



**Flowing Wells Unified School District**  
*Potential Finds Opportunity*

### INVITATION FOR BID

**INVITATION FOR BID #:** 24-05-25  
**MATERIAL OR SERVICE:** Flowing Wells Junior High School Building K Restroom Renovation  
**DUE DATE:** May 2, 2024 at 2:00 PM Arizona Time  
**DELIVERY & OPENING LOCATION:** Flowing Wells School District #8  
 1556 W. Prince Road  
 Tucson, AZ 85705  
 520-696-8813

### PRE-BID CONFERENCE

**DATE:** April 16, 2024  
**TIME:** 1:00 p.m. Arizona Time  
**LOCATION:** Flowing Wells Junior High School  
 4545 N La Cholla Blvd., Tucson AZ 85705

Contact: Stacy Trueblood, [Stacy.Trueblood@fwusd.org](mailto:Stacy.Trueblood@fwusd.org), 520/696-8813

In accordance with the School District Procurement Rules in the Arizona Administrative Code (A.A.C) promulgated by the State Board of Education pursuant to A.R.S. §15-213, §41-2578 and §41-2579, and the School District Procurement Rules, sealed bids for the materials or services specified will be received by the Flowing Wells Unified School District #8, at 1556 W Prince Road, Tucson, AZ, until the time and date cited. Bids received by the correct time and date shall be opened and the name of each Bidder will be publicly read. **Faxed bids are not acceptable.**

The district will not be responsible for the pre-opening of, post-opening of or failure to open, a bid not properly addressed or identified. **Bids must be in the actual possession of the Flowing Wells Business Office on or prior to the time (based on the official District time clock) and date, and at the location indicated above. Late Bids may not be considered.**

Bids must be submitted in a sealed envelope with the Bid number and the Bidders name and address clearly indicated on the outside of the envelope. All Bids must be written legibly in ink or typewritten. Additional instructions for preparing the Bids are provided herein.

**VENDORS ARE STRONGLY ENCOURAGED TO CAREFULLY READ THE ENTIRE SOLICITATION DOCUMENT.**

**NOTICE INVITING SEALED BIDS**

Sealed Bids will be received until 2:00 P.M. (Arizona time), May 2, 2024, by Flowing Wells Unified School District No. 8 (“Owner”) in the Business Services Office, to do the work required for the Owner’s Project known as Flowing Wells Junior High School Building K Restroom Renovation, which is located at Flowing Wells Junior High School, 4545 N. La Cholla Blvd., Tucson, Arizona. The Project will be completed in accordance with the Specifications prepared by DLR Group.

Proposals will be opened publicly at the Owner’s Board Room at 1556 W. Prince Rd., Tucson, Arizona, at 2:00 P.M. (Arizona time), May 2, 2024, and read aloud by a representative of the Owner. All information and Proposals submitted by bidders will be made available for public inspection during regular business hours after an award is made, if any.

Specifications for the work, including related bid documents, may be reviewed online at:  
<http://flowingwellsschools.org/ourdistrict/business/procurement/materialmanagement>.

The Owner intends to contract, if at all, with the lowest responsive and responsible bidder whose bid confirms in all material respects to the requirements of the bid documents, including the Specifications. “Responsive Bidder” means the bidder who submits a bid that conforms in all material respects to this Notice Inviting Sealed Bids, Instructions to Bidders and the Specifications which are incorporated herein by this reference. “Responsive Bidder” means the bidder who has the capability to perform the contract requirements and the integrity and reliability to assure complete and good faith performance and who submits the lowest bid. In order for the bid to be considered, bidders must complete and submit the Proposal form, which is incorporated herein by reference.

A certified or cashier’s check or surety bond for ten percent (10%) of the Contract Amount proposed by the bidder must accompany each Proposal as a guarantee that the bidder will enter into a contract to perform the work in accordance with the Specifications or as liquidated damages in the event of the bidder’s failure or refusal to enter into a contract. The check or bond will be returned to the unsuccessful bidders. The successful bidder’s check or bond will be returned upon the execution of satisfactory bonds and a contract as described by the bid documents.

It shall be mandatory on the contractor to whom the Contract is awarded, and upon any subcontractor under him, to comply in every respect with the applicable provisions of the Arizona Revised Statutes and with all other requirements of the laws of Arizona applicable to contracts for the construction of public works for school districts.

The bidder to whom the Contract is awarded shall furnish the Owner, within five (5) days after the award, satisfactory Payment and Performance Bonds in an amount equal to one hundred percent (100%) of the Contract Amount stated in the Proposal. Individual surety bonds are not acceptable.

The Owner reserves the right to reject any or all Proposals, to withhold the award of a contract for any reason it may determine and to hold any or all Proposals for a period of sixty (60) days. Any bid protests concerning this bid must be filed with the District Representative, who is Stacy Trueblood, Chief Financial Officer, Flowing Wells Unified School District No. 8, 1556 West Prince Road, Tucson, Arizona 85705 ([stacy.trueblood@fwusd.org](mailto:stacy.trueblood@fwusd.org)).

The Owner reserves the right to waive any irregularities in any Proposal if such action is determined by the Owner, in its sole discretion, to be in the best interest of the Owner.

Flowing Wells Unified School District No.8

By   
Title: Chief Financial Officer

Published: April 5, 2024

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**DOCUMENTS REFERENCED:**

You may access a copy of the documents referenced within this proposal at the following web addresses:

Arizona Revised Statutes (A.R.S.) is available at:

<http://www.azleg.state.az.us/ArizonaRevisedStatutes.asp>

School District Procurement Rules in the Arizona Administrative Code (A.A.C.) is available at:

[http://azsos.gov/public\\_services/Title\\_07/7-02.htm#Article\\_10](http://azsos.gov/public_services/Title_07/7-02.htm#Article_10)

I.R.S. W-9 form (Request for Taxpayer I.D. Number) is available at:

<http://ftp.fedworld.gov/pub/irs-pdf/fw9.Pdf>

Education Department General Administrative Regulations (EDGAR) and Other Applicable Grant Regulations is available

at: <https://www2.ed.gov/policy/fund/reg/edgarReg/edgar.html>

**DEFINITION OF TERMS**

As used in this solicitation and instructions, the terms listed below are defined as follows:

- A. **“Attachment”** means any item the Solicitation requires a Bidder to submit as part of the Bid.
- B. **“Contract”** means the combination of the Solicitation, including the uniform and Special Instructions to Bidders, the Uniform and Special Terms and Conditions, and the Specifications and Statement or Scope of Work; the Bid; and any Solicitation Amendments or Contract Amendments; and any terms applied by law.
- C. **“Contract Amendment”** means a written document signed by the Procurement Officer that is issued for the purpose of making changes in the Contract.
- D. **“Contractor”** means any person who has a contract with the School District/public entity.
- E. **“Days”** means calendar days unless otherwise specified.
- F. **“Exhibit”** means any item labeled as an Exhibit in the Solicitation or placed in the Exhibits section of the solicitation.
- G. **“Gratuity”** means a payment, loan, subscription, advance, deposit of money, services, or anything of more than nominal value present or promised, unless consideration of substantially equal or greater value is received.
- H. **“Offer”** means bid, proposal or quotation.
- I. **“Bidder”** means a vendor who responds to a Solicitation.
- J. **“Procurement Officer”** means the person duly authorized to recommend and administer Contracts and make written determinations with respect to the Contract or his or her designee.
- K. **“Responsible Bidder”** means the Bidder who has the capability to perform the contract requirements and the integrity and reliability to assure complete and good faith performance and who submits the lowest Proposal.
- L. **“Responsive Bidder”** means the Bidder who submits a Proposal that conforms in all material respects to this Request for Proposals, Instruction to Bidders and the Plans and Specifications which are incorporated herein by this reference.
- M. **“Solicitation”** means an Invitation for Bids (IFB), a Request for Proposals (RFP), or a Request for Quotations (RFQ).
- N. **“Solicitation Amendment (or Addendum)”** means a written document that is authorized by the Procurement Officer and issued for the purpose of making changes to the Solicitation.

- O. ***“Subcontract”*** means any Contract, express or implied, between the Contractor and another party or between a subcontractor and another party delegating or assigning, in whole or in part, the making or furnishings of any material or any service required for the performance of the Contract.
  
- P. ***“School District”*** means the School District/public entity that executes the contract.

**UNIFORM INSTRUCTIONS TO BIDDERS****1. Inquiries**

- A. Duty to Examine. It is the responsibility of each Bidder to examine the entire Solicitation, seek clarification in writing, and check its Bid for accuracy before submitting the Bid. Lack of care in preparing a Bid shall not be grounds for withdrawing the Bid after the Bid due date and time nor shall it give rise to any Contract claim.
- B. Solicitation Contact Person. Any inquiry related to a Solicitation, including any requests for or inquiries regarding standards referenced in the Solicitation shall be directed solely to the Solicitation contact person. The Bidder shall not contact or direct inquiries concerning this Solicitation to any other employee unless the Solicitation specifically identifies a person other than the Solicitation contact person as a contact.
- C. Submission of Inquiries. The Procurement Officer or the person identified in the Solicitation as the contact for inquiries may require that an inquiry be submitted in writing. Any inquiry related to a Solicitation shall refer to the appropriate Solicitation number, page, and paragraph. Do not place the Solicitation number on the outside of the envelope containing that inquire since it may then be identified as an Bid and not be opened until after the Bid due date and time.
- D. Timeliness. Any inquiry shall be submitted as soon as possible and at least seven (7) days before the Bid due date and time. Failure to do so may result in the inquiry not being answered.
- E. No Right to Rely on Verbal Responses. Any inquiry that results in changes to the Solicitation shall be answered solely through a written Solicitation Amendment. An Bidder may not rely on verbal responses to its inquiries.
- F. Solicitation Amendments/Addenda. The Solicitation shall only be modified by a Solicitation Amendment or Addendum.
- G. Pre-Bid Conference. If a Pre-Bid Conference has been scheduled under this Solicitation, the date, time, and location appear on the Solicitation cover sheet or elsewhere in the Solicitation. A Bidder should raise any questions it may have about the Solicitation or the procurement at that time. Statements made during a pre-bid conference are not an amendment to the solicitation. Material issues raised at the conference that result in changes to the Solicitation shall be answered solely through a written Solicitation Amendment.
- H. Persons with Disabilities. Persons with a disability may request a reasonable accommodation, such as a sign language interpreter, by contacting the appropriate Solicitation contact person. Requests shall be made as early as possible to allow time to arrange the accommodation.

**2. Bid Preparation**

- A. Forms: No Facsimile or Electronically Submitted Offers. A Bid shall be submitted either on the forms provided in this Solicitation or their substantial equivalent. Any substitute document for the forms provided in this Solicitation will be legible and contain the same information requested on the form. A facsimile or electronically submitted Bid shall be rejected.

- B. Typed or Ink; Corrections. The Bid must be typed or in ink. Erasures, interlineations or other modifications in the Bid must be initialed in ink by the person signing the Bid. Modifications shall not be permitted after Bids have been opened except as otherwise provided under A.A.C. R7-2-1030.
- C. Evidence of Intent to be Bound. Failure to submit verifiable evidence of intent to be bound, such as an original signature, may result in rejection of the Bid.
- D. Exceptions to Terms and Conditions. All exceptions included with the Bid shall be submitted on the Deviations and Exceptions page in which the Bidder clearly identifies the specific paragraphs of the Solicitation where the exceptions occur. Any exceptions not included in such a section shall be without force and effect in any resulting Contract unless such exception is specifically referenced by the Procurement Officer in a written statement. The Bidder's Pre-printed or standard terms will not be considered as a part of any resulting Contract. A Bid that takes exception to a material requirement of any part of the Solicitation, including terms and conditions, may be rejected.
- E. Subcontracts. Bidder shall clearly list any proposed subcontractors and the subcontractor's proposed responsibilities in the Bid.
- F. Cost of Bid Preparation. The District will not reimburse any Bidder the cost of responding to a Solicitation.
- G. Solicitation Amendments Unless otherwise stated in the Solicitation, each Solicitation Amendment shall be acknowledged by the person signing the Bid. Failure to acknowledge a material Solicitation Amendment or to follow the instructions for acknowledgement of the Solicitation Amendment may result in rejection of the Bid.
- H. Federal Excise Tax. School Districts/public entities are exempt from Federal Excise Tax on manufactured goods. Exemption Certificates will be prepared upon request.
- I. Provision of Tax Identification Numbers. Bidders are required to provide their Arizona Transaction Privilege Tax number and/or Federal Tax Identification number, if applicable, in the space provided on the Offer and Acceptance Form and provide the tax rate and amount, if applicable, on the Price Sheet.
- J. Identification of Taxes in Bid. School Districts are subject to all applicable state and local transaction privilege taxes. If Arizona resident Bidders do not indicate taxes on a separate item in the Bid, the School District will conclude that the price(s) bid includes all applicable taxes. At all times, payment of taxes and the determination of applicable taxes are the sole responsibility of the Bidder.
- K. Disclosure. If the Firm, business, or person submitting this Bid has been debarred, suspended, or otherwise lawfully precluded from participating in any public procurement activity, including being disapproved as a subcontractor with any federal, state, or local government, or if any such preclusion from participation from any public procurement activity is currently pending, the Bidder must fully explain the circumstances relating to the preclusion or proposed preclusion in the Bid. The Bidder shall include a letter with its Bid setting forth the name and address of the governmental unit, the



effective date of this suspension or debarment, the duration of the suspension or debarment, and the relevant circumstances relating the suspension or debarment. If suspension or debarment is currently pending, a detailed description of all relevant circumstances including the details enumerated above must be provided.

- L. Solicitation Order of Precedence. In the event of a conflict in the provisions of this Solicitation, the following shall prevail in the order set forth below:
  - 1. Amendments;
  - 2. Special Terms and Conditions;
  - 3. Uniform General Terms and Conditions;
  - 4. Scope of Work/Specifications;
  - 5. Attachments;
  - 6. Exhibits;
  - 7. Special Instructions to Bidders;
  - 8. Uniform Instructions to Bidders
  
- M. Delivery. Unless stated otherwise in the Solicitation, all prices shall be F.O.B. Destination, freight prepaid to the Flowing Wells Unified School District as indicated on the purchase order, and shall include all delivery and unloading at the destination(s).

**3. Submission of Bid**

- A. Sealed Envelope or Package. Each Bid shall be submitted to the submittal location identified in this Solicitation, in a sealed envelope or package that identifies its contents as a Bid and the Solicitation number to which it responds. The appropriate Solicitation number shall be plainly marked on the outside of the envelope or package.
  
- B. Bid Amendment or Withdrawal. A Bidder may modify or withdraw a Bid in writing at any time before Bid opening if the modification or withdrawal is received before the Bid due date and time at the location designated in the Invitation for Bid. A Bid may not be amended or withdrawn after the Bid due date and time except as otherwise provided under A.A.C.R7-2-1028.
  
- C. Public Record. Under applicable law, all Bids submitted and opened are public records and must be retained by the School District. Bids shall be open to public inspection after Contract award, except for such Bids deemed to be confidential by the School District, pursuant to A.A.C. R7-2-1006. If a Bidder believes that information in its Bid contains confidential trade secrets or other proprietary data no to be disclosed as otherwise required by A.R.S. § 39-121, a statement advising the school district of this fact shall be provided on the Confidential/Proprietary Submittals page and the information shall be so identified wherever it appears. Contract terms and conditions, pricing, and information generally available to the public are not considered confidential information under this Section.
  
- D. Non-collusion, Employment, and Services. By signing the Offer and Acceptance form or other official contract form, the Bidder certifies that:
  - 1. The prices have been arrived at independently, without consultation, communication or Agreement, for the purpose of restricting competition, as to any matter relating to such prices

with any other Bidder or with any competitor; the prices which have been quoted have not been nor will not be disclosed directly or indirectly to any other Bidder or to any competitor; nor attempt has been made or will be made to induce any person or firm to submit or not to submit, an Offer for the purpose of restricting competition. It did not engage in collusion or other anti-competitive practices in connection with the preparation or submission of its Proposal; and

2. It does not discriminate against any employee, applicant for employment, or person to whom it provides services because of race, color, religion, sex, national origin, or disability, and that it complies with all applicable federal, state, and local laws and executive orders regarding employment; and
3. By submission of this Bid, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency; and
4. By submission of this Bid, that no Federal appropriated funds have been paid or will be paid by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a member of Congress in connection with the awarding of a Federal contract, the making of a Federal grant, the making of a Federal loan, the entering into a Cooperative Agreement, and the extension, continuation, renewal, amendment, or modification of a Federal contract, grant, loan, or cooperative agreement.
5. By submission of this Bid, that Bidder has taken steps and exercised due diligence to ensure that Bidder has not offered, conferred, or agreed to confer any personal gift or benefit on a person who supervises or participates in contracts, purchases, payments, claims or other financial transactions, or on a person who supervises or participates in planning recommending, selecting or contracting for materials, services, goods, construction or construction services of the District, in accordance with A.R.S. §15-213(O) and A.A.C. R7-2-1003(J).

**4. Additional Bid Information**

- A. Unit Price Prevails. Where applicable, in the case of discrepancy between the unit price or rate and the extension of that unit price or rate, the unit price or rate shall govern.
- B. Late Bids, Modifications or Withdrawals. A Bid, Modification or Withdrawal submitted after the exact Bid due date and exact time shall not be considered except under the circumstances set forth in A.A.C. R7-2-1028(B).
- C. Taxes. The amount of any applicable transaction privilege or use tax of a political subdivision of this state will not be a factor when determining lowest bidder.
- D. Disqualification. A Bid from a Bidder who is currently debarred, suspended or otherwise lawfully prohibited from any public procurement activity may be rejected.
- E. Bid Acceptance Period. A Bidder submitting an Bid under this Solicitation shall hold its Bid open for the number of days from the due date that is stated in the Solicitation. If the Solicitation does

not specifically state a number of days for the Bid acceptance, the number of days shall be ninety (90).

- F. Payment. Payments shall comply with the requirements of A.R.S. Titles 35 and 41, Net 30 days. Upon receipt and acceptance of goods or services, the Contractor shall submit a complete and accurate invoice for payment within thirty (30) days.
- G. Waiver and Rejection Rights. Notwithstanding any other provision of the solicitation, the School District reserves the right to:
  - 1. Waive any minor informality;
  - 2. Reject any and all offers or portions thereof; or
  - 3. Cancel a solicitation.

**5. Award**

- A. Number or Types of Awards. Where applicable, the School District reserves the right to make multiple awards or to award a Contract by individual line items, by a group of line items, or to make an aggregate award, whichever is deemed most advantageous to the School District. If the Procurement Officer determines that an aggregate award to one Bidder is not in the School District best interest, multiple awards may be awarded.
- B. Contract Inception. A Bid does not constitute a Contract nor does it confer any rights on the Bidder to the award of a Contract. A Contract is not created until the Bid is accepted in writing by the Procurement Officer signature on the Offer and Acceptance Form. A letter or other notice of award or of the intent to award shall not constitute acceptance of the Bid.
- C. Effective Date. The effective date of this Contract shall be the date that the Procurement Officer signs the Offer and Acceptance Form or other official contract form, unless another date is specifically stated in the Contract.
- D. Final Acceptance for each participating School District will be contingent upon the approval of their Governing Board, if applicable.

**6. Protests**

A protest shall comply with and be resolved according to Arizona Department of Education School District Procurement Code Rule A.A.C. R7-2-1141 through R7-2-1153. Protests shall be in writing and be filed with the District Representative as listed in the Special Instructions to Bidders.

A. Protest shall include:

- 1. The name, addresses, and telephone number of the interested party
- 2. The signature of the interested party or the interested party's representative;
- 3. Identification of the purchasing agency and the Solicitation or Contract number;
- 4. A detailed statement of the legal and factual grounds of the protest including copies of relevant documents; and
- 5. The form of relief requested.

- B. The interested party shall supply promptly any other information requested by the district representative.
- C. Protests based upon alleged improprieties in a solicitation that are apparent before the due date and time for responses to the solicitation, shall be filed before the due date and time for responses to the solicitation.
- D. In cases other than those covered in section C of the section, the interested party shall file the protest within ten (10) days after the school district makes the procurement file available for public inspection.
- E. The interested party may file a written request for an extension of the time limit for protest filing. The written request for an extension shall be filed with the District Representative before the expiration of the time limit and shall set forth good cause as to the specific action or inaction of the school district that resulted in the interested party being unable to file the protest within the ten (10) days. The district representative shall approve or deny the request in writing, state the reasons for the determination, and, if an extension is granted, set forth a new date for submission of the filing.

**UNIFORM GENERAL TERMS AND CONDITIONS****1. Contract Interpretation**

- A. Arizona Law. The law of Arizona applies to this Contract including, where applicable, the Uniform Commercial Code as adopted by the State of Arizona and the Arizona School District Procurement Code, Arizona Revised Statutes (A.R.S.) § 15-213, and its implementing rules, Arizona Administrative Code (A.A.C.) Title 7, Chapter 2, Articles 10 and 11.
- B. Implied Contract Terms. Each Provision of law and any terms required by law to be in this Contract are a part of this Contract as if fully stated in it.
- C. Relationship of Parties. The Contractor under this Contract is an independent Contractor. Neither party to this Contract shall be deemed to be the employee agent of the other party to the Contract.
- D. Conflict of Interest. All parties hereby are put on notice that this Contract is subject to termination if any District employee or Governing Board Member has substantial interest in the firm and/or services and has not followed State and District rules governing orders in such interest. Contractor must further certify that they have not paid or agreed to pay any person, other than a bona fide employee a fee or brokerage resulting from the award of this Contract.
- E. Severability. The provisions of this Contract are severable. Any term or condition deemed illegal or invalid shall not affect any other term or condition of the Contract.
- F. No Parol Evidence. This Contract is intended by the parties as a final and complete expression of their agreement. No course of prior dealings between the parties and no usage of the trade shall supplement or explain any terms used in this document.
- G. No Waiver. Either party's failure to insist on strict performance of any term or condition of the Contract shall not be deemed waiver of that term or condition even if the party accepting or acquiescing in the nonconforming performance knows of the nature of the performance and fails to object to it.

**2. Contract Administration and Operation**

- A. Records. Under A.R.S. § 35-214 and § 35-215, the Contractor shall retain and shall Contractually require each Subcontractor to retain all data and other records ("records") relating to the acquisition and performance of the Contract for a period of five years after the completion of the Contract. All records shall be subject to inspection and audit at reasonable times. Upon request, the Contractor shall produce a legible copy of any or all such records.
- B. Non-Discrimination. The Contractor shall comply with State Executive Order No. 99-4, 2000-4 and all other applicable Federal and State laws, rules and regulations, including the Americans with Disabilities Act.
- C. Audit. At any time during the term of this Contract and five (5) years thereafter, the Contractor's or any Subcontractor's books and records shall be subject to audit by the School District and, where

applicable, the Federal Government, the extent that the books and records relate to the performance of the Contract or Subcontract.

- D. Inspection and Testing. The Contractor agrees to permit access to its facilities, Subcontractor facilities and the Contractor's processes for producing the materials, at reasonable time for inspection of the materials and services covered under this Contract. The School District shall also have the right to test at its own cost the materials to be supplies under this Contract. Neither inspection at the Contractor's facilities nor testing shall constitute final acceptance of the materials. If the School District determines non-compliance of the materials, the Contractor shall be responsible for the payment of all costs incurred by the School District for testing and inspection.
- E. Notices. Notices to the Contractor required by this Contract shall be made by the School District to the person indicated on the Offer and Acceptance form submitted by the Contractor unless otherwise stated in the Contract. The Contractor shall make notices to the School District required by the Contract to the Solicitation Contact Person indicated on the Solicitation cover sheet, unless otherwise stated in the Contract. An authorized Procurement Officer and an authorized Contractor representative may change their respective person to whom notices shall be given by written notice and an Amendment to the Contract shall not be necessary.
- F. Advertising and Promotion of Contract. The Contractor shall not advertise or publish information for commercial benefit concerning this Contract without the prior written approval of the Procurement Officer.
- G. Property of the School District. Any materials, including reports, computer programs and other deliverables, created under this Contract are the sole property of the School District. The Contractor is not entitled to a patent or copyright on those materials and may not transfer the patent or copyright to anyone else. The Contractor shall not use or release these materials without the prior written consent of the School District.

### 3. Costs and Payments

- A. Payments. Payments shall comply with the requirements of A.R.S. § 35-342 41, Net 30 days. Upon receipt and acceptance of goods or services, the Contractor shall submit a complete and accurate invoice for payment from the School District within thirty (30) days. The Purchase Order number must be referenced on the invoice.
- B. Applicable Taxes.
1. Payment of Taxes by the School District. The School District will pay only the rate and/or amount of taxes identified in the Offer and in any resulting Contract.
  2. State and Local Transaction Privilege Taxes. The School District is subject to all applicable state and local transaction privilege taxes. Transaction privilege taxes apply to the sale and are the responsibility of the seller to remit. Failure to collect taxes from the buyer does not relieve the seller from its obligation to remit taxes.
  3. Tax Indemnification. Contractor and all Subcontractors shall pay all federal, state, and local taxes applicable to its operation and any persons employed by the Contractor. Contractor shall, and require all Subcontractors to hold the School District harmless from any responsibility for taxes,

damages and interest, if applicable, contributions required under federal, and/or state and local laws and regulations and any other costs including transaction privilege taxes, unemployment compensation insurance, Social Security and Worker's Compensation.

4. IRS W-9. In order to receive payment under any resulting Contract, Contractor shall have a current I.R.S. W-9 Form on file with the School District.

C. Availability of Funds for the Next Fiscal Year. Funds may not presently be available for performance under this Contract beyond the current fiscal year. No legal liability on the part of the School District for any payment may arise under this Contract beyond the current fiscal year until funds are made available for performance of the Contract. The School District will make reasonable efforts to secure such funds.

#### 4. Contract Changes

A. Amendments. This Contract is issued under the authority of the Procurement Officer who signed this Contract. The Contract may be modified only through a Contract Amendment within the scope of the Contract signed by the Procurement Officer. Changes to the Contract, including the addition of work or materials, the revision of payment terms, or the substitution of work or materials, directed by an unauthorized employee or made unilaterally by the Contractor are violations of the Contract and or applicable law. Such changes, including unauthorized written Contract Amendments, shall be void and without effect, and the Contractor shall not be entitled to any claim and this Contract based on those changes.

B. Subcontracts. The Contractor shall not enter into any Subcontract under this Contract without the advance written approval of the Procurement Officer. The Subcontract shall incorporate by reference the terms and conditions of this Contract.

C. Assignment and Delegation. The Contractor shall not assign any right nor delegate any duty under this Contract without the prior written approval of the Procurement Officer. The Procurement Officer shall not unreasonably withhold approval.

#### 5. Risk and Liability

A. Risk of Loss. The Contractor shall bear all loss of conforming material covered under this Contract until received by authorized personnel at the location designated in the purchase order or Contract. Mere receipt does not constitute final acceptance. The risk of loss for nonconforming materials shall remain with the Contractor regardless of receipt.

B. General Indemnification. To the extent permitted by A.R.S. § 41-621 and § 35-154, the School District shall be indemnified and held harmless by the Contractor for its vicarious liability as result of entering into this Contract. Each party to this Contract is responsible for its own negligence.

C. Indemnification - Patent and Copyright. To the extent permitted by A.R.S. § 41-621 and § 35-154, the Contractor shall indemnify and hold harmless the School District against any liability, including costs and expenses, for infringement of any patent, trademark, or copyright arising out of Contract performance or use by the School District of materials furnished or work performed under this Contract. The School District shall reasonably notify the Contractor of any claim for which it may be liable under this paragraph.

- D. Insurance If applicable, vendor shall secure at its own expense and keep in effect during the term of this contract Workers' Compensation Insurance for all the Contractor's employees engaged in work under this Contract and comprehensive general liability insurance, to include automobile and professional liability, providing limits of not less than \$1,000,000 per occurrence. The District shall be named on the Contractor's liability policy as an additional insured. Evidence of the insurance coverage specified above shall be by means of Certificates of Insurance giving the District thirty (30) days' notice of cancellation or material change in policy. It is understood and agreed that the successful vendor shall provide the Certificates of Insurance and other required documents, and commence the contract services within ten (10) days of notice of award from the District (see Special Terms and Conditions for other applicable insurance requirements, if applicable).
- E. Safety Bidder, at its own expense and at all times, shall take all reasonable precautions to protect persons and the District property from damage, loss or injury resulting from the activities of Bidder, its employees, its subcontractors, and/or other persons present. Bidder will comply with all specific job safety requirements promulgated by any governmental authority, including without limitation, the requirements of the Occupational Safety Health Act of 1970.
- F. Force Majeure
1. Except for payment of sums due, neither party shall be liable to the other nor deemed in default under this Contract if and to the extent that such party's performance of this Contract is prevented by reason of force majeure. The term "*force majeure*" means an occurrence that is beyond the control of the party affected and occurs without its fault or negligence. Without limiting the foregoing, force majeure includes acts of God; acts of the public enemy; war; riots; strikes; mobilization; labor disputes; civil disorders; fire; flood; lockouts; injections-intervention-acts; or failures or refusals to act by government authority; and other similar occurrences beyond the control of the party declaring force majeure which such party is unable to prevent by exercising reasonable diligence.
  2. Force Majeure shall not include the following occurrences:
    - a. Late delivery of equipment or materials caused by congestion at a manufacturer's plant or elsewhere, or an oversold condition of the market; or
    - b. Late performance by a Subcontractor unless the delay arises out of a force majeure occurrence in accordance with this force majeure term and condition; or
    - c. Inability of either the Contractor or any Subcontractor to acquire or maintain any required insurance, bonds, licenses, or permits.
  3. If either party is delayed at any time in the progress of the work by force majeure, the delayed party shall notify the other party in writing of such delay, as soon as is practicable and no later than the following working day, of the commencement thereof and shall specify the causes of such delay in such notice. Such notice shall be delivered or mailed certified-return receipt requested, and shall make a specific reference to this article, thereby invoking its provisions. The delayed party shall cause such delay to cease as soon as practicable and shall notify the other party in writing when it has done so. The time of completion shall be extended by Contract Amendment for a period of time equal to the time that results or effects of such delay prevent the delayed party from performing in accordance with this Contract.



4. Any delay or failure in performance by either party hereto shall not constitute default hereunder or give rise to any claim for damages or loss of anticipated profits if, and to the extent that such delay or failure is caused by force majeure.

G. Third Party Antitrust Violations. The Contractor assigns to the School District any claim for overcharges resulting from antitrust violation the extent that those violations concern materials of services supplied by third parties to the Contractor toward fulfillment of this Contract.

## 6. Warranties

A. Liens. The Contractor warrants that the materials supplies under this Contract are free of liens.

B. Quality. Unless otherwise modified elsewhere in these terms and conditions, the Contractor warrants that for one year after acceptance by the School District of the materials or services, they shall be:

1. Of a quality to pass without objection in the trade under the Contract description;
2. Fit for the intended purposes for which the materials or services are used;
3. Within the variations permitted by the Contract and are of even kind, quality, and quality within each unit and among all units;
4. Adequately contained, packaged and marked as the Contract may require; and
5. Conform to the written promises or affirmations of fact made by the Contractor.

C. Fitness. The Contractor warrants that any material or service supplied to the School District shall fully conform to all requirements of the Solicitation and all representations of the Contractor, and shall be fit for all purposes and uses required by the Contract.

D. Inspection/Testing. The warranties set forth in subparagraphs A through C of this paragraph are not affected by inspection testing of or payment for the materials or services by the School District.

E. Exclusions. Except as otherwise set forth in this Contract, there are no express or implied warranties or merchant ability fitness.

F. Compliance with Applicable Laws. The materials and services supplied under this Contract shall comply with all applicable federal, state and local laws, and the Contract shall maintain all applicable licenses and permits.

G. Survival of Rights and Obligations after Contract Expiration or Termination.

1. Contractor's Representations and Warranties. All representations and warranties made by the Contractor under this Contract shall survive the expiration of termination hereof. In addition, the parties hereto acknowledge that pursuant to A.R.S. § 12-510, except as provided in A.R.S. § 12-529, the School District is not subject to or barred by any limitations of actions prescribed in A.R.S. Title 12, Chapter 5.

2. Purchase Orders. The Contractor shall, in accordance with all terms and conditions of the Contract, fully perform and shall be obligated to comply with all purchase orders received by the Contractor prior to the expiration or termination hereof, unless otherwise directed in writing by the Procurement Office, including, without limitation, all purchase orders received prior to but not fully performed and satisfied at the expiration or termination of this Contract.

## 7. School District's Contractual Remedies

- A. Right to Assurance. If the School District in good faith has reason to believe that the Contractor does not intend to, or is unable to perform or continue performing the Contract, the Procurement Officer may demand in writing that the Contractor give a written assurance of intent or ability to perform. Failure by the Contractor to provide written assurance within the number of days specified in the demand may, at the School District's option, be the basis for terminating the Contract under the Uniform General Terms and Conditions.
- B. Stop Work Order.
  1. The School District may, at any time, by written order to the Contractor, require the Contractor to stop all or any part, of the work called for by this Contract for a period of up to ninety (90) days after the order is delivered to the Contractor, and for any further period to which the parties may agree. The order shall be specifically identified as a stop work order issued under this clause. Upon receipt of the order, the Contractor shall immediately comply with its terms and take all reasonable steps to minimize the incurrence of costs allocable to the work covered by the order during the period of work stoppage.
  2. If a stop work order issued under this clause is canceled or the period of the order or any extension expires, the Contractor shall resume work. The Procurement Officer shall make an equitable adjustment in the delivery schedule or Contract price, or both, and the Contract shall be amended in writing accordingly.
- C. Non-exclusive Remedies. The rights and the remedies of the School District under this Contract are not exclusive.
- D. Nonconforming Tender. Materials supplied under this Contract shall fully comply with the Contract. The delivery of materials or a portion of the materials in an installment that do not fully comply constitutes a breach of Contract. On delivery of nonconforming materials, the School District may terminate the Contract for default under applicable termination clauses in the Contract, exercise any of its remedies under the Uniform Commercial Code, or pursue any other right or remedy available to it.
- E. Right to Offset. The School District shall be entitled to offset against any sums due the Contractor, any expenses or costs incurred by the School District or damages assessed by the School District concerning the Contractor's nonconforming performance or failure to perform the Contract, including expenses, costs and damages described in the Uniform General Terms and Conditions.

## 8. Contract Termination

- A. Cancellation for Conflict of Interest. Per A.R.S. § 38-511 and A.A.C. R7-2-1087 (F) the School District may cancel this Contract within three (3) years after Contract execution without penalty or further obligation if any person significantly involved in initiating, negotiating, securing, drafting, or creating the Contract on behalf of the School District is, or becomes at any time while the Contract or

an extension the Contract is in effect, an employee of or a consultant to any other party to this Contract with respect to the subject matter of the Contract. The cancellation shall be effective when the Contractor receives written notice of the cancellation unless the notice specifies a later time.

- B. Personal Gifts or Benefits The School District may, by written notice, terminate this Contract, in whole or in part, if the School District determines that any person or vendor has offered, conferred or agreed to confer any personal gift or benefit on any employee of the School District who supervised or participated in the planning, recommending, selecting or contracting of the Contract, in accordance with A.R.S. § 15-213 (O) and A.A.C. R7-2-1087 (G).
- C. Gratuities. In accordance with A.A.C. R7-2-1087(H) the School District may, by written notice, terminate this Contract, in whole or in part, if the School District determines that employment or gratuity was offered or made by the Contractor or a representative of the Contractor to any officer or employee of the School District for the purpose of influencing the outcome of the procurement or securing the Contract, an Amendment to the Contract, or favorable treatment concerning the Contract, including the making of any determination or decision about Contract performance. The School District/public entity, in addition to any other rights or remedies, shall be entitled to recover exemplary damages in the amount of three (3) times the value of the gratuity offered by the Contractor.
- D. Suspension or Debarment. The School District may, by written notice to the Contractor, immediately terminate this Contract if the School District/public entity determines that the Contractor has been disbarred, suspended or otherwise lawfully prohibited from participating in any public procurement activity, including but not limited to, being disapproved as a Subcontractor of any public procurement unit or other governmental body.
- E. Termination for Convenience. The School District reserves the right to terminate the Contract, in whole or in part at any time, when in the best interests of the School District without penalty recourse. Upon receipt of the written notice, the Contractor shall immediately stop all work, as directed in the notice, notify all Subcontractors of the effective date of the termination and minimize all further costs to the School District. In the event of termination under this paragraph, all documents, data and reports prepared by the Contractor under the Contract shall become the property of and be delivered to the School District. The Contractor shall be entitled to receive just and equitable compensation for work in progress, work completed, and materials accepted before the effective date of the termination. The cost principles and procedures provided in A.A.C. R7-2-1125 shall apply.
- F. Termination for Default.
1. In addition to the rights reserved in the General Terms and Conditions, the School District reserves the right to terminate the Contract in whole or in part due to the failure of the Contractor to comply with any term or condition of the Contract, to acquire and maintain all required insurance policies, bonds, licenses and permits, or to make satisfactory progress in performing the Contract. The Procurement Officer shall provide written notice of the termination and the reasons for it to the Contractor.
  2. Upon termination under this paragraph, all documents, data and reports prepared by the Contractor under the Contract shall become the property of and be delivered to the School District.

3. The School District may, upon termination of this Contract, procure, on terms and in the manner that it deems appropriate, materials and services to replace those under this Contract. The Contractor shall be liable to the School District for any excess costs incurred by the School District re-procuring the materials or services.

G. Continuation of Performance through Termination. The Contractor shall continue to perform, in accordance with the requirements of the Contract, up to the date of termination, as directed in the termination notice.

**8. Contract Claims**

All Contract claims and controversies under this Contract shall be resolved according to A.R.S. §15-213 and rules adopted thereunder.

**9. Gift Policy**

The District will accept no gifts, gratuities or advertising products from Bidders. The Purchasing Department has adopted a zero tolerance policy concerning Bidder gifts. The District may request product samples from Bidders for official evaluation with disposal of those said samples at the discretion of the Procurement Officer.

**10. Offshore Performance**

Due to security and identity protection concerns, direct services under any subsequent contract shall be performed within the borders of the United States. Any services that are described in the specifications or scope of work that directly serve the school district(s) or charter schools(s) or its clients and may involve access to secure or sensitive data or personal client data or development or modification of software for the state shall be performed within the borders of the United States. Unless specifically stated otherwise in the specifications, this definition does not apply to indirect or “overhead” services, redundant back-up services or services that are incidental to the performance of the contract. This provision applies to work performed by subcontractors at all tiers.

**11. Contractors Employment Eligibility**

By entering the contract, contractor warrants compliance with A.R.S. § 41-4401, A.R.S. § 23-214, the Federal Immigration and Nationality Act (FINA), and all other federal immigration laws and regulations. The District may request verification of compliance from any contractor or subcontractor performing work under this contract. The District reserves the right to confirm compliance in accordance with applicable laws. Should the District suspect or find that the contractor or any of its subcontractors are not in compliance, the District may pursue any and all remedies allowed by law, including, but not limited to: suspension of work, termination of the contract for default, and suspension and/or debarment of the contractor. All costs necessary to verify compliance are the responsibility of the contractor.

**12. Fingerprint Clearance Cards**

In accordance with A.R.S. § 15-512(H), a contractor, subcontractor or vendor or any employee of a contractor, subcontractor or vendor who is contracted to provide services on a regular basis at an individual school may be required to obtain a valid fingerprint clearance card pursuant to Title 41, Chapter 12, Article 3.1. An exception to this requirement may be made as authorized in Governing Board policy.

Contractor, subcontractors, vendors and their employees shall not provide services on school district properties until authorized by the District.

Additionally, contractor shall comply with the governing body fingerprinting policies of each individual School District/Public Entity.

**13. Terrorism Country Divestments**

Per A.R.S. § 35-392, the District is prohibited from purchasing from a company that is in violation of the Export Administration Act.

**14. Integrity of Bid**

By signing this Bid, the Bidder affirms that the Bidder has not given, nor intends to give any time hereafter any economic opportunity, future employment, gift, loan gratuity, special discount, trip favor, or service to any employee of the School District in connection with the submitted Bid. Failure to sign the Bid, or signing it with a false statement, shall void the submitted Bid or any resulting contract.

**15. Vendor Registration**

All vendors are required to be a registered vendor before a contract can be awarded to the Bidder. For information or questions regarding vendor registration contact Teressa Austin, Flowing Wells Unified School District No. 8, 1556 W Prince Road, Tucson, AZ 85705, telephone 520 696-8813, fax 520 690-2330, email [teressa.austin@fwusd.org](mailto:teressa.austin@fwusd.org) or website [www.flowingwellsschools.org](http://www.flowingwellsschools.org).

**16. Registered Sex Offender Restriction**

Pursuant to this order, the named vendor agrees by acceptance of this order that no employee of the vendor or a subcontractor of the vendor, who has been adjudicated to be a registered sex offender, will perform work on District premises or equipment at any time when District students are, or are reasonably expected to be, present. The vendor further agrees by acceptance of this order that a violation of this condition shall be considered a material breach and may result in a cancellation of the order at the District’s discretion.

**17. Affordable Care Act**

Vendor understands and agrees that is shall be solely responsible for compliance with the Patient Protection and Affordable Care Act, Public Law 111-148 and the Health Care Education Reconciliation Act, Public Law 111-152 (collectively the Affordable Care Act “ACA”). Contractor shall bear sole responsibility for providing health care benefits for its employees who provide services to the District as required by state or federal law.

**18. Clarifications**

Clarification means communication with Bidder for the sole purpose of eliminating minor irregularities, informalities, or apparent clerical mistakes in the Bid. It is achieved by explanation or substantiation, either in a written response to an inquiry from the District or as initiated by Bidder. Clarification does not give Bidder an opportunity to revise or modify its Bid, except to the extent that correction of apparent clerical mistakes results in a revision.

**19. Confidential/Proprietary Information**

Confidential information request: If Bidder believes that its Bid contains trade secrets or proprietary information that should be withheld from public inspection as required by A.R.S. § 39-121, a statement advising the School District/Public Entity of this fact shall accompany the Bid, and the information shall be so identified wherever it appears. The School District/Public Entity shall review the statement and shall determine in writing whether the information shall be withheld. If the School District/Public Entity determines to disclose the information, the School District/Public Entity shall inform Bidder in writing of such determination.

When submitting a bid containing “CONFIDENTIAL” information, bidder agrees to defend, indemnify and hold harmless the District, its officers and employees, from every claim, demand, loss, expense, cost, damage or injury, including attorney’s fees, arising out of or resulting from the District withholding information that bidder marked as “CONFIDENTIAL”.

When requesting information in your Response to be considered as Confidential/Proprietary, a complete hardbound and electronic copy of the solicitation with the Confidential/Proprietary material redacted must also be submitted with your Offer and so identified. Failure to submit redacted copies may result in denial of request.

Contract Terms and Conditions, Pricing and information generally available to the Public are not considered confidential information under this section.

Public Record: All Bids submitted in response to this solicitation shall become the property of the School District/Public Entity. They will become a matter of public record available for review, subsequent to award notification, under the supervision of the Purchasing Official.

**FEDERAL FUNDING REQUIREMENTS**

- 1. Affordable Care Act:** The bidder understands and agrees that it shall be solely responsible for compliance with the Patient Protection and Affordable Care Act, Public Law 111-148 and the Health Care and Education Reconciliation Act, Public Law 111-152 (collectively the Affordable Care Act “ACA”). The bidder shall bear sole responsibility for providing health care benefits for its employees who provide services to the District as required by State or Federal law.
- 2. Buy American Provision (only applies to Food & Nutrition food purchases):** The bidder will purchase, to the maximum extent practicable, domestic commodities or products in accordance with 7CFR§210.21(d) and 7CFR§220.16(d). The bidder shall purchase, to the maximum extent practicable, domestic agricultural commodities or products substantially processed in the United States. “Substantially” means the final processed product contains over 51% domestically grown agricultural commodities. This provision applies to all food purchases paid from the nonprofit school food services account. There are limited exceptions to this provision which allow for the purchase of products not meeting the “domestic” standard as described above (“non-domestic”) in circumstances when use of domestic products is truly not practicable. However, before utilizing an exception, alternatives to purchasing non-domestic food products should be considered.
- 3. Disclosure of Lobbying Activities:** Pursuant to Byrd Anti-Lobbying Amendment 31 USC 1352, the bidder must disclose lobbying activities in connection with school nutrition programs. If there are material changes after the initial filing, updated reports must be submitted on a quarterly basis. 7CFR§3018.100 (Only applies to contracts over \$100,000)
- 4. Certification Regarding Lobbying:** Pursuant to 31 USC 1352, the bidder must submit a certification regarding lobbying which conforms in substance with the language provided in 2CFR Part 200.450. No appropriated funds may be expended by the recipient of a Federal contract, grant, loan, or cooperative Agreement to pay any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with any of the following covered Federal actions.
- 5. Certificate of Independent Price Determination:** The bidder admits that all prices in this bid have been arrived at independently, without consultation, communication or agreement, for the purpose of restricting competition, as to any matter relating to such prices with any other bidder or with any competitor certification regarding non-collusion.
- 6. Civil Rights Compliance (only applies to Food & Nutrition contracts):** In accordance with Federal civil rights law and U.S. Department of Agriculture (USDA) civil rights regulations and policies, the USDA, its Agencies, offices, and employees, and institutions participating in or administering USDA programs are prohibited from discriminating based on race, color, national origin, sex, disability, age, or reprisal or retaliation for prior civil rights activity in any program or activity conducted or funded by USDA.
  - a.** Persons with disabilities who require alternative means of communication for program information (e.g., Braille, large print, audiotope, American Sign Language, etc.) should contact the Agency (State or local) where they applied for benefits. Individuals who are deaf, hard of hearing or have speech disabilities may contact USDA through the Federal Relay Service at (800) 877-8339. Additionally, program information may be made available in languages other than English.

- b. To file a program complaint of discrimination, complete the USDA Program Discrimination Complaint Form, AD-3027, found on line at [www.ascr.usda.gov/complaint\\_filing\\_cust.html](http://www.ascr.usda.gov/complaint_filing_cust.html), and at any USDA office, or write a letter addressed to USDA and provide in the letter all of the information requested in the form. To request a copy of the complaint form, call (866) 632-9992. Submit your completed form or letter to USDA by: (1) mail: U.S. Department of Agriculture, Office of the Assistant Secretary for Civil Rights, 1400 Independence Avenue, SW, Washington, D.C. 20250-9410; (2) fax: (202) 690-7442; or (3) email: [program.intake@usda.gov](mailto:program.intake@usda.gov).
7. **Clean Air Act, Clean Water Act, and Environmental Protection Agency Regulation:** The bidder will comply with all applicable standards, orders or requirements issued under Section 306 of the Clean Air Act, Section 508 of the Clean Water Act, Executive Order 11738 and Environmental Protection Agency regulations which prohibit the use, under nonexempt federal contracts, grants or loans to facilities included on the EPA List of Violating Facilities.
8. **Contract Work Hours and Safety Standard Act:** The bidder shall comply with Sections 103 and 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 327–330) as supplemented by Department of Labor regulations (29 CFR Part 5). (Only applies to contracts over \$100,000)
9. **Debarment, Suspension, Ineligibility and Voluntary Exclusion:** By signing the Bid & Acceptance form, the bidder certifies that they have not been debarred, suspended, or otherwise excluded from or ineligible for participation in federal assistance programs under executive order 12549 and 12689. The bidder shall comply with regulations implementing Office of Management and Budget Guidance in Non-procurement Debarment and Suspension codified at 2 CFR Part 180 and 2 CFR Part 417. These regulations restrict transactions with certain parties that are debarred, suspended or otherwise excluded from, or ineligible for, participation in Federal assistance programs or activities. (Only applies to contracts over \$25,000)
10. **Energy Policy and Conservation Act:** The bidder shall meet the mandatory standards and policies relating to energy efficiency which are contained in the State Energy Conservation Plan issued in compliance with the Energy Policy and Conservation Act. (Pub. L. 94–163, 89 Stat.871.)
11. **Equal Employment Opportunity:** The bidder shall comply with Executive Order 11246 of September 24, 1965, entitled “Equal Employment Opportunity,” as amended by Executive Order 11375 of October 13, 1967, and as supplemented in Department of Labor regulations (41 CFR chapters 60).
12. **Record Keeping:** The books and records of the bidder pertaining to operations under this Agreement shall be available to the District at any reasonable time. These records are subject to inspection or audit by representatives of the District, State Agency, the US Department of Agriculture (for food/nutrition only), and the US General Accounting Office at any reasonable time and place. The District shall maintain such records, for a period of not less than five (5) years after the final day of the contract, or longer if required for audit resolution (A.R.S § 35-214). 7CFR§210.23 and 2 CFR Part 200.318(i).
13. **Invoicing (only applies to Food & Nutrition contracts):** The bidder fully discloses all discounts, rebates, allowances and incentives received by the bidder from its suppliers. If the bidder receives a discount, rebate, allowance, or incentive from any supplier, the bidder must disclose and return to the District the full amount of the discount, rebate, or applicable credit that is received based on the purchases made on behalf of the District. The bidder must identify the amount of each discount, rebate and other applicable credit on bills and invoices presented to the school food authority for payment and individually identify



the amount as a discount, rebate, or in the case of other applicable credits, the nature of the credit. 7CFR§210.21(f)(1)(iv).

No expenditure may be made from the nonprofit school food service account for any cost resulting from a cost-reimbursable contract that fails to include the requirements of 7CFR§210.21, nor may any expenditure be made from the nonprofit school food service account that permits or results in the bidder receiving payments in excess of the bidder's actual, net allowable costs. 7CFR§210.21 (f)(2)

The return of purchase incentives, discounts, rebates, and credits will be to the Sponsor's non-profit Child Nutrition account.

- 14. Termination Clause:** The District may terminate for cause and for convenience the contract. Appendix II to 2 CFR Part 200. (Only applies to contracts over \$10,000)
- 15. E-Verify Requirement:** The bidder warrants compliance with all Federal immigration laws and regulations relating to employees and warrants its compliance with A.R.S. § 23-214, Subsection A. (That subsection reads: After December 31, 2007, every employer, after hiring an employee, shall verify the employment eligibility of the employee through the E-Verify program.)
- 16.** Description of process for enabling vendors to receive or pick up orders upon contract award. Once the District has made the decision to order from a vendor of an awarded contract, price will be confirmed/verified and purchase orders issued and sent to the vendor, based upon the needs of the District. No volume is implied or guaranteed.
- 17. Solid Waste Disposal Act:** The bidder shall comply with Section 6002 of the Solid Waste Act and its implementing regulations.
- 18. Minority & Woman Businesses:** When federal funding may be used, the District shall take affirmative steps to ensure minority businesses, women's business enterprises, and labor surplus area firms are notified of solicitation opportunities when possible. Prime contractors are required to take the same affirmative steps let 2 CFR Part 200.321
- 19. Program Regulation (only applies to Food & Nutrition contracts):** Bidder shall be in conformance with applicable portions of the School Food Authority's (SFA) agreement under the program. Bidder will conduct program operations in accordance with 7 CFR Parts 210, 215, 220, 225, and 250. Bidder shall provide products that meet Public Law 111-296, the Healthy Hunger-Free Kids Act of 2010 (HHFKA). bidder's products shall meet grade level caloric, sodium, saturated fat, and trans fat requirements.
- 20. Copeland Anti-Kickback Act and Davis-Bacon Act (for building projects in excess of \$2000):**
  - a. Copeland "Anti-Kickback" Act -** All contracts and sub grants in excess of \$2000 for construction or repair awarded by recipients and sub recipients shall include a provision for compliance with the Copeland "Anti-Kickback" Act.
  - b. Davis-Bacon Act -** The bidder shall comply with the Davis-Bacon Act (40 U.S.C. 276a to 276a-7) as supplemented by Department of Labor regulations (29 CFR Part 5).
- 21. Contract Violations or Breach of Contract:** The District reserves all administrative, contractual and legal rights and privileges under applicable laws and regulations with respect to this procurement in the event of contractor violation or breach of contract.

22. **Rights to Inventions:** For all contracts that meet the definition of “funding agreement” and where the District wishes to enter into a contract with a small business firm or non-profit organization, the bidder shall comply with the Rights to Inventions made by non-profit organizations and small business firms under Government Grants, Contracts, and Cooperative Agreements.

**SPECIAL TERMS AND CONDITIONS**

1. **Purpose** It is the intent of the Flowing Wells Unified School District to contract with a qualified and experienced vendor to provide materials and service to complete the Flowing Wells Junior High School Building K Restroom Renovation.

2. **Award Basis**

The Flowing Wells School District shall award a contract to Bidders most qualified to meet the needs of the District based upon the factors set forth in the Bid. No other factors or criteria may be used in the evaluation.

- **Responsiveness** means a person (or company) who submits a bid, which conforms in all material respects to the Invitation for Bid.
- **Responsibility** means a person (or company) who has the capability to perform the contract requirements and the integrity and reliability, which will assure good faith performance.

Any deviation from the general terms and conditions or exceptions taken shall be described fully and appended to the bid form on the Bidder's letterhead over the signature of the person signing the bid form. Such appendages shall be considered part of the Bidder's formal bid. For the absence of any statements of deviation or exception, the bid shall be accepted as in strict compliance with all terms and conditions.

If a vendor receives a bid award, an order is placed and vendor is unable to meet the delivery requirements, meet service requirements, or material that meets the District's needs as outlined in this Invitation for Bid, or is unable to hold bid price, or fails to provide product or service within a reasonable period of time, AND/OR fails to provide product complying with bid specifications, as determined by the District, the District reserves the right to go to the next lowest bid price of equal quality which meets bid specifications. If the bid item delivered does not meet specifications or is received in an unsatisfactory condition and is in a damaged or unusable condition, or if service is unsatisfactory, contractor must pick up item immediately and replace to district's satisfaction at no additional charge, or issue full credit, for service a return visit must be re-scheduled within 24 hours. Rejected items must be removed from the District's premises by the vendor upon verbal notification.

*Note: However, if a vendor receives a contract award and is unable to meet the service requirements as outlined in this Solicitation (and subsequent contract), or is unable to hold the contract price, or fails to provide acceptable service as determined by the District, the District reserves the right to go to the next lowest ranked vendor if this determination occurs within a reasonable time period after contract award.*

3. **Award**

It is expected that the award for this contract will be made within forty-five (45) days of Bid opening unless otherwise noted.

4. **Warranty/Guarantee**

All bidders must guarantee full satisfaction of their materials/products or permit unsatisfactory materials/product to be returned collect for full money refund. All defective products shall be replaced and exchanged by the vendor. The cost of transportation, unpacking, inspection, repacking, reshipping or other like expenses shall be paid by the vendor.

**5. Price Clause**

Price discounts must remain firm for the initial term of the contract. The District’s Procurement Officer will review fully documented requests for price increases prior to any contract renewal. The Flowing Wells School District will review fully documented requests for price increases and may, at its sole option, accept any changes or cancel from the contract those materials and/or services concerned. The vendor shall likewise offer the District any published price reduction during the contract period. All price adjustments will be effective on acceptance by the District’s Procurement Officer. Prices, as indicated, shall include all costs associated with the specified service or good. Any extra or incidental costs must be indicated separately.

**6. Deviations to Bid**

Any deviation from the general terms and conditions or exceptions taken shall be described fully and appended to the bid form on the Bidder’s letterhead. Exceptions must be signed by authorized representative of the company. Such appendages shall be considered part of the Bidders formal bid. For the absence of any statements of deviation or exception, the Bid shall be accepted as in strict compliance with all terms and conditions.

**7. Procurement Methods**

Any materials/services obtained under this Invitation for Bid may be by Blanket Purchase Order, or Specific Purchase Order. The percent discount for parts and the labor rate must remain the same no matter what purchasing method the District uses.

**8. Non-Exclusive Contract**

Any contract resulting from this solicitation shall be awarded with the understanding and agreement that it is for the sole convenience of the District. The District reserves the rights to obtain like goods or services from other sources.

**9. Vendor Responsibility**

The successful Bidder shall protect all furnishings from damage and shall protect the school district’s property from damage or loss arising in connection with this contract. Bidder shall make good any such damage, injury or loss caused by the operations, or those employees, to the satisfaction of the District. Any damage caused to District facilities, lawns, etc., shall be repaired immediately or replaced at no expense to the District.

The successful Bidder shall take all necessary precautions for the safety of students, school employees and the public, and shall comply with all applicable provisions of Federal, State and Municipal Safety Laws. Successful Bidder agrees that they are fully responsible to the District for the acts and omissions of any and all persons whether directly or indirectly employed by them. They shall maintain such insurance as will protect them and the District from claims or damage from personal injury including death, which may arise from operations under this contract.

The successful Bidder must be prepared to provide an adequate work force and inventory of vehicles, materials and equipment. It shall be the successful Bidders responsibility to ensure continuation of service.

The successful Bidder must provide adequate training for all contracted employees providing services under this contract.

The successful Bidder must make employees aware of the requirements of the contract including, but not limited to delivery requirements, alarm procedures, and any other information which may be necessary to properly provide the specified service.

**10. District Requirements**

**A. Insurance**

Bidder agrees to maintain such insurance as will fully protect Bidder and the District from any and all claims under any workers' compensation statute or unemployment compensation laws, and from any and all other claims of any kind or nature for damage to property or personal injury, including death, made by anyone, that may arise from work or other activities carried on, under, or facilitated by this Agreement, either by Bidder, its employees, or by anyone directly or indirectly engaged or employed by Bidder. Bidder agrees to maintain such automobile liability insurance as will fully protect Bidder and the District for bodily injury and property damage claims arising out of the ownership, maintenance or use of owned, hired or non-owned vehicles used by Bidder or its employees, while providing services to the District.

Successful Bidder will be required to provide proof of and maintain comprehensive general liability insurance with a limit of not less than \$1,000,000 per occurrence and \$2,000,000 aggregate coverage with a deductible of not more than \$5,000.

Successful Bidder will be required to submit proof of and maintain Worker's Compensation and Employer's Liability Insurance as required by law.

**B. Licenses**

The successful Bidder will provide documentation of professional memberships, certifications, and licenses.

**C. Safety**

Bidder, at its own expense and at all times, shall take all reasonable precautions to protect persons and the District property from damage, loss or injury resulting from the activities of Bidder, its employees, its subcontractors, and/or other persons present. Bidder will comply with all specific job safety requirements promulgated by any governmental authority, including without limitation, the requirements of the Occupational Safety Health Act of 1970.

**11. Vendor Required Contract**

If your firm will require the District to sign any form of contract/agreement, a copy of that contract/agreement shall be included with this proposal. Contents and stipulations contained in the contract/agreement may be part of the evaluation criteria.

**12. Authority**

This solicitation as well as any resulting contract is issued under the authority of the Governing Board or designee. No alteration or any resulting contract may be made without the express written approval of the District in a form of an official contract amendment. Any attempt to alter any contract without such approval is a violation of the contract and the School District Procurement Rules. Any such action is subject to legal and contractual remedies available to the District inclusive of, but not limited to, contract cancellation, suspension and/or debarment of the contractor.

**13. Integrity of Proposals**

By signing this proposal, the Bidder affirms that the Bidder has not given, nor intends to give any time hereafter any economic opportunity, future employment, gift, loan gratuity, special discount, trip favor, or service to any employee of the District in connection with the submitted proposal. Failure to sign the proposal, or signing it with a false statement, shall void the submitted proposal or any resulting contract.

**14. Contract Liaison**

The Contract Liaison for any contract awarded under this Request for Proposal will be Stacy Trueblood, Chief Financial Officer, (520) 696-8828. The Contract Liaison shall act as the District’s contract manager and oversee performance under the contract.

**15. Billing**

The successful vendor(s) will be required to bill the District on an itemized invoice that indicates the items purchased, using school or department, and the applicable District purchase order number. Invoices must be sent to the district’s accounts payable, Flowing Wells School District, 1556 W. Prince Road, Tucson, AZ 85705, as shown on the purchase order. Any purchase order issued by FLOWING WELLS SCHOOL DISTRICT will refer to the Bid number of this Solicitation.

**16. Additional Materials/Services**

The District reserves the right to add related materials and/or services to the contract at any time during the contract period. The District shall contact the awarded vendor(s) for prices prior to adding any materials and/or service, and may, at FLOWING WELLS SCHOOL DISTRICT’s sole option, accept the quoted price or purchase elsewhere those materials and/or services.

**17. Sufficient Funds**

The District fully anticipates that sufficient funds will be available for this purchase. However funds are not currently available. Any contract award under this proposal will be conditioned upon the availability of funds. The District anticipates the use of Federal Funds for this project.

**Firm Information**

Length of time your firm has been in business? \_\_\_\_\_

Do you have a local representative to provide services as required? Yes No

Name of account representative \_\_\_\_\_

Location of account representative \_\_\_\_\_

Phone \_\_\_\_\_ Fax \_\_\_\_\_

E-Mail \_\_\_\_\_

Name of contact person for customer service calls \_\_\_\_\_

Phone \_\_\_\_\_ Fax Number \_\_\_\_\_

E-mail \_\_\_\_\_ Firm Web Site \_\_\_\_\_

Address for purchase orders: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Fax for purchase orders: \_\_\_\_\_ E-mail for purchase orders: \_\_\_\_\_

Remit to address for payments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

**Vendor Check List**

Yes/No

- Have you completed and submitted the Proposal? \_\_\_\_\_
- Did you include the List of Subcontractors in a separate sealed envelope? \_\_\_\_\_
- Firm information provided? \_\_\_\_\_
- Did you carefully read and examine all information in the referenced Solicitation? \_\_\_\_\_
- Did you include a Bid Bond? \_\_\_\_\_
- Did you include a completed W-9 form? \_\_\_\_\_
- Did you include the signed Offer and Acceptance? \_\_\_\_\_
- Is your Bid being returned in a sealed envelope? \_\_\_\_\_
- **Are the Bid name, number, date and time of opening clearly marked on outside of sealed envelope?** \_\_\_\_\_

**SPECIAL INSTRUCTIONS TO BIDDERS**

**1. PROPOSAL**

To be entitled to consideration, Proposals must be made in accordance with the following instructions:

a. Before submitting a Proposal, each bidder shall examine the Notice Inviting Sealed Bids, these Instructions to Bidders, the Drawings, Specifications, Contract and General Conditions Between Owner and Contractor, and all other documents comprising the Contract Documents, and fully inform himself of all existing conditions and limitations, and include in the Proposal a sum to cover the cost of all work required by the Contract Documents. The failure of any bidder to receive or examine any form, instrument, addendum, or other document, or visit the site and acquaint himself with conditions existing there, shall in no way relieve any bidder from obligations with respect to his Proposal or the Contract Documents.

b. Proposals shall be made only upon the form provided therefore. All blank spaces in the form shall be filled in completely. If some spaces do not apply, so state. Monetary amounts shall be stated both in writing and in numerals and, in case of any discrepancy between the two, the amounts in writing shall take precedence. The signature shall be in longhand and shall be that of an individual legally authorized to sign such form and bind the bidder. The completed form shall be without interlineation, alteration, or erasure.

c. Proposals shall not contain any recapitulation of the work to be done. No oral, telegraphic, telefax or telephonic proposals or modifications shall be considered.

d. Proposals shall be delivered to the place designated in the Notice Inviting Sealed Bids on or before the date and hour set for the opening of bids. Proposals shall be enclosed in an opaque, sealed envelope, bearing the title of the Project and the name of the bidder, except for that portion of the Proposal bearing the title "List of Subcontractors and Material Vendors," which shall be enclosed in a separate, opaque, sealed envelope, as hereinafter specified in these Instructions to Bidders. It is the sole responsibility of the bidder to deliver his proposal before the scheduled closing time. Any bids received after the scheduled closing time will be returned unopened.

e. The Contract Amount quoted is to include the furnishing of all materials, plant, equipment, tools, and all other facilities called for in the Contract Documents, and the performance of all labor and services necessary or proper for the completion of the Project, except such as may be otherwise expressly provided for in the Contract Documents.

f. The Proposal form must be used without alteration.

**2. LIST OF SUBCONTRACTORS AND MATERIAL VENDORS**

a. For use of the Owner in determining competency and capability of those who will work on the Owner's Project, and quality and workmanship of those who will supply material to the Owner's Project, each bidder is required to submit with his bid a list naming the subcontractors who will be used in performing the work. The list shall include any subcontractor that might be used in the event any or all of the various alternates are chosen by the Owner. The circumstances under which each subcontractor will be used must be specifically set forth by identifying alternates for which a particular subcontractor would be used.



b. ONE, and only one, subcontractor shall be submitted for each portion of the work for the Base Bid. The listing of more than one Subcontractor for any separate portion of the work shall be considered grounds for rejection of the bid by the Owner at the Owner's sole discretion.

c. The list shall be filled out and enclosed in a separate, opaque, sealed envelope bearing the title "List of Subcontractors" and the name of the bidder, and the envelope then inserted in the general bid envelope with the other forms. The list submitted by the successful bidder will be privately opened and will be retained by the Owner for record as a part of the Proposal. The lists of other bidders will be returned unopened.

d. No subcontractor not named in such list and approved by the Owner may be employed on the Owner's Project without express written permission of the Owner, notwithstanding any other provision of the Contract Documents which may be interpreted to the contrary. Should a change in the approved list become necessary in the opinion of the successful bidder, a written request shall be submitted to the Owner stating the reason for the change, and written approval of the Owner must be obtained before such change is made. This provision shall apply to work listed to be performed by the bidder, as well as work listed to be performed by vendors or subcontractors.

e. By this requirement of a List of Subcontractors, the Owner does not establish any contractual relation between the Owner and any subcontractor, nor will the Owner inquire into contractual or other relations of the bidder with any subcontractor, nor does this list establish limits to the contracts between the bidder and any subcontractor. The sole purpose and function of such requirement is set forth in the first sentence of the first paragraph of this section.

f. If prior to the signing of the Contract the Owner has a reasonable objection to any person or organization on the List of Subcontractors, the Owner shall notify the apparent successful bidder in writing of such objection. Failure of the Owner to make an objection to any person or organization on the list prior to the award shall constitute acceptance of such person or organization except in the case where a subcontractor is later found not to be qualified by law.

g. If, prior to the signing of the Contract, regardless of whether the Owner has evidenced any intention to award the Contract to Contractor or not, the Owner has a reasonable and substantial objection to any person or organization on such list, and refuses in writing to accept such person or organization except where such refusal is a result of the failure of a subcontractor to qualify by law, the apparent successful bidder may, prior to the signing, withdraw his bid without forfeiture of bid security. If the bidder submits an acceptable substitute with an increase in his bid price to cover the difference in cost occasioned by such substitution before the actual contract signing, the Owner may, at his discretion, accept the increased bid price or he may disqualify the bid.

3. BASE BID AND ALTERNATES

The Base Bids shall include all work as set forth on the Drawings, in the Specifications, and in all Contract Documents, plus the specified Contingency Reserve Fund and Cash Allowance, if any. Alternate bid items are described in the Specifications and indicated on the Proposal. The Owner shall have the right to accept Alternates in any order or combination and to determine the low bidder on the basis of the sum of the Base Bids and the Alternates accepted.

**4. CASH ALLOWANCES**

Bidders shall include Cash Allowances in their bids as described in the Specifications and in accordance with the Contract and General Conditions Between Owner and Contractor where required. In Cash Allowance items, the Owner will receive quotations and notify the Contractor of the successful bidder, and the Contractor shall purchase the items from the successful bidder as instructed by the Owner in writing. The Owner shall be charged with the actual cost of the purchase of the items by the Contractor, as determined by the quotation, including any discounts, to the Owner. In the event the purchase price of Cash Allowance items is less than the amount specified as Cash Allowance, the difference shall be credited to the Owner; and in the event the purchase price of the items exceeds the amount specified as Cash Allowance, the excess shall be paid by the Owner to the Contractor. Any adjustments to the Contract Price shall be made at the time of the final payment on the Contract.

**5. BID SECURITY**

All Proposals shall be accompanied by the bid security in the form and amount as published in the Notice Inviting Sealed Bids and as acceptable to the Owner, and shall be payable without conditions to the Owner as a guarantee that the bidder, if awarded the Contract, will promptly execute such Contract in accordance with the Proposal and in the manner and form required by the Contract Documents, and will furnish good and sufficient bonds for the faithful performance of the work and payment of all claimants supplying labor or materials. The bid security must be enclosed in the same envelope with the Proposal.

Note: The Notice Inviting Sealed Bids requires that this bid security will also serve as liquidated damages in the event the Contractor fails or refuses to enter into a contract. Mistake shall not excuse any failure or refusal to enter into a contract.

**6. WITHDRAWAL OF BID**

Any bidder may withdraw his Bid, either personally or by telegraphic or written request, at any time before the scheduled closing time for receipt of Bids. No Bid may be withdrawn for at least forty-five (45) days after the date the bids are opened, nor may any bid be withdrawn between the scheduled closing time for receipt of Proposals and the time the bids are actually opened.

**7. INTERPRETATIONS AND ADDENDA**

Should a bidder find discrepancies in, or omissions from, the Drawings or other Contract Documents, or should he be in doubt as to their meaning, he must at once request the Architect for an interpretation, who will send a written instruction to each person receiving a set of such documents. The bidder submitting a request for interpretations will be responsible for its prompt delivery. All requests for interpretations shall be made in writing. Neither the Owner nor the Architect will be responsible for any explanations or interpretations except those duly issued in the form of written addenda. Receipt of any addenda so issued during the time of bidding shall be included in the bid and shall be acknowledged in the Proposal and be made a part of the Contract Documents.

**8. APPROVAL OF EQUAL ITEMS OF EQUIPMENT AND/OR MATERIALS BEFORE SUBMISSION OF BIDS**

Products are generally specified by reference standard and/or manufacturer's name and model number or trade name. When specified only by reference standard, the bidder may select any product meeting this standard by any manufacturer. When several products or manufacturers are specified as being equally acceptable, the bidder has the option of using any product and manufacturer combination listed.

When a specific manufacturer, installer (where pre-qualification is required), trade name or material is specified, or indicated, it is to establish a standard of quality and shall not be construed as limiting competition. If the bidder desires to use other than that specified, he shall request approval of such substitution in the manner specified below:

a. Prior Approvals: Substitutions will be considered only when a written request has been submitted by a bidder, who shall be a general contractor qualified to submit a bid to the Owner, for approval at least eight (8) days prior to the original date for receipt of bids. No approvals will be granted to suppliers, distributors or subcontractors. Each request shall include all information requested hereinafter. If the Architect approves any proposed substitution, such approval shall be set forth in an Addendum.

b. Substitutions at Bid Time Not Prior Approved: A bidder may offer substitutions which have not received prior approval with his bid, together with the net addition to or deduction from the Base Bid amount and the net increase or decrease in calendar days to the construction time specified. These additions or deductions will not be considered in determining the low bid for award of the Contract.

c. Submittal Requirements: All requests shall contain sufficient information, descriptive brochures, drawings, performance and test data, samples or other data as is necessary for complete evaluation and shall indicate by direct comparison how the proposed substitution compares with the specified in every material respect with that specified. Each submittal shall be well marked and identified as to the type and kind of items proposed to be substituted. It is the sole responsibility of the bidder to submit complete descriptive and technical information so that the Architect can make a complete evaluation. Lack of sufficient information will be cause for rejection. References to catalogs will not be acceptable. Submittals shall be accompanied by a written statement from the manufacturer or contractor on his letterhead certifying that the proposed substitution meets or exceeds that specified in all aspects and that it will coordinate properly with related construction. Any redesign necessitated by the substitution shall be paid for by the Contractor.

d. As set forth in the Specifications, the bidder's request for prior approval shall include, without limitation:

- (1) Complete data substantiating compliance of the proposed substitution with the Contract Documents.
- (2) Product identification, including manufacturer's name, address and telephone number.
- (3) A tabulation comparing the specified product manufacturer's complete product description, performance test data and reference standards with the same information for the proposed products.
- (4) Samples and colors of the proposed products.
- (5) Names and addresses of similar projects in which the proposed product was used and the date of installation.
- (6) For construction methods, include a detailed description for proposed method and drawings illustrating same.

- (7) Accurate cost data on proposed substitution in comparison with product or method specified.

e. Any bidders, other than the bidder who requested a particular substitution, who choose to utilize a prior approved item, as approved by Addendum, shall comply with all terms and conditions of the original prior approval submittal. All provisions of this Paragraph 8 regarding using of substitutions shall apply to any bidder who chooses to utilize such substitution.

9. **BIDDERS INTERESTED IN MORE THAN ONE BID**

No person, firm, or corporation shall be allowed to make, file, or be interested in more than one bid for the same work. A person, firm, or corporation who has submitted a sub-proposal to a bidder, or who has quoted prices on materials to a bidder, is not thereby disqualified from submitting a sub-proposal or quoting prices to other bidders.

10. **ACCEPTANCE OR REJECTION OF PROPOSALS**

The Owner reserves the right to reject any or all bids and to waive any informalities in the Proposals received. The award of the Contract, if made by the Owner, will be made to the responsible and qualified bidder submitting the lowest bid, but the Owner shall determine in its own discretion whether a bidder is responsible and qualified to perform the Contract, what bid is the lowest, and whether it is in the interest of the Owner to accept the bid.

11. **AGREEMENT AND BONDS**

The form of agreement which the successful bidder will be required to execute, and the forms and amounts of surety bonds which he will be required to furnish at the time of execution of the agreement, are included in the Contract Documents on file in the office of the Architect and must be carefully examined by the bidder. All sureties must be authorized to do business in Arizona, listed on the U.S. Department of Treasury's list of approved sureties, and must be satisfactory to the Owner. No individual sureties are acceptable. The successful bidder must furnish the required bonds and insurance certificates and commence work within five (5) days after issuance of the Notice of Award and Notice to Proceed. By his submission of a Proposal, a bidder will be deemed, and agrees to be so treated, to have actual notice of every term of every Contract Document.

12. **NON-COLLUSION AFFIDAVIT**

Upon specific request of the Owner, the bidder, before the award of the Contract, shall submit to the Owner non-collusion affidavits covering the bidder and all subcontractors.

13. **LIST OF COMPARABLE PROJECTS**

If requested by Owner, the bidder must submit, within 24 hours after bid opening, a list of all projects undertaken within the three (3) years immediately preceding the bid date and a Contractor's Qualification Statement in the form of AIA A-305. Such list shall include the name, address and phone number of the owner and the architect of each project, the contract amount, and the starting date. Bidder consents to the use of the list and Qualification Statement by Owner to inquire into bidder's fitness, capabilities and responsibility in connection with Owner's consideration of the bid. Bidder agrees to hold harmless the Owner, the Architect, and each owner and architect listed from any action or claim that might arise from any adverse report received by Owner

concerning the bidder's performance on the projects listed. Failure to furnish a complete list and Qualification Statement as required herein may be considered grounds for rejection of the bid by the Owner, at the Owner's sole discretion.

14. **BID PROTESTS**

Any bid protests concerning this bid must be filed with the District Representative, who is Stacy Trueblood, Chief Financial Officer, Flowing Wells Unified School District, 1556 West Prince Road, Tucson, Arizona 85705.

**PROPOSAL**

Place \_\_\_\_\_

Date \_\_\_\_\_

Proposal of \_\_\_\_\_,

(Name)

a corporation organized and existing under the laws of the State of \_\_\_\_\_; a partnership

consisting of \_\_\_\_\_; an individual trading as

\_\_\_\_\_.

(Name)

**PROJECT: Flowing Wells Junior High School Building K Restroom Renovation**

TO: Flowing Wells Unified School District No. 8

1. In compliance with your Notice Inviting Sealed Bids and Instructions to Bidders, the undersigned hereby offers to furnish the materials and perform the work for the Owner's Project designated above, in strict accordance with the Plans, and all other pertinent Contract Documents, and agrees, upon written notice of acceptance of this Proposal at any time within forty-five (45) days after the date of opening of the bids, that he will execute the Contract in accordance with the Proposal as accepted, and give bond, as sufficient surety, in the amount of one hundred percent (100%) of the Contract Amount, within five (5) days after the Contract Documents are presented for signature, for the following sum:

**A. Base bid FWJHS Building K Restroom Remodel –**

\_\_\_\_\_, (\$\_\_\_\_\_).

2. Enclosed is bid security as required consisting of \_\_\_\_\_ in the amount of \_\_\_\_\_ (\$\_\_\_\_\_). (Not less than ten percent (10%) of the proposed Contract Amount, including all additive alternates.)

3. It is understood and agreed that the work under the Contract Documents shall be commenced by the undersigned Bidder, if awarded the Contract for the Project, on the date specified as the Start Date in the Notice to Proceed issued by the Architect in the manner specified in the Contract and General Conditions, and shall be completed by the Contractor by July 26, 2024. If the work is not completed by the date specified, then the undersigned Bidder shall pay Owner the amount of Two Hundred Dollars (\$200.00) as liquidated damages for each calendar day after expiration of the Contract Time that the work remains incomplete for each project.

4. The undersigned Bidder hereby acknowledges receipt of the following Addenda, if any:

Addendum No.

Date

\_\_\_\_\_

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

5. The undersigned Bidder understands that the Owner reserves the right to reject any or all Proposals or to waive any formality or technicality, and to accept Alternates, if any, in any order or combination, and to determine the low bidder on the basis of the sum of the Base Bid and the Alternates selected, as determined by the Owner in its sole discretion, in any Proposal in the interest of the Owner.
  
6. The undersigned Bidder hereby certifies and affirms that this Proposal is genuine and not a sham or collusive, nor made in the interest or behalf of any person not herein named, and that the undersigned Bidder has not directly or indirectly induced or solicited any other Bidder to put in a sham bid, or any other person, firm, or corporation to refrain from bidding, and that the Bidder has not in any manner sought by collusion to secure for itself an advantage over any other Bidder.
  
7. Contractor's Arizona Contractor's License No(s). \_\_\_\_\_.

\_\_\_\_\_  
 (Official Name of Firm)

SEAL - If Bidder is a  
 Corporation

By \_\_\_\_\_

Title \_\_\_\_\_

\_\_\_\_\_  
 (Complete Business Address)

**LIST OF SUBCONTRACTORS**

**(To be filled out and submitted in separate sealed envelope as a part of the Proposal)**

OWNER'S PROJECT: Flowing Wells Junior High School Building K Restroom Renovation

TO: Flowing Wells Unified School District No. 8

In compliance with Paragraph 2 of the Instructions to Bidders, the undersigned submits the following names of Subcontractors to be used in performing the work for the Project.

Contractor must indicate any changes in the subcontractor list that would result from acceptance by the Owner of any combination of alternates by identifying the substitute Subcontractor to be used, along with the number of the alternate that would result in such substitution. No substitutions or deviations from this list shall be permitted without written consent of the Owner.

SUBCONTRACTORS OR MATERIAL VENDOR'S WORK	SUBCONTRACTOR'S NAME
Electrical	
Mechanical	
Plumbing	
Concrete	
Painting	
Carpentry	
Drywall	

SUBMITTED BY:

\_\_\_\_\_  
Contractor

By \_\_\_\_\_

\_\_\_\_\_  
Title \_\_\_\_\_



**BID BOND**

PURSUANT TO RULE R7-2-1111 OF THE ARIZONA SCHOOL DISTRICT  
PROCUREMENT RULES

(Penalty of this bond must be not less than 10% of the bid amount)

KNOW ALL PERSONS BY THESE PRESENTS:

THAT, \_\_\_\_\_ (hereinafter called the "Principal"), as Principal, and \_\_\_\_\_, a corporation organized and existing under the laws of the State of \_\_\_\_\_, with its principal office in the City of \_\_\_\_\_ (hereinafter called the "Surety"), as Surety, are held and firmly bound unto Flowing Wells Unified School District No. 8 (hereinafter called the ("Obligee") in the amount of \_\_\_\_\_ Dollars (\$\_\_\_\_\_), for the payment whereof, the said Principal and Surety bind themselves, and their heirs, administrators, executors, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has submitted a bid for Flowing Wells Junior High School Building K Restroom Renovation.

NOW, THEREFORE, if the Obligee shall accept the proposal of the Principal and the Principal shall enter into a contract with the Obligee in accordance with the terms of the proposal and give the bonds and certificates of insurance as specified in the standard specifications with good and sufficient surety for the faithful performance of the contract and for the prompt payment of labor and materials furnished in the prosecution of the contract, or in the event of the failure of the Principal to enter into the contract and give the bonds and certificates of insurance, if the Principal pays the Obligee the difference not to exceed the penalty of the bond between the amount specified in the proposal and such larger amount for which the Obligee may in good faith contract with another party to perform the work covered by the proposal, then this obligation is void. Otherwise, it remains in full force and effect; provided, however, that this bond is executed pursuant to the provisions of Ariz. Admin. Code Rule R7-2-1111, and all liabilities on this bond shall be determined in accordance with the provisions of the section to the extent as if it were copied at length herein.

The prevailing party in a suit on this bond shall recover as a part of his judgment such reasonable attorneys' fees as may be fixed by a judge of the Court.

Witness our hands this \_\_\_ day of \_\_\_\_\_, 2024.

\_\_\_\_\_  
Principal                      Seal

By \_\_\_\_\_

Title \_\_\_\_\_

\_\_\_\_\_  
Surety                              Seal

By \_\_\_\_\_

Title \_\_\_\_\_

\_\_\_\_\_  
Agency of Record

\_\_\_\_\_

\_\_\_\_\_  
Agency Address

<b>Bid No. 24-05-25</b>	<b>OFFER AND ACCEPTANCE</b>	Flowing Wells School District #8 1556 W. Prince Road Tucson, AZ 85705
-------------------------	-----------------------------	-----------------------------------------------------------------------------

The Undersigned hereby offers and agrees to furnish the material, service or construction in compliance with all terms, conditions, specifications, and amendments in the Solicitation and any written exceptions in the offer.

Company Name	For Clarification of this Offer, contact:	
Arizona Transaction (Sales) Privilege Tax License No.	Name	
Federal Employer Identification No.	Phone	
Street Address	Fax	
City	E-mail	
State	Zip	
Tax Rate (if applicable) _____%	<b>Signature</b> of Person Authorized to Sign Offer	
	Printed Name of Person Authorized to Sign Offer	
	Title	

**CERTIFICATION**

By signature in the Offer section above, the bidder certifies:

1. The submission of the Bid did not involve collusion or other anti-competitive practices and bidder has taken steps and exercised due diligence to ensure that no violation of A.R.S. § 15-213(O), A.A.C. R7-2-1003(J) and A.A.C. R7-2-1024(B.I.q) have occurred.
2. The Bidder shall not discriminate against any employee or applicant for employment in violation of State Executive Order 99-4, 2000-4 or A.R.S. §§ 41-1461 through 1465.
3. The Bidder has not given, offered to give, nor intends to give at any time hereafter any economic opportunity, future employment, gift, loan, gratuity, special discount, trip, favor, or service to a public servant in connection with the submitted Offer. Failure to provide a valid signature affirming the stipulations required by this clause shall result in rejection of the Bid. Signing the Bid with a false statement shall void the Bid, any resulting contract and may be subject to legal remedies provided by law.
4. The Bidder warrants that it and all proposed subcontractors will maintain compliance with the Federal Immigration and Nationality Act (FINA), A.R.S. § 41-4401 and A.R.S. § 23-214 and all other Federal immigration laws and regulations related to the immigration status of its employees which requires compliance with Federal immigration laws by employers, contractors and subcontractors in accordance with the E-Verify Employee Eligibility Verification Program.
5. In accordance with A.R.S. § 35-392, the Bidder is in compliance and shall remain in compliance with the Export Administration Act.
6. In Accordance with A.R.S. § 35-393, the bidder is not engaged in and for the duration of the contract will not engage in a boycott of Israel.
7. In Accordance with A.R.S. § 35-394, the bidder is not currently and for the duration of the contract will not use the forced labor of ethnic Uyghurs in the People's Republic of China including goods, services, contractors, subcontractors, or suppliers thereof.
8. In accordance with A.R.S. § 15-512, the Bidder shall comply with fingerprinting requirements unless otherwise exempted.
9. By submission of this Bid, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.
10. By submission of this Bid, that no Federal appropriated funds have been paid or will be paid by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a member of Congress in connection with the awarding of a Federal contract, the making of a Federal grant, the making of a Federal loan, the entering into a Cooperative Agreement, and the extension, continuation, renewal, amendment, or modification of a Federal contract, grant, loan, or cooperative agreement.

ACCEPTANCE OF OFFER

When approved for award and countersigned below by the Chief Financial Officer, authorized designee, the offer is accepted.

The Contractor is now bound to sell the materials or services listed by the attached contract and based upon the solicitation, including all terms, conditions, specifications, amendments, etc., and the Contractor's Offer as accepted by the school district/public entity.

**This contract shall henceforth be referred to as Contract No. 24-05-25**

The Contractor is cautioned not to commence any billable work or to provide any material or service under this contract until Contractor receives purchase order, contract release document, or written notice to proceed.

Awarded this \_\_\_\_\_ day of \_\_\_\_\_ 2024

\_\_\_\_\_  
Authorized signature

Form **W-9**  
(Rev. October 2018)  
Department of the Treasury  
Internal Revenue Service

### Request for Taxpayer Identification Number and Certification

Give Form to the requester. Do not send to the IRS.

Go to [www.irs.gov/FormW9](http://www.irs.gov/FormW9) for instructions and the latest information.

Print or type.  
See Specific Instructions on page 3.

1 Name (as shown on your income tax return). Name is required on this line; do not leave this line blank.

2 Business name/disregarded entity name, if different from above

3 Check appropriate box for federal tax classification of the person whose name is entered on line 1. Check only one of the following seven boxes.

Individual/sole proprietor or single-member LLC

C Corporation

S Corporation

Partnership

Trust/estate

Limited liability company. Enter the tax classification (C=C corporation, S=S corporation, P=Partnership) ▶ \_\_\_\_\_

**Note:** Check the appropriate box in the line above for the tax classification of the single-member owner. Do not check LLC if the LLC is classified as a single-member LLC that is disregarded from the owner unless the owner of the LLC is another LLC that is not disregarded from the owner for U.S. federal tax purposes. Otherwise, a single-member LLC that is disregarded from the owner should check the appropriate box for the tax classification of its owner.

Other (see instructions) ▶ \_\_\_\_\_

4 Exemptions (codes apply only to certain entities, not individuals; see instructions on page 3):

Exempt payee code (if any) \_\_\_\_\_

Exemption from FATCA reporting code (if any) \_\_\_\_\_

*(Applies to accounts maintained outside the U.S.)*

5 Address (number, street, and apt. or suite no.) See instructions.

6 City, state, and ZIP code

7 List account number(s) here (optional)

Requester's name and address (optional)

#### Part I Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. The TIN provided must match the name given on line 1 to avoid backup withholding. For individuals, this is generally your social security number (SSN). However, for a resident alien, sole proprietor, or disregarded entity, see the instructions for Part I, later. For other entities, it is your employer identification number (EIN). If you do not have a number, see *How to get a TIN*, later.

**Note:** If the account is in more than one name, see the instructions for line 1. Also see *What Name and Number To Give the Requester* for guidelines on whose number to enter.

Social security number

				-			-				
--	--	--	--	---	--	--	---	--	--	--	--

OR

Employer identification number

								-					
--	--	--	--	--	--	--	--	---	--	--	--	--	--

#### Part II Certification

Under penalties of perjury, I certify that:

- The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me); and
- I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding; and
- I am a U.S. citizen or other U.S. person (defined below); and
- The FATCA code(s) entered on this form (if any) indicating that I am exempt from FATCA reporting is correct.

**Certification instructions.** You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the certification, but you must provide your correct TIN. See the instructions for Part II, later.

**Sign Here**      Signature of U.S. person ▶ \_\_\_\_\_      Date ▶ \_\_\_\_\_

**Confidential/Proprietary Submittals**

Confidential / Proprietary Submittals (mark one):

\_\_\_\_\_ No confidential/proprietary materials have been included with this offer.

\_\_\_\_\_ Confidential/Proprietary materials included. Offerors should identify below any portion of their offer deemed confidential or proprietary. Identification in this section does not guarantee that disclosure will be prevented but that the item will be subject to review by the Offeror and the District prior to any public disclosure. The District will be the final judge if material will be accepted as confidential or not. Request to deem the entire offer or price as confidential will not be a consideration. Complete description of the material to be considered confidential, the page number, paragraph and other identifiable information must be submitted below. Page number (s), paragraph, and description:

**Deviations and Exceptions**

Offerors shall indicate any and all exceptions taken to the provisions or specification in this solicitation document.

Exceptions (mark one):

\_\_\_\_\_ No exceptions

\_\_\_\_\_ Exceptions taken (describe –attach additional pages if needed)

---

\_\_\_\_\_  
**Firm:**

\_\_\_\_\_  
**Authorized Signature**

EXHIBIT A

PAYMENT BOND PURSUANT TO R7-2-1112
OF THE ARIZONA ADMINISTRATIVE CODE
(SCHOOL DISTRICT PROCUREMENT RULES)
(Penalty of this bond must be 100% of the Contract Amount)

KNOW ALL PERSONS BY THESE PRESENTS:

That, \_\_\_\_\_ (hereinafter called the "Principal"), as Principal, and \_\_\_\_\_, a corporation organized and existing under the laws of the State of \_\_\_\_\_, with its principal office in the City of \_\_\_\_\_ (hereinafter called the "Surety"), as Surety, are held and firmly bound unto Flowing Wells Unified School District No. 8, Pima County, Arizona (hereinafter called the "Obligee"), for the amount of \_\_\_\_\_ Dollars (\$\_\_\_\_\_) for the payment whereof, the said Principal and Surety bind themselves, and their heirs, administrators, executors, successors, and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has entered into a certain written contract with the Obligee, entitled Contract and General Conditions Between Owner and Contractor, dated the \_\_\_\_ day of \_\_\_\_\_, 2024 ("Contract"), to construct and complete certain work described as Flowing Wells Junior High School Building K Restroom Renovation, which Contract is hereby referred to and made a part hereof as fully and to the same extent as if copied at length herein.

NOW, THEREFORE, the condition of this obligation is such that if the Principal promptly pays all monies due to all persons supplying labor or materials to the Principal or the Principal's subcontractors in the prosecution of the work provided for in the Contract, this obligation is void. Otherwise it remains in full force and effect.

Provided, however, that this bond is executed pursuant to the provisions of Arizona Administrative Code Rule R7-2-1112, and all liabilities on this bond shall be determined in accordance with the provisions, conditions and limitations of said Rule, to the extent as if it were copied at length in this agreement.

The prevailing party in a suit on this bond shall recover as part of the judgment reasonable attorney fees that may be fixed by a judge of the Court.

Witness our hands this \_\_\_\_ day of \_\_\_\_\_, 2024.

AGENCY OF RECORD

Agency Address

PRINCIPAL Seal
By \_\_\_\_\_
Title \_\_\_\_\_

SURETY Seal
By \_\_\_\_\_
Title \_\_\_\_\_



**EXHIBIT B**

**PERFORMANCE BOND PURSUANT TO R7-2-1112  
OF THE ARIZONA ADMINISTRATIVE CODE  
(SCHOOL DISTRICT PROCUREMENT RULES)**

**(Penalty of this bond must be 100% of the Contract Amount)**

KNOW ALL PERSONS BY THESE PRESENTS:

That, \_\_\_\_\_ (hereinafter called the "Principal"), as Principal, and \_\_\_\_\_, a corporation organized and existing under the laws of the State of \_\_\_\_\_, with its principal office in the City of \_\_\_\_\_ (hereinafter called the "Surety"), as Surety, are held and firmly bound unto Flowing Wells Unified School District No. 8, Pima County, Arizona (hereinafter called the "Obligee"), for the amount of \_\_\_\_\_ Dollars (\$ \_\_\_\_\_) for the payment whereof, the said Principal and Surety bind themselves, and their heirs, administrators, executors, successors, and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has entered into a certain written contract with the Obligee, entitled Contract and General Conditions Between Owner and Contractor, dated the \_\_\_\_\_ day of \_\_\_\_\_, 2024 ("Contract"), to construct and complete certain work described as Flowing Wells Junior High School Building K Restroom Renovation, which Contract is hereby referred to and made a part hereof as fully and to the same extent as if copied at length herein.

NOW, THEREFORE, the condition of this obligation is such that if the Principal faithfully performs and fulfills all of the undertakings, covenants, terms, conditions and agreements of the Contract during the original term of the Contract and any extension of the Contract, with or without notice to the Surety, and during the life of any guaranty required under the Contract, and also performs and fulfills all of the undertakings, covenants, terms, conditions and agreements of all duly authorized modifications of the Contract that may hereafter be made, notice of which modifications to the Surety being hereby waived, the above obligation is void. Otherwise, it remains in full force and effect.

Provided, however, that this bond is executed pursuant to the provisions of Arizona Administrative Code Rule R7-2-1112, and all liabilities on this bond shall be determined in accordance with the provisions of said Rule, to the extent as if it were copied at length in this agreement.

The prevailing party in a suit on this bond shall recover as part of the judgment reasonable attorney fees that may be fixed by a judge of the Court.

Witness our hands this \_\_\_\_ day of \_\_\_\_\_, 2024.

\_\_\_\_\_  
PRINCIPAL Seal

\_\_\_\_\_  
AGENCY OF RECORD

By\_\_\_\_\_

Title\_\_\_\_\_

\_\_\_\_\_  
Agency Address

\_\_\_\_\_  
SURETY Seal

By\_\_\_\_\_

Title\_\_\_\_\_

**EXHIBIT C**

**CONTRACT AND GENERAL CONDITIONS  
BETWEEN OWNER AND CONTRACTOR**

THIS AGREEMENT, made this \_\_\_\_ of \_\_\_\_\_, 2024, by and between \_\_\_\_\_, hereinafter called the "Contractor," and Flowing Wells Unified School District No. 8, an Arizona unified school district organized and operating in Pima County, hereinafter called the "Owner":

**WITNESSETH:**

That the Contractor and the Owner agree as follows:

**ARTICLE 1  
THE CONTRACT DOCUMENTS**

**1.1 CONTRACT DOCUMENTS.**

1.1.1 The following listed documents constitute the Contract Documents, and they are all as fully a part of the Contract and General Conditions as if herein repeated:

1. This Contract and General Conditions between Owner and Contractor.
2. Notice of Award, Notice to Proceed and Receipt of Notice dated \_\_\_\_\_
3. Performance Bond and Labor and Material Payment Bond.
4. Amendment No. 1 dated \_\_\_\_\_.
5. Specifications (as modified by the above-referenced Amendment and selected alternates as listed herein, if any) as set forth in Exhibit A to this Contract.
6. Proposal, dated \_\_\_\_\_
7. Instructions to Bidders.
8. Notice Inviting Sealed Bids.
9. Certificates of Insurance.

1.1.2 In the event of any inconsistency between any of the terms of the before enumerated documents, such inconsistencies shall be resolved by giving precedence to the terms of the lowest numbered of the above numbered documents. Anything in these Contract Documents to the contrary notwithstanding, the provisions of all pertinent general public laws of the State of Arizona in effect at the time of the execution of this Contract shall be a part of the Contract between the parties and shall take precedence over all of the other Contract Documents.

**ARTICLE 2  
SCOPE OF WORK**

2.1 As required by the Contract Documents, the Contractor shall furnish and install all of the materials and labor and perform all of the work for the Owner's Project known as Flowing Wells Junior High School Building K Restroom Renovation, 4545 N. La Cholla Blvd., Tucson, Arizona 85705 ("Project" herein). Specifications for this Project were prepared by DLR Group.

**ARTICLE 3  
CONTRACT AMOUNT, TIME AND LIQUIDATED DAMAGES**

3.1 CONTRACT AMOUNT.

3.1.1 The Owner shall pay the Contractor the sum of \_\_\_\_\_ Dollars and \_\_\_\_\_ Cents (\$\_\_\_\_\_) for the Base Bid, which is the Contract Amount. This sum is subject to additions or deductions made in accordance with the provisions of the Contract Documents.

3.2 CONTRACT TIME. The Contract Time as used and defined in Article 11 herein shall be sixty three (63) calendar days.

3.3 LIQUIDATED DAMAGES. Liquidated damages as used and defined in Article 11 herein shall be two hundred Dollars (\$200.00) per calendar day for each day the Work remains not substantially complete after expiration of the Contract Time as defined in Article 11 and specified in Subparagraph 3.2 above.

3.4 OVERHEAD AND PROFIT. Limits on the amount of overhead and profit allowed on Change Orders are specified in Article 15.

3.5 SOURCE OF FUNDS. The Owner's obligations and liabilities under this Contract shall be paid with funds from Arizona School Facilities Oversight Board (SFOB) funds.

3.6 CONTINGENCY FUND. It is agreed that the Contract Amount includes a "Contingency Fund Allowance" of none, and this fund is intended by the parties to be used by the Owner to pay the Contractor for the reasonable cost of work, labor and materials furnished on the Project at the Owner's request for additional construction, installations, or services not included in the Plans and Specifications, at the time of bidding, involving extra cost to the Contractor. That portion of the Contingency Fund Allowance not expended as provided herein shall be credited to the Owner upon the contract completion.

3.7 CASH ALLOWANCES. NONE.

**ARTICLE 4  
DEFINITIONS AND GENERAL PROVISIONS**

4.1 OWNER AND CONTRACTOR. The Owner and the Contractor are those herein defined in this Contract and General Conditions. They are treated throughout the Contract Documents as though each were of the singular number and masculine gender.

4.2 SUBCONTRACTOR. See Article 8.

4.3 NOTICE. See Articles 7 and 10.

4.4 TIME. See Articles 3 and 11.

4.5 COST. The term "Cost" shall include all charges, costs, losses, and expenditures of every kind whatsoever for the Work, or portion thereof to which reference is made with respect to this term.

4.6 FINISH, SUBSTANTIAL COMPLETION AND FINAL COMPLETION DATES. See Article 11.

4.7 MODIFICATIONS. See also Article 1. A Modification is:

- .1 A written amendment to the Contract and General Conditions signed by all parties;
- .2 A Change Order properly signed by all parties pursuant to Paragraph 15.1; or
- .3 A Field Order for a minor change in the Work issued by the Owner pursuant to Paragraph 15.4.

A modification may be made only after execution of the Contract and General Conditions.

4.8 CONTRACT. The Contract consists of all the Contract Documents enumerated in Article 1. The Contract represents the entire and integrated agreement between the parties hereto and supersedes all prior negotiations, representations, or agreements, either written or oral. The Contract may be amended or modified only by a Modification as defined in Paragraph 4.8.

4.9 WORK. The term "Work" includes, without limitation, furnishing all labor, administrative services and supervision necessary to produce the construction required by the Contract Documents and furnishing and installing all materials and equipment incorporated, or to be incorporated in such construction to complete the Project.

4.10 PROJECT. The Project is the total construction shown on the Contract Documents of which the Work performed under the Contract Documents may be the whole or a part.

4.11 EXECUTION, CORRELATION, INTENT AND INTERPRETATIONS OF THE CONTRACT DOCUMENTS.

4.11.1 The Contract and General Conditions shall be signed by the Owner and the Contractor. By executing the Contract and General Conditions, each party accepts and agrees to be bound by each of the Contract Documents listed in Article 1.

4.11.2 By executing the Contract and General Conditions, the Contractor represents and warrants that he has visited the site, has familiarized himself with the local conditions under which the Work is to be performed, including any and all relevant weather conditions or records or both, and correlated all of his observations with the requirements of the Contract Documents.

4.11.3 The Contract Documents are complementary, and what is required by any one shall be as binding as if required by all. The intention of the Contract Documents is to include, without limitation, all labor, materials, equipment and other items as provided in Subparagraph 7.4.1 necessary for the proper execution and completion of the Work. Words and abbreviations which have well known technical or trade meanings are used herein in accordance with such recognized meanings.

4.11.4 The organization of the Specifications into divisions, sections and articles, and the arrangements of Drawings shall not control the Contractor in dividing the Work among Subcontractors or in establishing the

extent of Work to be performed by any trade, or constituting part of the contract or having any legal or contractual significance.

4.11.5 Written interpretations necessary for the proper execution or progress of the Work, in the form of drawings or otherwise, will be issued with reasonable promptness by the Owner in accordance with any schedule agreed upon, or with reasonable promptness in any case. Such interpretations shall be consistent with and reasonably inferable from the Contract Documents.

4.12 COPIES FURNISHED AND OWNERSHIP.

4.12.1 The Contractor will be furnished, free of charge, all copies of Contract Documents reasonably necessary for the execution of the Work as determined by the Owner.

4.12.2 It shall be the responsibility of the Contractor to insure that each Subcontractor, Sub-subcontractor and supplier has a current set of those portions of the Construction Documents that may be required for proper execution of their respective portions of the Work.

**ARTICLE 5  
PROJECT ADMINISTRATION**

5.1 DEFINITION.

5.1.1 The Owner is the person or organization identified as such in this Contract and General Conditions.

5.2 ADMINISTRATION OF THE CONTRACT.

5.2.1 The Owner will provide general administration of this Contract, including performance of the functions hereinafter described.

5.2.2 The Owner shall make daily visits to the site to observe the progress and quality of the Work and to determine if the Work is proceeding in accordance with the Contract Documents. The Owner shall not be responsible for the Contractor's ways and means, methods, techniques and procedures in the construction of the Project or for enforcement of safety requirements on the Project.

5.2.3 Based on such observations and the Contractor's Applications for Payment, the Owner will determine the amounts owing to the Contractor and will issue Certificates for Payment in such amounts, as provided in Subparagraph 12.4.1.

5.2.4 The Owner will be, in the first instance, the interpreter of the requirements of the Contract Documents and the judge of the performance thereunder by both the Owner and the Contractor, except where otherwise provided herein. The Owner will promptly render such interpretations as he may deem necessary for the proper execution or progress of the Work.

5.2.5 All claims, disputes and other matters in question relating to the execution or progress of the Work, payment, time extension or interpretation of the Contract Documents shall be referred to the Owner in the manner provided by Subparagraph 12.4.3, within the time limits prescribed in Subparagraph 15.2.1, for decision by the Owner, which will be rendered in writing within a reasonable time.

5.2.6 The Owner shall have authority to reject Work which does not conform to the Contract Documents. Whenever, in the Owner's reasonable opinion, he considers it necessary or advisable to insure the proper implementation of the intent of the Contract Documents, he will require special inspection or testing of the Work as provided in Subparagraph 10.8.2, whether or not such Work be then fabricated, installed or completed.

5.2.7 The Owner will review Shop Drawings, Product Data and Samples promptly as provided in Subparagraphs 7.12.1 through 7.12.8, inclusive.

5.2.8 The Owner will prepare Change Orders in accordance with Article 15 and will have authority to order minor changes in the Work not involving extra cost as provided in Subparagraph 15.3.

5.2.9 The Owner will conduct inspections to determine the date or dates of Substantial Completion and Final Completion and shall issue a Certificate of Substantial Completion and of Final Completion.

**ARTICLE 6  
NOT USED**

**ARTICLE 7  
CONTRACTOR**

7.1 DEFINITION.

7.1.1 The Contractor is the person or organization identified as such in this Contract and General Conditions and the term "Contractor" means the Contractor or his authorized representative. The Contractor, and all Subcontractors employed on the Project shall possess valid Arizona Contractor's Licenses as required by law.

7.1.2 Whenever the words "as may be directed," "suitable," "or equal," "as approved," or other words of similar intent and meaning are used within the Contract Documents implying that judgment or discretion is to be exercised or a decision is to be made, it is understood that it is the judgment, discretion, or decision of the Owner to which reference is made.

7.1.3 All materials and articles of any kind necessary for this Work are subject to the approval of the Owner as provided in the Contract Documents.

7.1.4 After execution of the Contract, changes of brand named, trade named, trademarked, patented articles, or any other substitutions will be allowed only by written order signed by the Owner, in which case the Owner shall receive all benefit of the difference in cost involved, except where choice of material or method is designated "or equal" or "acceptable alternates" in the Specifications.

7.2 REVIEW OF CONTRACT DOCUMENTS AND EXAMINATION OF SITE.

7.2.1 By executing this Contract the Contractor warrants that he has examined the site and carefully studied and compared the Contract and General Conditions, Drawings, Specifications, Addenda, and all other Contract Documents before so executing the Contract. The Contractor shall at once report to the Owner any error, inconsistency or omission he may discover. The Contractor shall not be liable to the Owner for any damage resulting from any such errors, inconsistencies or omissions so long as the Owner is notified thereof unless discovery of such error, inconsistency or omission should have reasonable been made by careful

examination of the Contract Documents prior to submitting a Proposal. The Contractor shall do no Work without appropriate Contract Documents, or where required, approved Shop Drawings, Product Data and Samples.

7.2.2 The Contractor shall be required to use for data and dimensions, figures marked on the drawings in preference to what the drawings may measure to scale. In the absence of figured dimensions, the Owner shall be notified and the dimensions provided within a reasonable time. Drawings shall not be scaled in the absence of figured dimensions.

7.2.3 The Contractor shall verify all dimensions shown and check all measurements in connection with any present building or buildings, levels of grades, walks, driveways, or other existing conditions, before executing any work. Contractor shall immediately report to the Owner any discrepancies between the Plans and actual field conditions. Failure to report any discrepancy within 72 hours after discovery will constitute a waiver of any claim arising out of such discrepancy. This provision shall have precedence over any other notice provisions contained herein.

7.3 SUPERVISION AND CONSTRUCTION PROCEDURES. The Contractor shall supervise the Work, using his best skill and attention. He shall be solely responsible for all construction means, methods, techniques, sequences and procedures and for coordinating all portions of the Work under the Contract. Notwithstanding anything herein to the contrary, Subcontractors shall have an independent responsibility for the means and methods related to the performance of their work.

7.4 LABOR AND MATERIALS.

7.4.1 Unless otherwise specifically noted, the Contractor shall provide and pay for all labor, materials, equipment, tools, construction equipment and machinery, heat, utilities, transportation and any other facilities and services necessary for the proper execution and completion of the Work, whether temporary or permanent and whether or not incorporated or to be incorporated in the Work. No materials shall be incorporated into this Work that contain more than 0% asbestos.

7.4.2 Any work necessary to be performed after regular working hours, on Sundays or legal holidays, shall be performed without additional expense to the Owner.

7.4.3 The Contractor shall at all times enforce strict discipline and good order among his employees and shall not employ on the Work any unfit person or anyone not skilled in the task assigned to him. When requested in writing by the Owner, the Contractor shall remove from the Project any person who commits trespass or is, in the opinion of the Owner, disorderly, dangerous, insubordinate, incompetent or violates any policies of the Owner. If the Owner requests such a removal, he shall notify the Contractor in writing of his action. The Contractor shall keep the Owner harmless from damages or claims for compensation that may occur in the enforcement of this requirement. The Contractor shall not permit the use of tobacco products, alcohol or illegal drugs on the project site.

7.5 WARRANTY.

7.5.1 The Contractor warrants to the Owner that all materials and equipment furnished under this Contract will be new unless otherwise specified, and that all Work will be of good quality, free from faults and defects and in conformance with the Contract Documents. All Work not so conforming to these standards may be considered defective. If required by the Owner, the Contractor shall furnish satisfactory evidence as to the kind and quality of materials and equipment.



7.5.2 The warranty provided in Paragraphs 7.5 and 18.1 shall be in addition to and not in limitation of any other warranty or remedy available pursuant to law or the Contract Documents.

7.6 **TAXES.** The Contractor shall pay all sales, consumer, use, transaction privilege and other taxes required by law in connection with the performance of this Contract, whether in force as of the date of this Contract. If the Contractor's principal place of business is not in Arizona, Contractor shall post a bond for taxes in compliance with A.R.S. § 42-1305.02 and furnish evidence of such bond to Owner prior to submitting any application for payment hereunder

7.7 **PERMITS, FEES AND NOTICES.**

7.7.1 Unless otherwise provided in the Specifications or by Addendum, the Contractor shall secure and pay for all permits, fees, inspections and reinspections necessary for the proper execution and completion of the Work, including approval of the Arizona Department of Water Resources. The Contractor shall procure and pay for all necessary utilities for the Project, including temporary utility hook-ups and utilities used in course of construction, except for water which will be provided by Owner.

7.7.2 The Contractor shall give all notices and comply with all laws, ordinances, rules, regulations and orders of any public authority bearing on the performance of the Work. If the Contractor observes that any of the Contract Documents are at variance therewith in any respect, he shall promptly notify the Owner in writing. If the Contractor performs any Work knowing it to be contrary to such laws, ordinances, rules and regulations, and without such notice to the Owner, he shall assume full responsibility therefor and shall bear all costs attributable thereto, including any reasonable attorney's fees incurred by Owner in connection therewith.

7.8 **SUPERINTENDENT.** The Contractor shall employ a competent Superintendent and necessary assistants who shall be in attendance at the Project site during the progress of the Work. The Contractor shall assign to the Project a Superintendent prior to the pre-construction meeting and shall furnish to the Owner the Superintendent's resume. The Superintendent shall be satisfactory to the Owner and shall not be changed except with the consent of the Owner, unless the Superintendent proves to be unsatisfactory to the Contractor and ceases to be in his employ. The Superintendent shall represent the Contractor, and all communications given to the Superintendent shall be as binding as if given to the Contractor. Important communications will be confirmed in writing. Other communications will be so confirmed on written request in each case.

7.9 **RESPONSIBILITY FOR THOSE PERFORMING THE WORK.** The Contractor shall be responsible to the Owner for the acts and omissions of all his employees and all Subcontractors, their agents and employees, and all other persons performing any of the Work or supplying any material or equipment to be incorporated in the Work under a contract of any nature with the Contractor.

7.10 **PROGRESS SCHEDULE AND REPORTS.**

7.10.1 The Contractor, within fourteen (14) days after being awarded the Contract, shall prepare and submit for the Owner's review his planned Construction Progress Schedule for the Work as provided in the specifications. The Construction Progress Schedule shall be related to the entire Project and shall indicate the dates for the starting and completion of the various components and phases of construction and shall be revised monthly or as required by the conditions of the Work, upon request of and subject to the review of the Owner. The Contractor shall comply with the requirements of the Specifications in connection with the preparation and revision of the Construction Progress Schedule. Approval of the Construction Progress Schedule by the Owner shall not relieve the Contractor from his obligation to complete the Project within the Contract Time.

**7.11 DRAWINGS AND SPECIFICATIONS AT THE SITE.**

7.11.1 The Contractor shall maintain at the site for the Owner one (1) copy of all Drawings, Specifications, Addenda, approved Shop Drawings, Change Orders, other Modifications, and manufacturers' printed specifications and recommendations, in good order and marked carefully and accurately to record on a daily basis all changes made during construction, all of which shall be available to the Owner at all times. These Drawings shall be delivered to the Owner upon completion of the Work.

7.11.2 The Contractor shall also submit to the Owner for his record three copies each of all manufacturers' maintenance manuals, printed specifications and recommendations, which by reference in the several divisions of the Specifications are a part thereof.

**7.12 SHOP DRAWINGS, PRODUCT DATA AND SAMPLES.**

7.12.1 Shop Drawings and Product Data are drawings, diagrams, illustrations, schedules, performance charts, brochures and other data which are required by the Contract Documents and are prepared by the Contractor or any Subcontractor, Sub-subcontractor, manufacturer, supplier or distributor, and which illustrate or describe some portion of the Work.

7.12.2 Samples are physical examples furnished by the Contractor to illustrate materials, equipment or workmanship, and to establish standards by which the Work will be judged.

7.12.3 By submitting Shop Drawings, Product Data and Samples, the Contractor thereby represents that he has determined and verified all field measurements, field construction criteria, materials, catalog numbers and similar data, or will do so, and that he has checked and coordinated all Shop Drawings, Product Data and Samples with the requirements of the Work and of the Contract Documents.

7.12.4 The Owner will review and take other appropriate action with respect to Shop Drawings, Product Data and Samples with reasonable promptness so as to cause no delay, but only for conformance with the Contract Documents.

7.12.5 The Contractor shall make any corrections required by the Owner to comply with the Contract Documents and shall resubmit the required number of corrected copies of Shop Drawings, Product Data or new Samples until approved.

7.12.6 The Owner's review of Shop Drawings, Product Data or Samples shall not relieve the Contractor of responsibility for any deviation from the requirements of the Contract Documents unless the Contractor has informed the Owner in writing of such deviation at the time of submission and the Owner has given written approval to the specific deviation, nor shall the Owner's approval relieve the Contractor from responsibility for errors or omissions in the Shop Drawings, Product Data or Samples.

7.12.7 No portion of the Work requiring a Shop Drawing, Product Data or Sample submission shall be commenced until the submission has been approved by the Owner. All such portions of the Work shall be in accordance with approved Shop Drawings, Product Data and Samples.

**7.13 CUTTING AND PATCHING OF WORK.** The Contractor shall accurately and carefully do all cutting, fitting, or patching of his Work that may be required to make its several parts fit together properly, and

shall not endanger any Work, either new or existing, by cutting, excavating or otherwise altering such Work or any part of it.

**7.14 CLEANING UP.**

7.14.1 The Contractor at all times during the progress of the Work shall keep the buildings and site free from accumulation of waste materials or rubbish caused by his operations. At the completion of the Work he shall remove all his waste materials and rubbish from and about the Project as well as all his tools, construction equipment, machinery and surplus materials not specified to be left at the site, and shall clean all glass surfaces and other areas or materials as specified, and leave the Work "broom-clean" or its equivalent, except where more stringent cleaning requirements are provided by the Contract Documents.

7.14.2 If the Contractor fails to satisfactorily clean up, the Owner will do so and the cost thereof shall be charged to the Contractor as provided in Paragraph 10.6.

**7.15 COMMUNICATIONS.** The Contractor shall forward all written communications to the Owner.

**7.16 INDEMNIFICATION.**

7.16.1 To the fullest extent permitted by law, the Contractor shall defend, indemnify and hold harmless the Owner and its agents and employees from and against any and all claims, damages, losses and expenses, including any attorney's fees court costs, experts' fees and other costs incurred, arising out of or resulting from the performance of the Work, delivery to the work site of any and all materials to be used in the Work, and any and all other activities connected with the Work, provided that any such claim, damage, loss or expense:

.1 is attributable to bodily injury, sickness, disease or death, or to injury or destruction of tangible property (other than the Work itself) including the loss of use resulting therefrom; and

.2 is caused in whole or in part by any negligent or intentional act or omission of the Contractor, any Subcontractor, Sub-subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, regardless of whether or not it is caused in part by a party indemnified hereunder.

7.16.2 In any and all claims against the Owner or any of its agents or employees by any employee of the Contractor, any Subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, the indemnification obligation under this Paragraph 7.16 shall not be limited in any way by any limitation on the amount or type of damages, compensation or benefits payable by or for the Contractor or any Subcontractor under worker's compensation acts, disability benefit acts or other employee benefit acts.

**ARTICLE 8  
SUBCONTRACTORS**

**8.1 DEFINITION.**

8.1.1 A Subcontractor is a person or organization who has a direct contract with the Contractor to supply materials or equipment or to perform any of the Work at the site. The term "Subcontractor" is referred to throughout the Contract Documents as if singular in number and masculine in gender and means a Subcontractor or his authorized representative.

8.1.2 A Sub-subcontractor is a person or organization who has a direct or indirect contract with the Subcontractor to perform any of the Work at the site, or to supply any materials or equipment to be used in the Project. The term "Sub-subcontractor" is referred to throughout the Contract Documents as singular in number and masculine in gender, and means a Sub-subcontractor or an authorized representative thereof.

8.2 AWARD OF SUBCONTRACTS AND OTHER CONTRACTS FOR PORTIONS OF THE WORK.

8.2.1 If, after the actual signing of this Agreement, the Owner refuses to accept any person or organization on the Subcontractor and Material Vendor List for good and substantial reason, the Contractor shall submit an acceptable substitute and the Contract Amount shall be increased or decreased by the difference in cost occasioned by such substitution and an appropriate Change Order shall be issued. However, no increase in the Contract Amount shall be allowed for any such substitution unless the Contractor has acted promptly and responsibly in submitting a name with respect thereto.

8.2.2 The Contractor shall not contract with any Subcontractor proposed to perform portions of the Work designated in the Construction Documents, or if none is so designated, with any Subcontractor proposed for the principal portions of the Work who has not been accepted by the Owner. The Contractor will not be required to contract with any Subcontractor against whom he has a reasonable objection.

8.2.3 If the Owner requires a change of any proposed Subcontractor previously accepted by it, the Contract Amount shall be increased or decreased by the difference in cost occasioned by such change and an appropriate Change Order shall be issued.

8.2.4 The Contractor shall not make any substitution for any Subcontractor who has been accepted by the Owner unless the substitution is approved in writing by the Owner.

8.2.5 Notwithstanding any provisions to the contrary in the Contract Documents, if any Subcontractor listed is found not to be qualified to perform public work as a matter of law, upon written notice from the Owner, the Contractor shall submit a qualified Subcontractor for the Owner's approval and shall substitute such qualified and approved Subcontractor at no additional cost to the Owner.

8.3 SUBCONTRACTUAL RELATIONS.

8.3.1 All work performed for the Contractor by a Subcontractor shall be pursuant to an appropriate written agreement between the Contractor and the Subcontractor (and where appropriate between Subcontractors and Sub-subcontractors) which shall contain provisions that:

- .1 preserve and protect the rights of the Owner under the Contract with respect to the Work to be performed under the subcontract so that the subcontracting thereof will not prejudice such rights;
- .2 require that such work be performed in accordance with the requirements of the Contract Documents;
- .3 require submission to the Contractor of applications for payment under each subcontract to which the Contractor is a party, in reasonable time to enable the Contractor to apply for payment in accordance with Article 12;

.4 require that all claims for additional costs, extensions of time, damages for delays or otherwise with respect to subcontracted portions of the Work shall be submitted to the Contractor (via any Subcontractor or Sub-Subcontractor where appropriate) in the manner provided in the Contract Documents for like claims by the Contractor upon the Owner;

.5 waive all rights the contracting parties may have against one another for damages caused by fire or other perils covered by the property insurance described in Article 14, except such rights as they may have to the proceeds of such insurance held by the Owner as trustee under Article 14; and

.6 obligate such Subcontractor specifically to consent to the provisions of this Paragraph 8.3.

**8.4 PAYMENTS TO SUBCONTRACTORS.**

8.4.1 The Owner may, on request and at his discretion, furnish to any Subcontractor, if practicable, information regarding percentages of completion certified to the Contractor on account of work done by such Subcontractors.

8.4.2 The Owner shall have no obligation to pay or to see to the payment of any monies to any Subcontractor except as may otherwise be required by law.

**ARTICLE 9  
SEPARATE CONTRACTS**

9.1 **OWNER'S RIGHT TO AWARD SEPARATE CONTRACTS.** The Owner reserves the right to award other contracts in connection with other portions of the Project under conditions similar to this Contract.

**9.2 MUTUAL RESPONSIBILITY OF CONTRACTORS.**

9.2.1 The Contractor shall afford other contractors reasonable opportunity for the introduction to the site and storage of their materials and equipment thereon and the execution of their work, and shall properly connect and coordinate his Work with theirs.

9.2.2 If any part of the Contractor's Work depends for proper execution or results upon the work of any other separate contractor, the Contractor shall inspect and promptly report to the Owner any apparent discrepancies or defects in such work that render it unsuitable for such proper execution and results. Failure of the Contractor to so inspect and report shall constitute an acceptance of the other contractor's work as fit and proper to receive his Work, except as to defects which may develop in the other separate contractor's work after the execution of the Contractor's Work.

9.2.3 Should the Contractor cause damage to the Work or property of any separate contractor on the Project, the Contractor shall, upon written notice, promptly attempt to settle such other contractor's claim. If such separate contractor sues the Owner on account of any damage alleged to have been so sustained, the Owner shall promptly notify the Contractor, who shall defend such proceedings at the Contractor's expense, and if any judgment against the Owner arises therefrom, the Contractor shall promptly pay or satisfy it and shall immediately, upon presentation to it of a statement thereof, reimburse the Owner for all attorney's fees and court costs which the Owner has incurred.

**9.3 CUTTING AND PATCHING UNDER SEPARATE CONTRACTS.**

9.3.1 The Contractor shall do all cutting, fitting or patching of his Work that may be required to fit it to receive or be received by the work of other contractors indicated in the Contract Documents. The Contractor shall not endanger any work of any other contractors by cutting, excavating or otherwise altering any work and shall not cut or alter the work of any other contractor except with the written consent of the Owner.

9.3.2 Any costs caused by defective or ill-timed work shall be borne by the party responsible therefor.

**ARTICLE 10  
MISCELLANEOUS PROVISIONS**

10.1 **LAW OF THE PLACE.** The Contract shall be governed by the law of the State of Arizona, and any other subordinate jurisdiction in which the Project is located.

10.2 **SUCCESSORS AND ASSIGNS.** The Owner and the Contractor each binds himself, his partners, successors, assigns and legal representatives to the other party hereto and to the partners, successors, assigns and legal representatives of such other party in respect to all covenants, agreements and obligations contained in the Contract Documents. Neither party to the Contract shall assign the Contract or any part hereof or sublet it as a whole or in part without the written consent of the other, nor shall the Contractor assign or pledge any monies due or to become due to him hereunder, without the previous written consent of the Owner.

10.3 **WRITTEN NOTICE.** Written notice shall be deemed to have been duly served if delivered in person to the individual for whom it was intended or if delivered at or sent by registered or certified mail to the last business address known to him who gives the notice.

10.4 **CLAIMS FOR DAMAGES.** Should either party to the Contract suffer injury or damage to person or property because of any act or omission of the other party or of any of his employees, agents or others for whose acts he is legally liable which claim is not covered by Article 15 hereof, a claim shall be made in writing to such other party within a reasonable time after the first observance of such injury or damage.

10.5 **PERFORMANCE BOND AND LABOR AND MATERIAL PAYMENT BOND.** The Contractor shall furnish and maintain performance and labor and material payment bonds as required by Arizona law covering the faithful performance of the Contract and the payment of all obligations arising thereunder in such form and amount as the Owner may prescribe and with such sureties as may be agreeable to the Owner. The premiums shall be paid by the Contractor. The Contractor shall, prior to commencement of the Work, submit such bonds to the Owner. Individual sureties are not acceptable.

10.6 **OWNER'S RIGHT TO COMPLETE THE WORK.** If the Contractor defaults or neglects to carry out the Work in accordance with the Contract Documents, or fails to perform any provision of the Contract, the Owner may, after seven days' written notice to the Contractor and/or his surety, if any, and without prejudice to any other remedy he may have, proceed to make such other necessary and reasonable arrangements to carry out the Work in accordance with the Contract Documents, all at the expense of the Contractor, including the Owner's attorneys' fees and other costs.

10.7 **ROYALTIES AND PATENTS.** The Contractor shall pay all royalties and license fees. He shall defend all suits or claims from infringement of any patent right and shall save the Owner harmless from loss on account thereof, including Owner's attorneys' fees and court costs, except that Owner shall be responsible for all

such loss when a particular design, process or product of a particular manufacturer or manufacturers is specified. But, if the Contractor has reason to believe that the design, process or products specified is an infringement of a patent, he shall be responsible for such loss unless he promptly gives information to the Owner prior to starting the Work.

**10.8 TESTS.**

10.8.1 Where the Contract Documents, laws, ordinances, rules, regulations or orders of any public authority having jurisdiction require any of the Work to be inspected, tested or approved, the Contractor shall give the Owner timely notice of its readiness and of the date arranged so the Owner may observe such inspection, testing or approval. The Owner shall pay the cost of all such tests, except where otherwise provided herein, and except for retest or reinspection of Work which fails to comply with the Contract Documents.

10.8.2 All equipment and materials used in the construction of the Project, especially those upon which the strength and durability of the structure may depend, shall be subject to adequate inspection and testing in accordance with accepted standards to establish conformity with Specifications, applicable codes and standards and suitability for use intended all as set forth more particularly in the Specifications.

10.8.3 If after the commencement of the Work the Owner determines that any of the Work requires special inspection, testing, or approval which Subparagraph 10.8.1 does not include, he will order such special inspection, testing or approval, and the Contractor shall give notice of readiness as in Subparagraph 10.8.1. If such special inspection or testing reveals a failure of the Work to comply:

- .1 with the requirements of the Contract Documents, or
- .2 with laws, ordinances, rules, regulations or orders of any public authority having jurisdiction over the Work,

the Contractor shall bear all costs thereof and the costs of such inspection or testing and other expenses related thereto, including without limitation Owner's legal fees, if any, incurred in connection with advising Owner on such failure of compliance; otherwise the Owner shall bear such costs.

10.8.4 Required certificates of re-inspections or testing to secure compliance with Clauses 10.8.3.1 or 10.8.3.2 above shall be paid for by the Contractor.

10.8.5 If the Owner wishes to observe the inspections, tests or approvals required by this Paragraph 10.8, he will do so promptly and, where appropriate, at the source of supply.

10.8.6 Neither the observations of the Owner in his administration of the Construction Contract, nor inspections, tests or approvals by persons other than the Contractor shall relieve the Contractor from his obligations to perform the Work in accordance with the Contract Documents.

10.9 **LEGAL FEES AND COSTS.** The prevailing party shall be entitled to recover its attorney's fees, any costs of suit, any expert witness fees and the actual cost of any test or inspection incurred in connection with any effort undertaken to enforce any of the terms of this Contract.

**ARTICLE 11  
TIME AND LIQUIDATED DAMAGES**

**11.1 CONTRACT TIME, LIQUIDATED DAMAGES AND RELATED PROVISIONS.**

11.1.1 It is understood and agreed that the construction of the Work under the Contract Documents shall be commenced on the date stated in the Notice to Proceed issued by the Owner and shall be Substantially Complete by the Contractor no later than the number of consecutive calendar days from that date, which number is the Contract Time as specified in Paragraph 3.2, herein. The Contract Time is the period of time from (1) the date specified in the Notice to Proceed as the date upon which the Contractor is to commence the Work (the "Start Date"), through (2) the date when the agreed time for Substantial Completion of the construction of the Project expires (the "Finish Date"). The date of beginning, rate of progress, and time for completion are essential conditions of the Contract, and the Contractor agrees that said Work shall be prosecuted regularly, diligently, and uninterruptedly at such rate of progress as will insure full completion thereof within the Contract Time specified. It is expressly agreed that the Contract Time is reasonable.

11.1.2 If the Substantial Completion Date as defined in Subparagraph 11.1.3 for the Project or any Phase thereof, occurs after the expiration of the Contract Time, the Contractor shall pay the Owner the amount or amounts stated in Article 3 as liquidated damages for each calendar day the Work remains incomplete after expiration of the Contract Time. These amounts are agreed upon because of the impracticability and extreme difficulty of ascertaining the actual damages the Owner would sustain. It is expressly agreed that the amounts of liquidated damages set forth herein are reasonable. Said amounts may be retained from time to time by the Owner from payments due the Contractor.

11.1.3 The date of the Substantial Completion of the Work, or designated portion thereof, is the date established by a Certificate of Substantial Completion prepared by the Owner when construction is sufficiently complete, in accordance with the Contract Documents as they may have been modified by any Change Orders agreed to by the parties, so that the Owner may occupy the Project, or a designated portion thereof, if he so elects, for the use for which it is intended. Certification of a designated portion of the Work by the Owner as being "Substantially Complete" and occupancy of that portion thereafter by the Owner shall neither release, or otherwise operate to excuse the Contractor from his duty to complete the remainder of the Work within the Contract Time nor relieve the Contractor from any liability for not completing expeditiously the remainder of Work.

11.1.4 The Final Completion Date is the calendar date when all items of the Work are one hundred percent (100%) finished, with no items of any scope, large or small, outstanding and remaining to be completed, and all known defective work has been corrected. When the Owner certifies in writing, pursuant to the terms of Subparagraph 12.6.2, that the Final Completion Date is reached, the Contractor may make application for final payment pursuant to Subparagraph 12.6.2.

**11.2 PROGRESS AND COMPLETION.**

11.2.1 All time limits stated in the Contract Documents are of the essence of the Contract.

11.2.2 The Contractor shall begin the Work on the Start Date as defined in Subparagraph 11.1.1. He shall carry the Work forward expeditiously with adequate forces and shall complete it as required herein.

**11.3 DELAYS AND EXTENSIONS OF TIME.**

11.3.1 If the Contractor is delayed at any time in the progress of the Work by any cause which the Owner determines may justify the delay, including, but not limited to, unforeseeable cause beyond the control and without the fault or negligence of the Contractor, its agents and employees and Subcontractors and Sub-



subcontractors and their agents and employees, including, but not restricted to: acts of God, acts of the public enemy, acts of the Owner, acts of another contractor in performance of a contract with the Owner, fires, floods, epidemics, quarantine restrictions, strikes, freight embargoes and unusually severe weather over the entire Contract Time, then the Contract Time shall be extended by Change Order for such reasonable time as the Owner may determine. No extension of the Contract Time pursuant to this paragraph shall relieve the Contractor from any obligation attendant upon him under any of the provisions of this Contract. It is expressly agreed that the Owner's liability for delay from any cause shall be limited to granting a time extension to the Contractor, and there is no other obligation, expressed or implied, on the part of the Owner to the Contractor for delay from any cause other than Owner caused delay. If the Contractor makes a claim for delay, as provided herein, for which he alleges that the Owner is responsible, which is unreasonable under the circumstances and which was not within the contemplation of the parties, the Owner agrees to negotiate with the Contractor the validity of such claim, extensions of general conditions, and/or the amount of Contractor's damages incurred by the Contractor, if any.

11.3.2 Time extensions may be granted by the Owner in cases where unusually severe weather results in the inability of the Contractor to prosecute the work. Anticipated adverse weather as determined by the records of the National Oceanic and Atmospheric Administration ("NOAA") shall not entitle the Contractor to an extension of the Contract Time. The NOAA schedule of anticipated adverse weather will constitute the base line for monthly weather time evaluations. During the Contract Time each month, actual adverse weather days will be recorded on a calendar day basis (including weekends and holidays) and compared to the monthly anticipated adverse weather. The term actual adverse weather days shall include days on which the Work is impacted by adverse weather. The number of actual adverse weather days shall be calculated chronologically from the first to the last day in each month. Adverse weather days must prevent work for 50 percent or more of the Contractor's work day and delay work critical to the timely completion of the Project. If the number of actual adverse weather days exceeds the number of days of anticipated adverse weather days, the Owner will determine whether the Contractor is entitled to a time extension. The Contractor's Construction Progress Schedule must reflect the anticipated adverse weather delays on all weather dependent activities.

11.3.3 All claims for extension of time shall be made in writing to the Owner no more than fifteen (15) days after the occurrence of the delay; otherwise, they shall be waived. In the case of a continuing cause of delay, only one claim is necessary, and the Contractor shall promptly notify the Owner in writing of the date of the termination of the continuing cause of delay.

11.3.4 If no schedule or agreement is made stating the dates upon which written interpretations as set forth in Subparagraph 4.12.5 shall be furnished, then no claim for delay shall be allowed on account of failure to furnish such interpretations until fifteen days after demand is made for them, and not then unless such claim is reasonable.

**ARTICLE 12  
PAYMENTS AND COMPLETION**

12.1 **CONTRACT AMOUNT.** The Contract Amount is as stated in this Contract and General Conditions and is the total amount payable by the Owner to the Contractor for the performance of the Work under the Contract Documents, subject to credits or increases resulting from Change Orders.

12.2 **SCHEDULE OF VALUES.** Before the first Application for Payment, the Contractor shall submit to the Owner a schedule of values reflecting as nearly as reasonably possible the actual values of the various components of the Work aggregating the total Contract Amount, prepared in such form as Owner may require, and supported by such data to substantiate its correctness as the Owner may require. Each item in the

schedule of values shall include its proper share of overhead and profit. This schedule shall be used only as a basis for the Contractor's Application for Payment.

**12.3 PROGRESS PAYMENTS.**

12.3.1 On or about the first day of each calendar month during the course of construction, the Contractor shall submit to the Owner an itemized Application for Payment supported by such data substantiating the Contractor's right to payment as the Owner may require. If the Contractor desires to exercise his option to require the Owner to accept substitute security in lieu of retention provided for in Subparagraph 12.4.2 of this Contract and General Conditions, as permitted by law, the Contractor shall submit his request for acceptance of substitute security on Owner's approved form entitled "Request for Acceptance of Substitute Security and Assignment of Securities in Lieu of Retention" prior to his first Application for Payment. The Contractor shall comply with all of the instructions appearing on Owner's approved form for assigning substitute security. The Contractor agrees to pay Owner any reasonable expenses incurred by Owner in determining the sufficiency of the assignment or assignments, including a reasonable attorney's fee, if the Contractor fails to complete any part of Owner's approved form, or completes any part of those forms incorrectly, or attempts an assignment which reasonably requires Owner to consult an attorney to determine its sufficiency and that attorney reasonably concludes that the assignment is not legally sufficient. Any expenses so incurred by Owner shall be deducted by Owner from Owner's next payment to Contractor.

12.3.2 Payments shall be based on the Work actually performed during the preceding calendar month. Payment may be made for materials not incorporated in the Work but delivered and suitably stored at the site under such conditions agreed upon in writing by the Owner.

12.3.3 Material delivered and suitably stored at the site by the Contractor, Subcontractors, Sub-subcontractors, or Material Vendors shall be insured to the full value of the material and shall be suitably stored and protected. Only such material that is in accordance with the Contract Documents shall be installed into the Work. Until the Final Completion and acceptance of the Work by the Owner, it shall be the Contractor's responsibility to protect all materials installed in or delivered to the Project.

12.3.4 The Contractor warrants and guarantees that title for all work, materials and equipment covered by the Contract Documents shall pass to the Owner upon Final Completion and acceptance by the Owner and that such work, materials and equipment shall be free and clear of all liens, claims, security interests or encumbrances, hereinafter referred to in this Article 12 as "claims".

**12.4 PROGRESS PAYMENTS.**

12.4.1 If the Contractor has made Application for Payment as above, then not later than the tenth day of the month the Owner shall approve or modify the Application for such amount as the Owner determines to be properly due, or state in writing the Owner's reasons for withholding, in whole or in part, the amount applied for as provided in Subparagraph 12.5.1.

12.4.2 The Owner shall make a payment to the Contractor on the basis of the value of the Work actually performed during the preceding calendar month in accordance with Subparagraph 12.3.2, less the amount of retention specified in Subparagraph 12.4.4 hereof. Such payments shall be made within thirty days after receipt of application for payment if the Contractor has agreed to adhere to the provisions of A.R.S. § 41-2577(B),(D) and (F). If the Contractor has properly requested the Owner pursuant to Subparagraph 12.3.1 of this Contract and General Conditions to accept substitute security, the Owner shall pay to the Contractor one hundred percent (100%) of the value of the Work actually performed during the preceding calendar month in accordance with

this Paragraph 12. If the Contractor did not request an acceptance of substitute security, made an incomplete or incorrect assignment or made a legally insufficient assignment of substitute security, as determined by Owner or Owner's attorney, the Owner shall retain the amount of such approved Application for Payment specified in Subparagraph 12.4.4 hereof as a guarantee of the complete performance of the Contract. Any amounts retained or any securities held by Owner shall be returned to the Contractor within sixty (60) days after the Final Completion Date as specified in Subparagraph 12.6.2 of this Contract and General Conditions, provided the Contractor has by that time duly furnished the Owner any and all documents indicated to be furnished by the close out requirements of the Specifications or required for the proper maintenance and functioning of the Work as a whole. The Contractor shall submit along with the Application for payment lien waivers from each subcontractor, materials or equipment supplier, the aggregate sum of which shall be the amount of the previous progress payment issued to the Contractor. If lien waivers from all subcontractors, materials or equipment suppliers do not equal the aggregate sum of the previous progress payment, the General Contractor shall submit the following statement along with the current progress payment request: "I hereby certify as General Contractor on this project that I have paid all subcontractors, materials or equipment suppliers, for the Work provided in conjunction with the Project for which I have previously received payment."

12.4.3 In his Application for Payment, or in a separate notice, the Contractor shall include and itemize, and furnish such supporting particulars as the Owner shall require, all claims for additional compensation against the Owner arising under the Contract Documents or any covenant thereof, express or implied, or from any cause whatsoever, within the time limits prescribed in Subparagraph 15.2.1. It is expressly covenanted that the purpose of this provision is to guard the Owner against surprise claims, to permit the Owner to investigate claims as the same may arise, and to prevent vexatious litigation of claims. It is expressly covenanted that the Owner shall have no liability on any claim unless such claim was submitted in writing at the time and in the manner required hereby.

12.4.4 The Owner shall retain ten percent (10%) of the amount of each Application for Payment as insurance of proper performance of the Contract. Once the Contract is fifty percent (50%) complete, one-half of the retention then held shall be paid to the Contractor provided the Contractor is making satisfactory progress and there is no specific cause or claim requiring a greater amount to be retained. After the Contract is fifty percent (50%) completed, five percent (5%) of the amount of each subsequent Application for Payment shall be retained providing the Contractor is making satisfactory progress on the Project. If at any time the Owner determines that the Contractor is not making satisfactory progress, then the Owner may retain ten percent (10%) of all subsequent Applications for Payment.

12.4.5 No Certificate for a progress payment, nor an acceptance of any security in lieu of the cash retention, nor any progress payment, nor any partial or entire use or occupancy of the Project by the Owner, shall constitute an acceptance of any Work not in accordance with the Contract Documents.

12.5 PAYMENTS WITHHELD.

12.5.1 The Owner may decline to pay Contractor and may nullify the whole or any part of any Certificate for Payment previously issued to such extent as may be necessary in his opinion to protect the Owner from loss because of:

- .1 defective work not remedied,
- .2 claims filed or reasonable evidence indicating probable filing of claims,

- .3 reasonable doubt that the Work can be completed for the unpaid balance of the Contract Amount,
- .4 damage to the Owner or another contractor,
- .5 reasonable indication that the Work will not be completed within the Contract Time, or
- .6 unsatisfactory prosecution of the Work by the Contractor.

12.5.2 When the grounds in Subparagraph 12.5.1 are removed, or in the case of 12.5.1.3 above, when the Owner is satisfied that the Contractor will complete the Project at the agreed upon price, payment shall be made for amounts withheld because of them.

**12.6 SUBSTANTIAL COMPLETION AND FINAL PAYMENT.**

12.6.1 When the Contractor believes that the Work or a designated portion thereof acceptable to the Owner is substantially complete, the Contractor shall prepare for submission to the Owner a "punch list" of items to be completed or corrected. Any item on such list shall be completed or corrected before the Final Completion Date without regard to whether such item may be characterized by anyone as a "warranty item" or otherwise. The failure to include any items on such punch list does not alter the responsibility of the Contractor to complete all Work in accordance with the Contract Documents. When the Owner, on the basis of an inspection, determines that the Work or a portion thereof is substantially complete, he will then prepare a Certificate of Substantial Completion, which shall state the responsibilities of the Owner and the Contractor for utilities and insurance. The Certificate(s) of Substantial Completion shall be submitted to the Contractor for its written acceptance of the responsibilities assigned in such Certificate.

12.6.2 Upon receipt of written notice from the Contractor that the Work is ready for final inspection and acceptance, the Owner will promptly make such inspection and, when the Owner finds (1) the Work acceptable under the Contract Documents, (2) the Contract fully performed and (3) the Final Completion Date has been reached, as that term is defined in Subparagraph 11.1.4, then, and only then, the Owner shall promptly issue a final Certificate for Payment stating that, to the best of his knowledge, information and belief, and on the basis of observations and inspections, the Work has been fully completed in accordance with the terms and conditions of the Contract Documents, that the entire balance found to be due the Contractor is payable, and that any securities held by the Owner in lieu of a cash retention are returnable.

12.6.3 Neither the final payment nor the remaining retained percentage shall become due until the Contractor submits to the Owner (1) an affidavit that all payrolls, bills for materials and equipment, and other indebtedness connected with the Work for which the Owner or his property might in any way be responsible, have been paid or otherwise satisfied, (2) consent of surety to final payment, (3) if required by the Owner, other data establishing payment or satisfaction of all such obligations, to the extent and in such form as may be designated by the Owner, and (4) written certification by the Contractor, and such subcontractors, material suppliers and manufacturers as the Owner shall designate, that no materials have been incorporated into the Work which contain any asbestos.

12.6.4 The acceptance of final payment shall constitute a waiver of all claims by the Contractor except previously made in writing and still unsettled.

**ARTICLE 13**

**PROTECTION OF PERSONS AND PROPERTY**

13.1 SAFETY PRECAUTIONS AND PROGRAMS. The Contractor shall be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the Work in compliance with all local, state and federal laws and regulations.

13.2 SAFETY OF PERSONS AND PROPERTY.

13.2.1 The Contractor shall take all reasonable precautions for the safety of, and shall provide all reasonable protection to prevent damage, injury or loss, to:

.1 all employees engaged in the Work and all other persons who may be affected thereby;

.2 all the Work and all materials and equipment to be incorporated therein, whether in storage on or off the site, under the care, custody or control of the Contractor or any of his Subcontractors or Sub-subcontractors; and

.3 other property at the site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures and utilities not designated for removal, relocation or replacement in the course of construction.

13.2.2 The Contractor shall comply with all applicable laws, ordinances, rules, regulations and orders of any public authority having jurisdiction for the safety of persons or property or to protect them from damage, injury or loss. He shall erect and maintain, as required by existing conditions and the progress of the Work, all reasonable safeguards for safety and protection, including posting danger signs and other warnings against hazards, promulgating safety regulations and notifying owners and users of adjacent utilities.

13.2.3 When the use or storage of explosives or other hazardous materials or equipment is necessary for the execution of the Work, the Contractor shall exercise the utmost care and shall carry on such activities under the supervision of properly qualified personnel.

13.2.4 All damage or loss to any property referred to in Clauses 13.2.1.2 and 13.2.1.3 caused in whole or in part by the Contractor, any Subcontractor, any Sub-subcontractor, or anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable, shall be remedied by the Contractor.

13.2.5 The Contractor shall designate a responsible member of his organization at the site whose duty shall be the prevention of accidents. This person shall be the Contractor's Superintendent unless otherwise designated in writing by the Contractor to the Owner.

13.2.6 The Contractor shall not load or permit any part of the Work to be loaded so as to endanger its safety.

13.3 EMERGENCIES. In any emergency affecting the safety of persons or property, the Contractor shall act, at his discretion, to prevent threatened damage, injury or loss. Any additional compensation or extension of time claimed by the Contractor on account of emergency work shall be determined as provided by the applicable provisions of the Contract Documents.

**ARTICLE 14  
INSURANCE**

**14.1 CONTRACTOR'S INSURANCE.**

14.1.1 The Contractor shall procure and shall maintain during the entire life of this Contract, unless otherwise specified herein, the insurance of the kind and amount specified in this Article 14 from a company or companies with an AM Best rating of A- or better and licensed to do business in the State of Arizona at the time the policy is issued through the duration of the Contract, the cost of which shall be borne by Contractor.

14.1.2 The Contractor shall not commence work under this Contract until he has obtained and secured the Owner's approval of all insurance required herein, nor shall the Contractor allow any Subcontractor to commence work on his Subcontract until the insurance required of the Subcontractor has been so obtained and approved.

**14.2 BUILDER'S RISK INSURANCE.**

14.2.1 During the course of construction, Contractor will maintain Builder's Risk insurance until Substantial Completion. Such coverage will be on an all-risk basis providing coverage for, but not limited to, Fire, Vandalism and Malicious Mischief. Owner and Subcontractors of every tier will be additional insureds on said policy. Contractor will be responsible for deductible if a loss is caused by the negligence of Contractor or any of their subcontractors. Otherwise, Owner shall be responsible.

14.2.2 The Contractor shall furnish evidence of Builder's Risk Insurance equal in face amount to the full Contract Amount. This Certificate of Insurance shall be furnished to the Owner prior to beginning the Project.

14.2.3 During the life of this Contract, Contractor agrees to waive any right of recovery against the Owner for damage to the property of the Contractor. This provision includes specifically the waiver of the right of recovery against the Owner for fire damage to property under contract and not yet formally accepted by Owner even though said property at the time of loss may be partially occupied by the Owner.

14.3 **WORKER'S COMPENSATION INSURANCE.** The Contractor shall procure and shall maintain during the life of this Contract, Worker's Compensation Insurance for all his employees to be engaged in work on the Project under this Contract and, in case of any such work sublet, the Contractor shall require the Subcontractor similarly to provide Worker's Compensation Insurance for all of the latter's employees to be engaged in such work unless such employees are covered by the protection afforded by the Contractor's Worker's Compensation Insurance. In case any class of employees engaged in hazardous work on the Project under this Contract is not protected under the Worker's Compensation Statute, the Contractor shall provide and shall cause each Subcontractor to provide adequate employer's general liability insurance for the protection of such of his employees as are not otherwise protected.

14.4 **CONTRACTOR'S PUBLIC LIABILITY AND PROPERTY DAMAGE INSURANCE.** The Contractor shall procure and shall maintain during the life of this Contract public liability insurance providing combined single limits of not less than \$1,000,000.00 for any one event and an aggregate limit of \$2,000,000 for this Project. Property damage liability shall include coverage for explosion, collapse and underground. The required insurance must be written by a Company licensed to do business in Arizona at the time the policy is issued and the Company must be acceptable to the Owner.

14.5 CONTRACTUAL LIABILITY INSURANCE. The Contractor shall purchase and maintain contractual liability insurance to cover the Contractor's obligations under Paragraph 7.16, herein in the amount of Combined Single Limits of \$1,000,000.00 each occurrence. The Contractor shall also provide Products and Complete Operations Insurance which shall be maintained for a minimum period of two (2) years after the final payment and Contractor shall continue to provide evidence of such coverage to Owner on an annual basis during the aforementioned period.

14.6 AUTOMOBILE LIABILITY INSURANCE

14.6.1 Provide Comprehensive Automobile Liability Insurance including coverage of owned, non-owned and hired vehicles, with limits not less than those stated below.

- .1 Bodily Injury Liability: \$1,000,000.00 each person and \$1,000,000.00 each occurrence;
- .2 Property Damage Liability: \$300,000.00 each occurrence; OR
- .3 \$1,000,000.00 bodily injury and property damage combined single limit.

Liability Insurance may be arranged by Comprehensive General Liability and Comprehensive Automobile Liability Policies for the full limits required; or by a combination of underlying comprehensive liability policies for lesser limits with the remaining limits provided by an Excess or Umbrella Liability Policy.

14.7 UMBRELLA/EXCESS COVERAGE. Liability insurance may be arranged by General Liability and Automobile Liability. Policies for the full limits required; or by a combination of underlying liability policies for lesser limits with the remaining limits provided by an Excess or Umbrella Liability Policy.

14.8 SCOPE OF INSURANCE. The insurance required under Article 14 hereof shall name the Owner as an additional insured and shall provide protection for the Owner, against damage which may arise from operations under this Contract, whether such operations be by the Contractor by anyone directly or indirectly employed by him.

14.9 PROOF OF INSURANCE. Certificates of the insurance required in this Article 14 shall be filed with the Owner prior to commencement of work, in a form satisfactory to the Owner. All insurance policies shall include a clause to the effect that the policy shall not be cancelled or reduced, restricted or limited until 15 days after the Owner has received written notice of such modification.

**ARTICLE 15  
CHANGES IN THE WORK AND CLAIMS**

15.1 CHANGE ORDERS.

15.1.1 The Owner, without invalidating the Contract, may order changes in the Work within the general scope of the Contract consisting of additions, deletions or other revisions. The Contract Amount and/or the Contract Time shall be adjusted accordingly pursuant to the terms of the Contract Documents.

15.1.2 A Change Order is a written amendment to the Contract Documents signed by the Owner and the Contractor, issued after the execution of the Contract, authorizing a Change in the Work or an adjustment in the

Contract Amount or the Contract Time. The Contract Amount and the Contract Time may be changed only by Change Order.

15.1.3 The debit or credit, as the case may be, to the Owner resulting from a Change in the Work shall be determined in one or more of the following ways as mutually agreed:

- .1 by a lump sum properly itemized and supported as described below in order to permit evaluation;
- .2 by unit prices stated in the Contract Documents or subsequently agreed upon; or
- .3 by actual cost and specified percentage fee covering overhead and profit.

The total amount of overhead and profit allowed on any Change Order, whether increase or decrease shall not exceed 15% of the direct costs of the Change Order Work when the Work is performed by the Contractor, or 5% of the Direct Costs for the Contractor's overhead and profit and 15% for the Subcontractor's overhead and profit when the Work is performed by any level of Subcontractor or Sub-subcontractor. The aforesaid amounts shall include the general conditions, overhead and profit for both the Contractor, Subcontractor(s), and Sub-subcontractor(s), if any. The costs of bond premiums and sales tax shall be added, in that order, after calculation and addition of overhead and profit.

The overhead and profit margin shall cover the costs of any additional supervision and project management including the Contractor's and any Subcontractor's job superintendent, project manager, estimator, field office support, home office support, small tools and all other general conditions items.

For each and every proposed change in the Contract Amount, the Contractor shall provide an itemized breakdown of direct costs, hereinafter called the cost breakdown, that: (1) clearly describes each item, location and scope of work; (2) identifies in detail all labor (by trade classification), materials, equipment and services required to complete the work; (3) lists and extends all respective man hours (or unit hours), labor rates, quantities of materials, dimensions used to compute quantities, material units and unit prices, equipment time and rental rates. This cost breakdown shall be organized in a format that clearly identifies the subtotal of direct costs before overhead (if any), profit, bond and tax are added. The cost breakdown format is subject to the approval of the Owner.

Change proposals from the Contractor shall include separate cost breakdowns as described above from any and all Subcontractors involved with the change. Subcontractor cost breakdowns are to be in writing on their letterhead and signed by the Subcontractor. Contractor shall provide any additional data needed to substantiate costs of changes, including invoices from suppliers and payroll information upon request of the Owner. The Contractor shall respond to requests for quotations from the Owner within five calendar days.

The Direct Cost is defined as the lowest locally available cost to the Contractor or Subcontractor after all discounts, rebates and concessions are calculated. The Direct Cost is the basis for computing Contractor and Subcontractor overhead and profit margins. The Direct Costs that may be included in the price of a change are limited to the following items directly attributable to the change in the work:

- 1. Costs of materials, including cost of delivery;
- 2. Cost of labor, including social security, old age and employment insurance, and fringe benefits required by agreement and Worker's compensation insurance;



3. Rental value of equipment used to perform the Work.

15.1.4 If unit prices are stated in the Contract Documents or subsequently agreed upon, and if the quantities originally contemplated are so changed in a proposed Change Order that application of the agreed unit prices to the quantities of Work proposed will create a hardship on the Owner or the Contractor, the applicable unit prices shall be equitably adjusted to prevent such hardship.

15.1.5 Should concealed conditions encountered in the performance of the Work below the surface of the ground be at variance with the conditions indicated by the Contract Documents or should unknown physical conditions below the surface of the ground of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in this Contract, be encountered, the Contract Amount shall be adjusted by Change Order upon claim by either party made in compliance with Subparagraph 12.4.4 and within the time limits prescribed in Subparagraph 15.2.1.

15.1.6 If the Contractor claims that additional cost or time is involved because of:

- .1 any written interpretation issued pursuant to Subparagraph 4.12.5,
- .2 any order by the Owner to stop the Work pursuant to Subparagraph 5.2.11 where the Contractor was not at fault, or
- .3 any written order for a minor change in the Work issued pursuant to Paragraph 15.3,

the Contractor shall make such claim as provided in Paragraph 15.2.

15.2 CLAIMS FOR ADDITIONAL COST OR TIME. If the Contractor decides to make a claim for an increase in the Contract Amount or any other claim, except one for an extension of Contract Time, he shall give the Owner written notice thereof within fifteen (15) days after the occurrence of the event giving rise to such claim or include such notice in the Application for Payment for the month in which the event giving rise to the claim occurred, whichever is earlier. Notice of a claim for extension of Contract Time shall be given within fifteen (15) days of the occurrence of the event giving rise to such claim. Any notice other than one made for an extension of the Contract Time shall be given by the Contractor before proceeding to execute the Work which is the subject matter of the claim, except in an emergency endangering life or property, in which case the Contractor shall proceed in accordance with Subparagraph 13.3.1. All claims shall be made as provided in Subparagraph 12.4.3 within the time limits prescribed herein and no such claim shall be valid unless so made. No change in the Contract Amount or Contract Time resulting from such claim shall be valid unless approved by the Owner and authorized by Change Order.

15.3 MINOR CHANGES IN THE WORK. The Owner shall have authority to order minor changes in the Work not involving an adjustment in the Contract Amount or an extension of the Contract Time and not inconsistent with the intent of the Contract Documents.

15.4 FIELD INFORMATION MEMOS. The Owner may issue written Field Information Memos which interpret the Contract Documents in accordance with Subparagraph 4.12.5 or which order minor changes in the Work in accordance with Paragraph 15.3 without change in Contract Amount or Contract Time. The Contractor shall carry out such changes specified in the Field Information Memos promptly.

**ARTICLE 16  
UNCOVERING AND CORRECTION OF WORK**

**16.1 UNCOVERING OF WORK.**

16.1.1 If any Work should be covered contrary to the request of the Owner, it must, if required by the Owner, be uncovered for his observation and replaced, all at the Contractor's expense.

16.1.2 If any other Work has been covered which the Owner has not specifically requested to observe prior to being covered, the Owner may request to see such Work and it shall be uncovered by the Contractor. If such Work is found to be in accordance with the Contract Documents, the cost of uncovering and replacement after approval by the Owner shall, by appropriate Change Order, be charged to the Owner. If such Work is found not to be in accordance with the Contract Documents, the Contractor shall pay such costs unless it is found that this condition was caused by a separate contractor employed as provided in Article 9, and in that event the Owner shall be responsible for the payment of such costs.

**16.2 CORRECTION OF WORK.**

16.2.1 The Contractor shall promptly correct all Work rejected by the Owner as defective or as failing to conform to the Contract Documents whether observed before or after Final Completion and whether or not fabricated, installed or completed. The Contractor shall bear all costs of correcting such rejected Work.

16.2.2 If, within two years after acceptance of the Work by the Owner or within such longer period of time as may be prescribed by law or by the terms of any applicable special guarantee required by the Contract Documents, including the original conformance with the Contract Documents, any of the Work is found to be defective or not in accordance with the Contract Documents, the Contractor, without cost to the Owner, shall correct it promptly after receipt of a written notice from the Owner to do so. The Owner shall give such notice promptly after discovery of the condition.

16.2.3 All such defective or non-conforming Work under Subparagraphs 16.2.1 and 16.2.2 shall be removed from the site where necessary, and the Work shall be corrected to comply with the Contract Documents without cost to the Owner.

16.2.4 The Contractor shall bear the cost of making good all work of separate contractors destroyed or damaged by such removal or correction.

16.2.5 If the Contractor does not remove such defective or non-conforming Work within a reasonable time fixed by written notice from the Owner, the Owner may remove it and may store the materials or equipment at the expense of the Contractor. If the Contractor does not pay the cost of such removal and storage within ten days after receipt of a statement of charges therefor, the Owner may, upon ten additional days written notice, sell such Work at auction or at private sale and shall account for the net proceeds thereof after deducting all the costs that should have been borne by the Contractor, including compensation for additional architectural services and any attorneys' fees incurred by Owner in connection therewith. If such proceeds of sale do not cover all costs which the Contractor should have borne, the difference shall be charged to the Contractor and an appropriate Change Order shall be issued. If the payments then or thereafter due the Contractor are not sufficient to cover such amount, the Contractor shall pay the difference to the Owner, and all attorneys' fees and other costs that the Owner may incur in collecting same.

16.2.6 If the Contractor fails to correct such defective or non-conforming Work, the Owner may correct it in accordance with Paragraph 10.6.

16.2.7 The obligations of the Contractor under this Paragraph 16.2 shall be in addition to and not in limitation of any obligations imposed upon him by special guarantees required by the Contract Documents or otherwise prescribed by law.

16.3 ACCEPTANCE OF DEFECTIVE OR NON-CONFORMING WORK. If the Owner prefers to accept defective or non-conforming Work, he may do so instead of requiring its removal and correction, in which case a Change Order will be issued to reflect an appropriate reduction in the Contract Amount, or, if the amount is determined after final payment, it shall be paid by the Contractor.

**ARTICLE 17  
TERMINATION OF THE CONTRACT**

17.1 TERMINATION BY THE CONTRACTOR. If the Work is stopped for a period of thirty (30) days, and the Owner is immediately notified of such stopping, under an order of any court or other public authority having jurisdiction through no act or fault of the Contractor or a Subcontractor or their agents or employees or any other persons performing any of the Work under a contract with the Contractor, and by reason of some act or omission of Owner, then the Contractor may, upon thirty (30) days written notice to the Owner, terminate the Contract and recover from the Owner payment for all Work executed and for any proven loss sustained upon any materials, equipment, tools, construction equipment and machinery, including the percentage profit stated in Paragraph 3.4 herein for Work accomplished through the date the notice of termination is given.

17.2 TERMINATION BY THE OWNER.

17.2.1 If the Contractor files or has filed against it any petition in bankruptcy, or if he makes a general assignment for benefit of his creditors, or if a receiver is appointed on account of his insolvency, or if he refuses or fails, except in cases for which extension of time is provided, to supply enough properly skilled workmen or sufficient and proper materials to complete the Work in accord with the Progress Schedule and Contract Time, or he fails to make prompt payments to Subcontractors or for materials or labor, or disregards laws, ordinances, rules, regulations or orders of any public authority having jurisdiction, or otherwise is guilty of a material breach of any provision of the Contract Documents, then the Owner, may, without prejudice to any other right or remedy and after giving the Contractor and/or his surety seven days' written notice, terminate the employment of the Contractor and take possession of the site and all materials, equipment, tools, construction equipment and machinery thereon owned by the Contractor and may finish the Work by whatever method he may deem expedient. In such case, the Contractor shall not be entitled to receive any further payment until the Work is finished. Termination of the Contract under this Subparagraph 17.2.1 shall not relieve the Contractor of any warranty obligations he would otherwise have on all Work performed hereunder, and such obligations shall survive termination of this Contract.

17.2.2 If the unpaid balance of the Contract Amount exceeds the costs of finishing the Work, attorneys' fees and all other costs incurred by Owner in completion of the Contractor's obligations, such excess shall be paid to the Contractor. If such costs exceed such unpaid balance, the Contractor shall pay the difference to the Owner.

**ARTICLE 18  
WARRANTY AND SITE CONDITIONS**

**18.1 TWO-YEAR WARRANTY.**

18.1.1 The Contractor shall warrant all Work under this Contract against defects of material and workmanship for a period of at least two years from the date of Substantial Completion; provided, however, that those items of the Work specified as having longer warranties shall be warranted for the period specified. The Contractor's warranty excludes remedy for damage or defect caused by abuse, alterations to the Work not executed by the Contractor, improper or insufficient maintenance, improper operation, or normal wear and tear.

18.1.2 The Contractor shall be responsible for the total cost of repairing and restoring such defective Work to a new condition, at no cost to Owner.

18.1.3 In any case where the subject matter of the defect relates to Work done under a subcontract between the Contractor and any Subcontractor, it is the responsibility of the Contractor, not the Owner, to secure the Subcontractor's performance in compliance with this Paragraph and, in the event of the Subcontractor's failure or refusal within a reasonable time to perform after notice, it shall be the Contractor's responsibility to repair and restore such defective Work to a new condition, at no cost to Owner.

18.1.4 In any case where the defective Work has been brought to the attention of the Contractor by the Owner and the Contractor fails or refuses to correct it, the Owner may elect, without precluding its use of any other remedy it may have available to it, to have the defective Work repaired and restored to a new condition in whatever manner it deems appropriate, regardless of the cost, and the Contractor shall be liable to the Owner for (1) the total cost thereof, including, without limitation, any architectural and legal fees related to effecting the repair, and (2) the sum of \$7,500.00 as liquidated damages for Contractor's failure or refusal to honor his warranty. The amount of \$7,500.00 is agreed upon because of the impracticability and extreme difficulty of ascertaining the actual damages the Owner would sustain due to the impairment to the use of the facility, other injury and expense, inconvenience and associated aggravation resulting from the Contractor's failure or refusal to honor his warranty.

18.1.5 Material and workmanship made good through compliance with such warranty shall be subject to the same warranty period as the original materials and workmanship. Such warranty period shall begin on the date the replaced material and work is certified as acceptable in writing by the Owner.

**18.2 SANITATION.** The Contractor shall provide temporary sanitation facilities as provided in the Specifications and in accordance with OSHA requirements.

**18.3 JOB OFFICE.** A job office and other temporary facilities shall be provided by the Contractor as required by the Specifications.

**18.4 USE OF PREMISES.**

18.4.1 The Contractor shall confine his equipment and plant, the storage of materials, and the operations of his workmen to limits indicated by law, ordinances, permits, or directions of the Owner and shall not unreasonably encumber the premises with materials or equipment.

**18.5 SEVERABILITY.** In the event any provision in this Contract is held invalid by any court of competent jurisdiction, the remaining provisions in this Contract shall be deemed severable and shall remain in full force and effect.

18.6 IMMIGRATION LAW COMPLIANCE. The Contractor warrants compliance with the Federal Immigration and Nationality Act (FINA) and all other Federal and State immigration laws and regulations related to the immigration status of its employees. Contractor shall obtain statements from its Subcontractors of every tier certifying compliance and shall furnish the statements to the Owner upon request. These warranties shall remain in effect through the term of the Contract, and the Contractor and its Subcontractors of every tier shall also maintain Employment Eligibility Verification forms (I-9) as required by the U.S. Department of Labor’s Immigration and Control Act for all employees performing work pursuant to this Contract. I-9 forms are available for download at USCIS.GOV.

The Owner may request, and the Contractor agrees to furnish, verification of compliance from the Contractor or its Subcontractors of any tier performing work pursuant to this Contract. Should the Owner reasonably believe or discover that the Contractor or its Subcontractors of any tier are not in compliance, the Owner may pursue any and all remedies allowed by law, including, but not limited to: suspension of work, termination of the Contract for default, and suspension and/or debarment of the Contractor or its Subcontractors. All costs necessary to verify compliance are the responsibility of the Contractor.

18.7 COMPLIANCE WITH A.R.S. § 35-393.01. Pursuant to A.R.S.§ 35-393.01, the Contractor hereby certifies that it is not currently engaged in nor will it engage in a boycott of Israel for the duration of this Agreement.

18.8 A.R.S. § 38-511. This Agreement may be cancelled for any violation of the provisions of A.R.S. § 38-511, which are hereby incorporated by reference.

IN WITNESS WHEREOF, two (2) identical counterparts of this Agreement, each of which shall for all purposes be deemed original thereof, have been duly executed by the parties hereinabove named, on the day and year first above written.

OWNER:

FLOWING WELLS UNIFIED SCHOOL  
DISTRICT NO. 8

By: \_\_\_\_\_

Its: \_\_\_\_\_

CONTRACTOR:

\_\_\_\_\_

By \_\_\_\_\_

Its \_\_\_\_\_

**EXHIBIT D**

1. Project Manual/Specifications dated March 12, 2024 by DLR Group
2. Documents available from DLR Group, 177 North Church Ave., Ste 755, Tucson, AZ 85701  
or online at:  
[https://www.floatingwellsschools.org/our\\_district/business/procurement\\_\\_\\_material\\_management](https://www.floatingwellsschools.org/our_district/business/procurement___material_management)

**EXHIBIT E**

**Project Schedule**

**Flowing Wells Junior High School Building K Restroom Renovation**

Bidding Complete	May 2, 2024
Bid Award	May 14, 2024
Notice to Proceed: Order Equipment	May 15, 2024
Construction Start	May 25, 2024
Project Complete	July 26, 2024



**Exhibit F**

**NOTICE OF AWARD, NOTICE TO PROCEED AND RECEIPT OF NOTICE**

TO: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
(Contractor)

Project: Flowing Wells Junior High School Building K Restroom Renovation

**Notice of Award**

The Owner has considered the Proposal submitted by you for the Project described above. You are hereby notified that your Proposal in the Contract Amount of \_\_\_\_\_ Dollars (\$\_\_\_\_\_) has been accepted. You are required by the Contract Documents to execute the Contract and General Conditions Between Owner and Contractor when submitted to you. You are also required to furnish the required Performance and Payment Bonds and Certificates of Insurance prior to commencing any work on the Project. The Owner is finalizing the Contract and General Conditions Between Owner and Contractor for submission to you. Please return an acknowledged copy of this Notice of Award to the Owner.

**Notice to Proceed**

In accordance with the Contract Documents, the Contract Time will commence and you are hereby instructed to commence work on the Project on \_\_\_\_\_ and the Finish Date is \_\_\_\_\_.

Dated: \_\_\_\_\_, 2024.

OWNER:

FLOWING WELLS UNIFIED SCHOOL  
DISTRICT NO. 8

By \_\_\_\_\_

Title \_\_\_\_\_

**Receipt of Notice**

Receipt of the above Notice of Award and Notice to Proceed is hereby acknowledged by Contractor.

Dated: \_\_\_\_\_, 2024.

CONTRACTOR:

\_\_\_\_\_

By \_\_\_\_\_

Title \_\_\_\_\_

# FLOWING WELLS JUNIOR HIGH

## BUILDING K RESTROOM RENOVATIONS

4545 N LA CHOLLA BLVD  
TUCSON AZ, 85705

## 100% CONSTRUCTION DOCUMENTS

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3/12/2024

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G1.1	GENERAL NOTES, SYMBOLS AND ABBREVIATIONS
CODE	
CP1.0	CODE PLANS AND ANALYSIS
ARCHITECTURAL	
AD1.1	OVERALL DEMOLITION PLAN
AD3.1	REFLECTED CEILING DEMOLITION PLAN
A1.1	OVERALL FLOOR PLAN
A1.3	ROOF PLAN
AS.1	REFLECTED CEILING PLAN
AB.1	DOOR, WINDOW & FRAME TYPE & SCHEDULES, FINISH SCHEDULES
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E5.1	ELECTRICAL DIAGRAMS

**OWNER**  
FLOWING WELLS UNIFIED SCHOOL DISTRICT  
1555 W PRINCE RD  
TUCSON, AZ 85705  
CONTACT: TONY YOUNG

**ARCHITECT**  
DLR GROUP  
177 NORTH CHURCH AVE.  
STE. 705  
TUCSON, AZ 85701  
CONTACT: SHANE CHISM

**MECHANICAL AND PLUMBING ENGINEER**  
KC MECHANICAL ENGINEERING, L.L.C.  
5447 E. 5TH ST.  
#112  
TUCSON, AZ 85711  
CONTACT: KEN WEYKER

**ELECTRICAL ENGINEER**  
DLR GROUP  
6225 NORTH 24TH ST.  
STE. 250  
PHOENIX, AZ 85016  
CONTACT: LARRY HACKLEMAN



FLOWING WELLS UNIFIED SCHOOL DISTRICT  
FLOWING WELLS JUNIOR HIGH BUILDING K RESTROOMS  
4545 N LA CHOLLA BLVD, TUCSON AZ 85705

100%  
CONSTRUCTION  
DOCUMENTS  
3/12/2024  
REVISIONS

30-23107-04  
COVER SHEET

G0.1

Autodesk Docs://30-23107-04-FWUSD Flowing Wells - RHK Restrooms 30-23107-04-FWUSD Flowing Wells.RHK  
Restrooms\_AZ\_2024.rvt  
3/12/2024 10:44 AM

GENERAL ABBREVIATIONS

ARCHITECTURAL ABBREVIATIONS

Table with 2 columns: Abbreviation and Description. Includes items like ADA, ADDN, AFG, AHJ, ALT, ANSI, ARCH, BLDG, BSMT, CL, CLG, CM, CONN(S), CONST, CONT, CONTR, CTR, D, DEG, DEMO, DM, DM, DIV, DN, DTL, E, EA, EC, EL, ELEC, ENG, EQ, EQUIP, EXST, EXT, FN, FL, FT, FUT, GC, GOVT, H, HORIZ, HT, IBC, INT, LB(S), M, MAX, MC, MECH, MEZZ, MFR, MN, MISC, MM, N, NIA, NIC, NTS, OC, OPP, OVHD, PAR, PENT, PLYWD, QTY, REQ(D), REV, RM, RND, S, SCHED, SECT, SH, SIM, SPEC, STD, STL, STOR, STRUCT, SYM, TEMP, TYP, UNEX, UNFIN, UNO, VERT, VEST, VIF, W, WIO.

Table with 2 columns: Abbreviation and Description. Includes items like AIE, AB, ABS, ACC, ACF, ACT, AD, ADJ, ADUT, ADMIN, AEC, AL, ALUM, AP, APC, ASPH, AUTO, AVG, AWP, B.O., BCS, BD, BLK, BLKG, BLKHD, BM(S), BOT, BRG, BRKT, BT, BTWN, CAB, CBD, CER, CF, CFCI, CFMF, CG, CGD, CI, CIG, CIP, CJ, CIA, CLO, CLR, CMU, COL, COM, COMB, COMM, COMPR, CONF, CONFG, CORR, CPT, CR, CS, CSTJ, CSWK, CT, CTG, CTIG, CU, CV, CY, CYL, DB, DC, DEPR, DEPT, DET, DF, DG, DIAG, DPG, DSN, DW, DWL(S), DWR, EB, EE, EEW, EEWV, EFF, EJ, ELAS, ELEV, EMER, ENCL, ENTR, EPF, EUI, EW, EWC, EXP, F, F.O., FAB, FB, FD, FDN, FE, FEC, FF, FH, FHC, FIG, FIX, FLASH, FLEX, FLG, FLM, FLOOR, FO, FOC, FOF, FOM, FOS, FOW, FP, FR, FRP, FRT, FS, FSS, FTG, FVC, G, GA, GAL, GALV, GB, GD, GEN.

Table with 2 columns: Abbreviation and Description. Includes items like GFA, GL, GMP, GR, GR, GRS, GWB, GYP, HC, HD, HDR, HDWD, HDWR, HM, HR, HS, HSS, HVAC, IAW, ID, IF, IP, U, US, INC, INSUL, JAN, JBE, JBX, JCT, JFB, JST, JOINT, T, T&G, T.O., TAN, TB, TBD, TOP, TERR, TFG, TG, TH, THK, TI, TIG, TMR, TOL, LIN, LINO, LUM, LK, LOC, LONG, LSC, LTG, LV, LVT, MAG, MAINT, MAN, MAS, MATL, MB, MBD, MBH, MC, MEMB, MH, MHS, MTD, MTG, MVL, NC, NFPA, NOM, O to O, OA, OFCI, OFF, OFOI, OH, OPG(S), OSHA, OTB, OVFL, P, PAN B, PB, PC, PCD, PCT, PD, PERP, PERP, PG, PIC, PIG, PL, PL, PLM, PLBG, PLB, PR, PRFAB, PROJ, PS, PT, PT, PTD, FTDR, PTN, PVC, PVL, QGV, QTR RND, R, RAD, RB, RC, RCP, RD, REF, REF, REM, RESL, RF, RFM, RH, RIS&C, S, SAT, SAW, SB, SC, SC, SGD.

Table with 2 columns: Abbreviation and Description. Includes items like SCH, SCR, SST, SD, SECY, SF, SG, SG, SGL, SGV, SH, SHH, SLNT, SM, SND, SNV, SNO, SPL, SQ, SR, SSS, SSS, SSS, ST, ST, STAGD, STC, STOR, SUBFL, SUL, SURF, SUSP, SVF, SVG, T, T&G, T.O., TAN, TB, TBD, TOP, TERR, TFG, TG, TH, THK, TI, TIG, TMR, TOL, LIN, LINO, LUM, LK, LOC, LONG, LSC, LTG, LV, LVT, MAG, MAINT, MAN, MAS, MATL, MB, MBD, MBH, MC, MEMB, MH, MHS, MTD, MTG, MVL, NC, NFPA, NOM, O to O, OA, OFCI, OFF, OFOI, OH, OPG(S), OSHA, OTB, OVFL, P, PAN B, PB, PC, PCD, PCT, PD, PERP, PERP, PG, PIC, PIG, PL, PL, PLM, PLBG, PLB, PR, PRFAB, PROJ, PS, PT, PT, PTD, FTDR, PTN, PVC, PVL, QGV, QTR RND, R, RAD, RB, RC, RCP, RD, REF, REF, REM, RESL, RF, RFM, RH, RIS&C, S, SAT, SAW, SB, SC, SC, SGD.

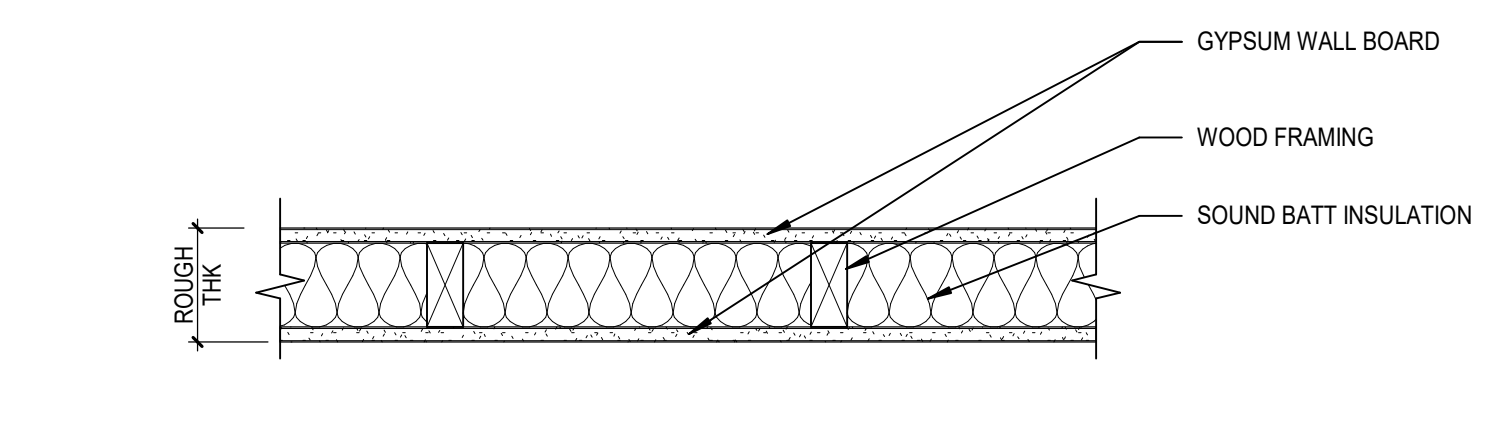
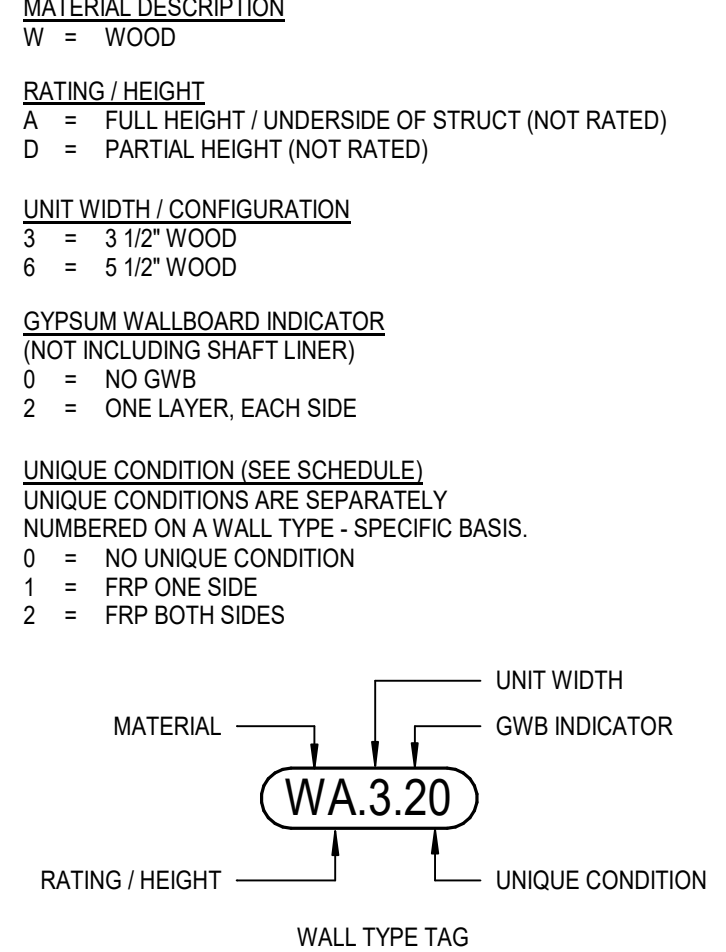


Table titled 'W - 2\_NON-RATED WOOD STUD PARTITION' with columns for MARK, ROUGH THICKNESS, RATING, TESTED ASSEMBLIES, STC RATING, TESTED ASSEMBLIES, T.O. WALL DETAIL, B.O. WALL DETAIL, and COMMENTS. It lists various wall types and their performance metrics.

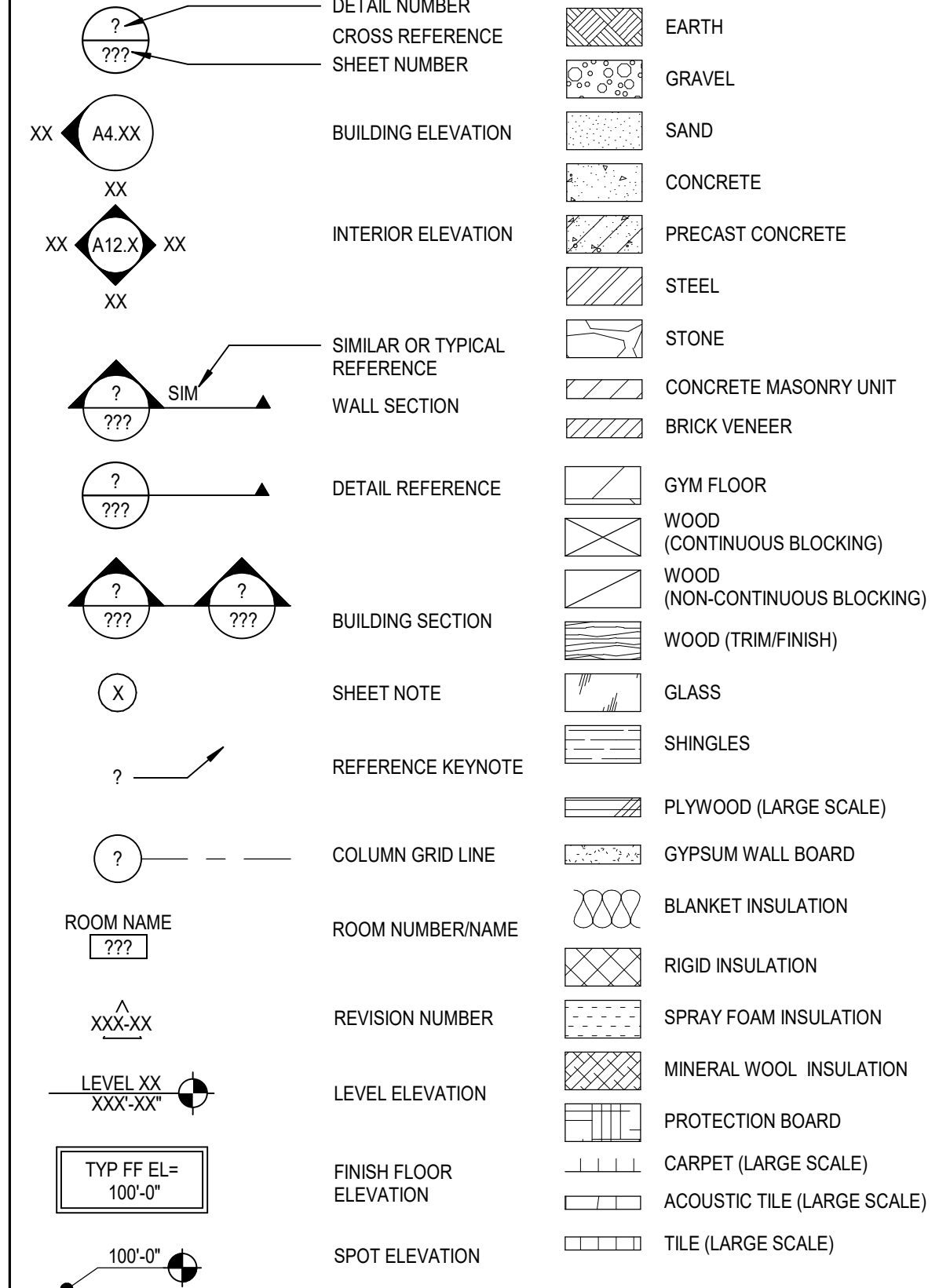
GENERAL NOTES

- A. GENERAL NOTES APPLY TO ALL SHEETS.
B. DIMENSIONS ARE ACTUAL AND ARE TO FACE OF STUDS, FACE OF CONCRETE WALLS, FACE OF CMU WALLS, FACE OF FRAMES, OR CENTERLINE OF COLUMNS, UNLESS NOTED OTHERWISE.
C. THE OWNER SHALL FURNISH AND INSTALL THE FOLLOWING ITEMS.
D. INCLUDE ALL OWNER-FURNISHED AND INSTALLED ITEMS AND OWNER-FURNISHED AND CONTRACTOR-INSTALLED ITEMS IN THE CONSTRUCTION SCHEDULE, AND SHALL COORDINATE WITH THE OWNER TO ACCOMMODATE THESE ITEMS.
E. COORDINATE ALL MECHANICAL CHASE SIZES WITH THE MECHANICAL CONTRACTOR.
F. ARCHITECTURAL FINISH FLOOR ELEVATION 0'-0" EQUALS ACTUAL SITE FINISH FLOOR.
G. COORDINATE WITH MECHANICAL AND ELECTRICAL CONTRACTORS THE SIZE AND LOCATION OF EQUIPMENT PADS SHOWN ON PLANS.
H. CONSTRUCTION DOCUMENTS ARE COMPLEMENTARY. SEE DRAWING FOR QUANTITIES AND LOCATION OF WORK. SEE SPECIFICATIONS FOR QUALITIES AND CONDITIONS OF WORK.
I. WORK: ALL ASPECTS OF THE WORK AND ITEMS NOT SPECIFICALLY MENTIONED, BUT NECESSARY TO MAKE A COMPLETE WORKING INSTALLATION, SHALL BE INCLUDED AND INDICATED IN THE CONTRACTOR'S BID.
J. GENERAL SHEET NOTES ONLY APPLY TO PARTICULAR DRAWING OR SERIES OF DRAWINGS.
K. NO ASBESTOS OR PCB CONTAINING MATERIALS SHALL BE USED ON THIS PROJECT.
L. DO NOT SCALE DRAWINGS. DIMENSIONS NOTED PREVAIL. NOTIFY ARCHITECT IN CASE OF DISCREPANCY.
M. HORIZONTAL AND VERTICAL DIMENSIONS ARE MINIMUM DIMENSIONS. CLEARANCES ARE GIVEN TO FINISH SURFACES. GO TO VERIFY ALL CLEARANCES. NOTIFY ARCHITECT IN CASE OF DISCREPANCY.

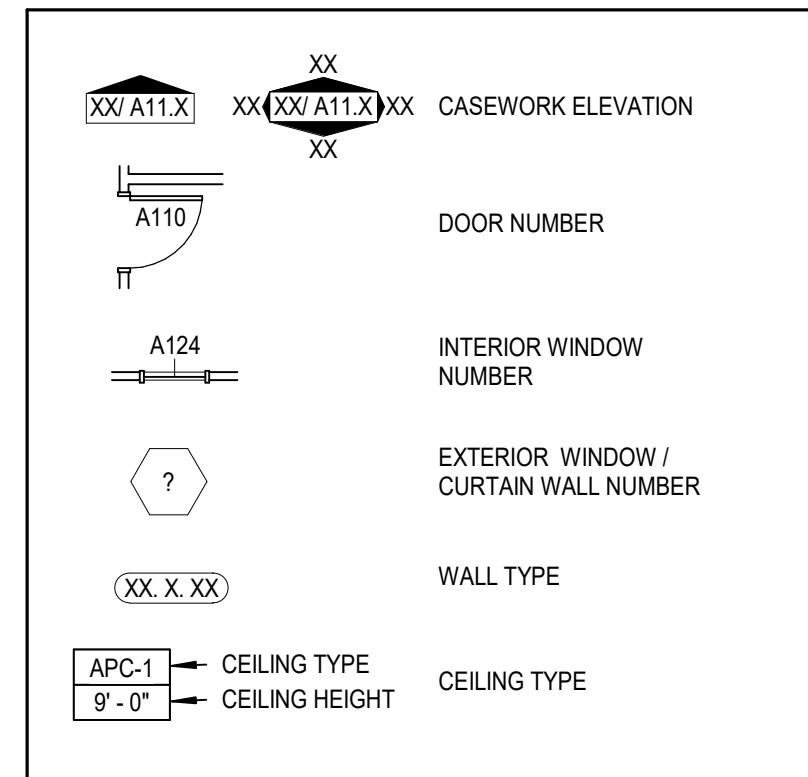
PARTITION TYPES DESCRIPTIONS



GENERAL SYMBOLS



ARCHITECTURAL SYMBOLS



FLOWING WELLS UNIFIED SCHOOL DISTRICT
FLOWING WELLS JUNIOR HIGH BUILDING K RESTROOMS
4656 N LA CHOLLA BLVD., TUCSON AZ 85705

100% CONSTRUCTION DOCUMENTS
3/12/2024 REVISIONS

30-23107-04 GENERAL NOTES, SYMBOLS AND ABBREVIATIONS

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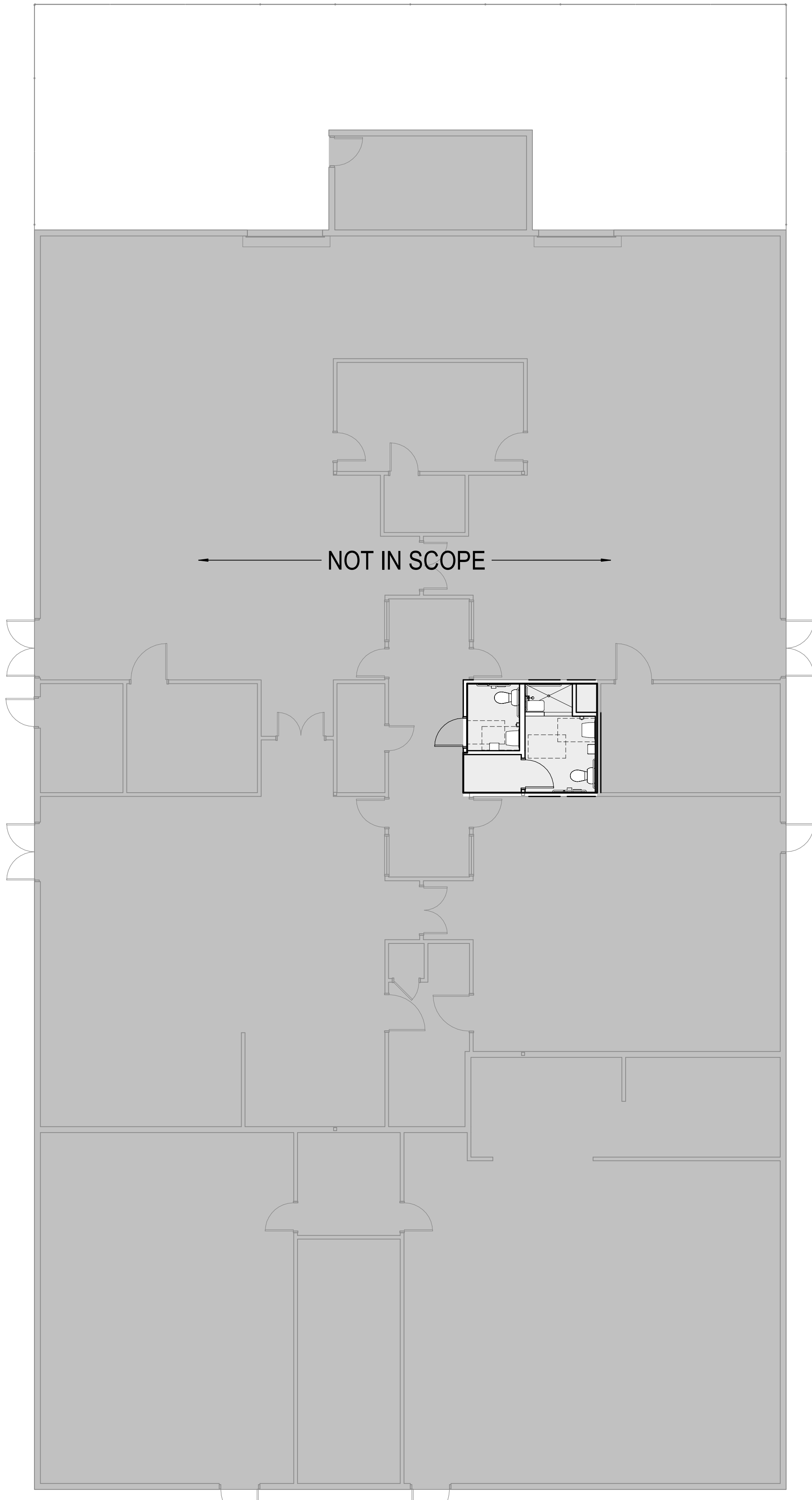
B

C

D

E

F



NOT IN SCOPE

**CODE PLAN**  
SCALE: 1/8" = 1'-0"

<b>CODE ANALYSIS</b>	
<b>AUTHORITIES HAVING JURISDICTION</b>	STATE OF ARIZONA FIRE MARSHAL
<b>APPLICABLE CODES</b>	<b>INTERNATIONAL BUILDING CODES</b> 2018 IBC INTERNATIONAL BUILDING CODE 2018 IECC INTERNATIONAL ENERGY CONSERVATION CODE 2018 IEBC INTERNATIONAL EXISTING BUILDING CODE 2018 IMC INTERNATIONAL MECHANICAL CODE 2018 IPC INTERNATIONAL PLUMBING CODE 2018 IFGC INTERNATIONAL FUEL AND GAS CODE 2018 IRC INTERNATIONAL FIRE CODE  <b>NFPA CODES</b> 2018 NFPA 10 PORTABLE FIRE EXTINGUISHERS 2018 NFPA 72 NATIONAL FIRE ALARM AND SIGNALING CODE 2019 NFPA 13 INSTALLATION OF SPRINKLER SYSTEMS 2021 NFPA 101 LIFE SAFETY CODE 2021 NFPA 170 STANDARD FOR FIRE SAFETY AND EMERGENCY SYMBOLS  <b>ACCESSIBILITY</b> 2009 ICC/ANSI 117.1 ACCESSIBLE AND USEABLE BUILDINGS AND FACILITIES
<b>PROJECT NARRATIVE</b>	MODIFICATION OF EXISTING RESTROOM TO MEET ADA STANDARDS. CONVERSION OF EXISTING STORAGE ROOM INTO RESTROOM WITH ROLL-IN SHOWER.
<b>OCCUPANCY CLASSIFICATION (SECTION 304)</b>	<b>UNCHANGED</b> GROUP E (OCCUPANCIES FOR SIX OR MORE PEOPLE UP TO THE 12TH GRADE)
<b>BUILDING AREA (SECTION 506)</b>	<b>UNCHANGED</b>
<b>TYPE OF CONSTRUCTION (IBC CHAPTER 6)</b>	<b>UNCHANGED</b> TYPE V-B BASED ON MATERIALS SHOWN IN 1975 PLANS.
<b>FIRE RESISTANCE RATINGS (IBC CHAPTER 6)</b>	<b>UNCHANGED</b> 0 HOURS BASED ON 1975 PLANS.
<b>FIRE PROTECTION SYSTEMS (IBC CHAPTER 9)</b>	<b>UNCHANGED</b> BUILDING IS NOT SPRINKLERED
<b>OCCUPANT LOAD (IBC TABLE 1004.5)</b>	REFER TO PLANS ON THIS SHEET. SPACE WAS ORIGINALLY PLANNED FOR 20 SF/OCC. OTHER LOCATIONS NOT IDENTIFIED ARE UNCHANGED.
<b>MEANS OF EGRESS SIZING (IBC SECTION 1005)</b>	STAIRWAYS - .3 INCHES PER OCCUPANT OTHER EGRESS COMPONENTS - .2 INCHES PER OCCUPANT
<b>PLUMBING FACILITIES (IBC TABLE 2902.1)</b>	ONE TOILET, ONE LAVATORY ADDED.



**FLOWING WELLS UNIFIED SCHOOL DISTRICT**  
 FLOWING WELLS JUNIOR HIGH BUILDING K RESTROOMS  
 4656 N LA CHOLLA BLVD, TUCSON, AZ 85705

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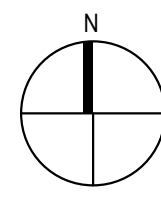
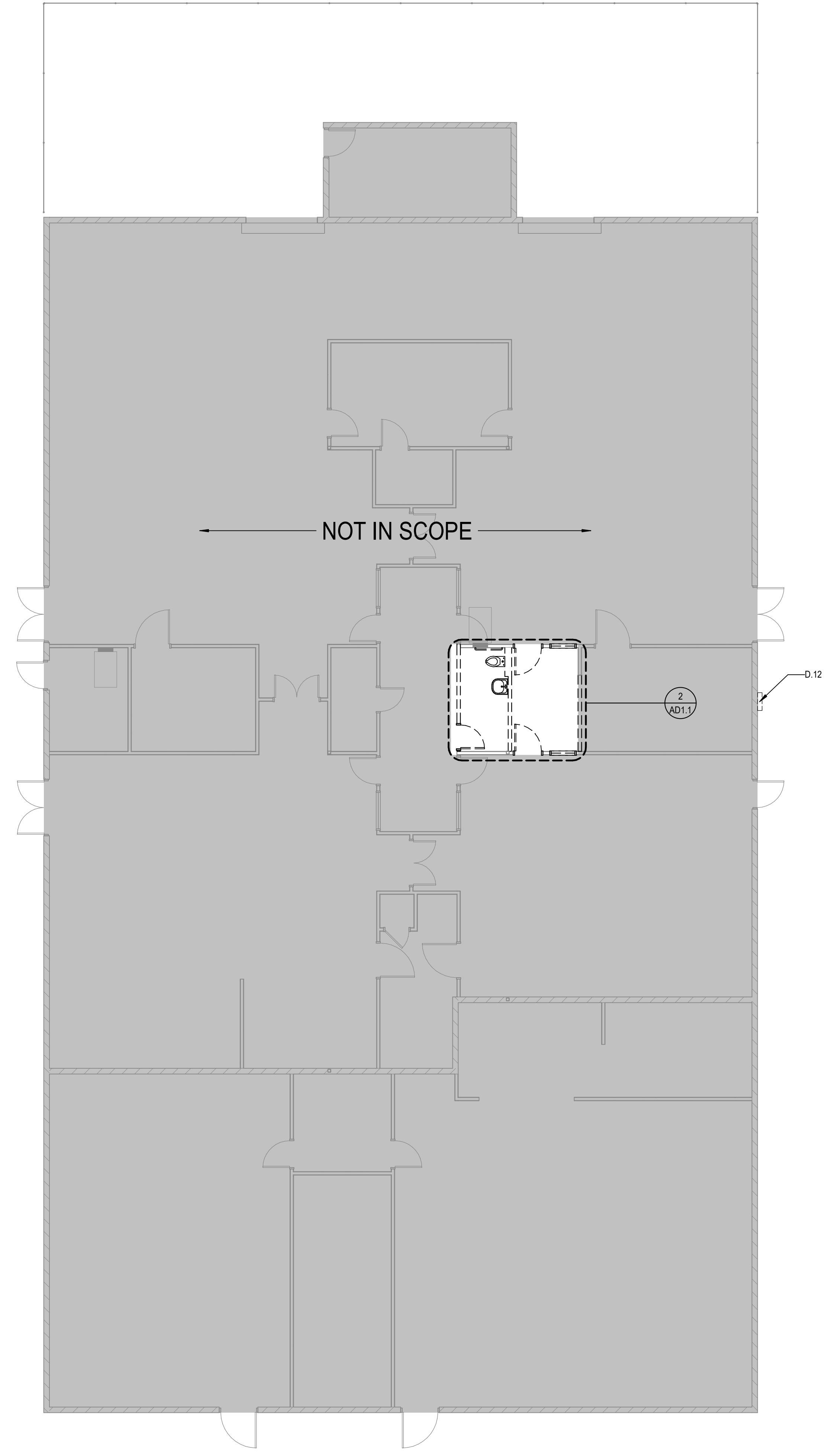
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 ANALYSIS

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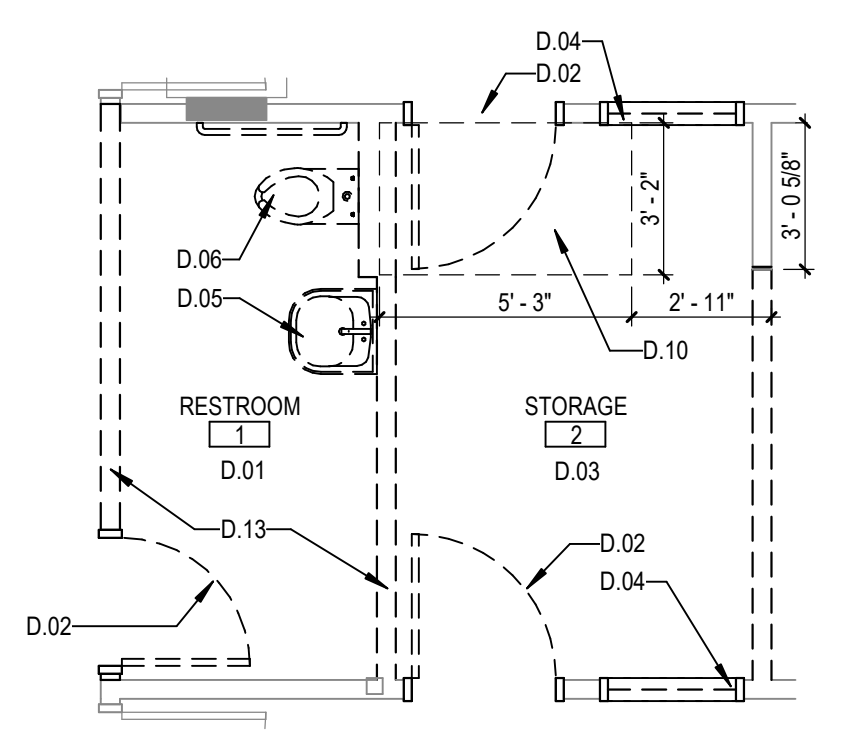
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 **OVERALL DEMOLITION PLAN**  
SCALE: 1/8" = 1'-0"



**ENLARGED DEMO PLAN - RESTROOM**  
SCALE: 1/4" = 1'-0"



**DEMOLITION GENERAL NOTES**

DEMOLITION NOTES APPLY TO ALL DEMOLITION SHEETS.

- THE CONTRACTOR SHALL:
- A. COORDINATE ALL DEMOLITION AND PHASING EFFORTS WITH THE ARCHITECT AND OWNER'S REPRESENTATIVE. EVERY EFFORT SHALL BE MADE TO MINIMIZE DISRUPTION OF OWNER'S OPERATIONS. EXCESSIVE NOISE OR VIBRATION SHALL BE PRE-APPROVED AND COORDINATED WITH THE OWNER'S REPRESENTATIVE. IN ALL CASES, PROVISIONS SHALL BE MADE FOR USER'S SAFETY.
  - B. COORDINATE ANY DISRUPTION OF UTILITY SERVICES WITH THE OWNER AND AS SPECIFIED.
  - C. CONSTRUCT TEMPORARY CONSTRUCTION PARTITIONS WITHIN THE EXISTING BUILDING WHICH OFFER A ONE-HOUR ENCLOSURE TO ISOLATE ANY DEMOLITION/CONSTRUCTION WORK FROM THE GENERAL PUBLIC AND AS DEEMED NECESSARY BY THE OWNER AND CODE OFFICIAL HAVING JURISDICTION. COORDINATE LOCATIONS WITH THE OWNER AND MAINTAIN MEANS OF EGRESS THROUGHOUT THE WORK.
  - D. MAINTAIN A SECURE, WEATHER-TIGHT ENCLOSURE AT ALL TIMES.
  - E. VERIFY ALL EXISTING CONDITIONS, DIMENSIONS AND ELEVATIONS AND NOTIFY THE ARCHITECT OF ANY DISCREPANCIES.
  - F. REMOVE IN THEIR ENTIRETY ALL EXISTING WALLS, DOORS, MILLWORK, PLUMBING FIXTURES, CEILINGS, SOFFITS, MARKERS/BARDS, AND OTHER ITEMS, AS REQUIRED TO EXECUTE THE DEMOLITION/CONSTRUCTION WORK DESCRIBED BY THE DRAWINGS.
  - G. THE OWNER SHALL RESERVE THE RIGHT TO SALVAGE ANY MATERIALS.
  - H. PROVIDE PROTECTION FOR ALL EXISTING BUILDING MATERIALS AND EQUIPMENT FROM DAMAGE DUE TO ANY DEMOLITION OR CONSTRUCTION-RELATED INCIDENT PERFORMED UNDER THIS CONTRACT.
  - I. REPAIR OR REPLACE ITEMS THAT ARE DAMAGED AS A RESULT OF DEMOLITION OR CONSTRUCTION TO MATCH EXISTING FINISH AND/OR CONDITION.
  - J. EXISTING MATERIALS SHALL NOT BE REUSED UNLESS NOTED OTHERWISE OR AS AUTHORIZED BY ARCHITECT.
  - K. VERIFY AND MAINTAIN THE LOCATION OF EXISTING POWER, COMMUNICATION AND DATA CABLES TO PREVENT INTERRUPTION OF THEIR SERVICE.
  - L. PATCH FLOOR, WALL AND CEILING PENETRATIONS RESULTING FROM REMOVAL OR RE-ROUTING OF NEW OR EXISTING PIPING, DUCTWORK, CONDUIT, AND OTHER ITEMS, AS REQUIRED TO MAINTAIN FIRE-RESISTANCE-RATED SEPARATIONS. FINISH AS REQUIRED FOR NEW OR EXISTING ADJACENT SURFACES.
  - M. CAP ALL DISCONNECTED MECHANICAL PIPING LINES WITHIN THE WALL OR FLOOR. PATCH AND FINISH AS REQUIRED TO MATCH NEW OR EXISTING ADJACENT SURFACES.
  - N. SEE MECHANICAL AND ELECTRICAL DRAWINGS AND NOTES FOR FURTHER SEQUENCING AND SCOPE OF WORK.
  - O. AVOID ANY DISTURBANCE OF SOILS WITHIN THE ZONE OF INFLUENCE AROUND EXISTING FOOTINGS AND FLOOR SLABS AS DIRECTED BY GEOTECHNICAL ENGINEER.
  - P. WHERE CMU WALLS ARE INDICATED TO BE REMOVED, PREPARE ADJACENT WALLS TO RECEIVE NEW PATCH-FINISH BY REMOVING CMU IN TOOTH-IN PATTERN BOTH SIDES OF DEMOLITION FOR CONTRACTOR TO TOOTH-IN NEW CMU PATCHES.
  - Q. WHERE PLASTER/STUD WALLS ARE INDICATED TO BE REMOVED, PREPARE ADJACENT WALLS TO RECEIVE NEW PATCH-FINISH BY SAWCUTTING ADJACENT PLASTER FINISH A MINIMUM OF 1'-0" BEYOND DEMOLITION.

**REFERENCE KEYNOTES**

- D.01 GRIND, POLISH AND SEAL EXISTING CONCRETE.
- D.02 REMOVE DOOR AND FRAME.
- D.03 REMOVE FLOORING. DEMO CONCRETE FOR NEW SANITARY LINE.
- D.04 REMOVE INTERIOR WINDOW AND FRAME.
- D.05 REMOVE SINK, TYPICAL. SEE PLUMBING DRAWINGS.
- D.06 REMOVE TOILET GRAB BARS AND ACCESSORIES. REMOVE TOILET. SEE PLUMBING DRAWINGS, TYPICAL.
- D.10 SAWCUT AND REMOVE EXISTING CONCRETE SLAB.
- D.12 CAP EXISTING EXHAUST WALL VENT. SEE MECHANICAL.
- D.13 REMOVE INTERIOR PARTITION WALL.

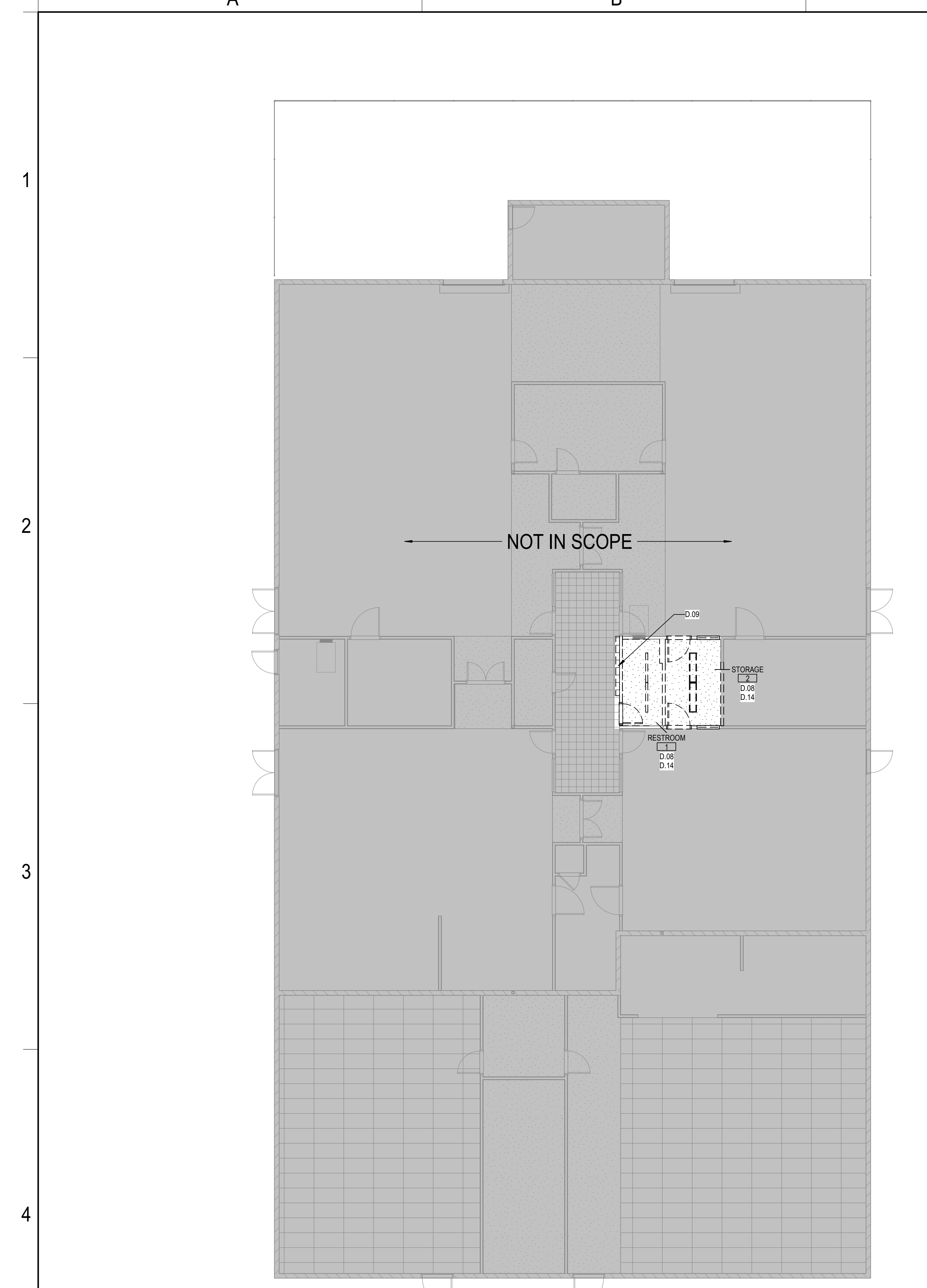


**FLOWING WELLS UNIFIED SCHOOL DISTRICT**  
FLOWING WELLS JUNIOR HIGH BUILDING K RESTROOMS  
4656 N LA CHOLLA BLVD, TUCSON, AZ 85705

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OVERALL  
DEMOLITION  
PLAN

**AD1.1**



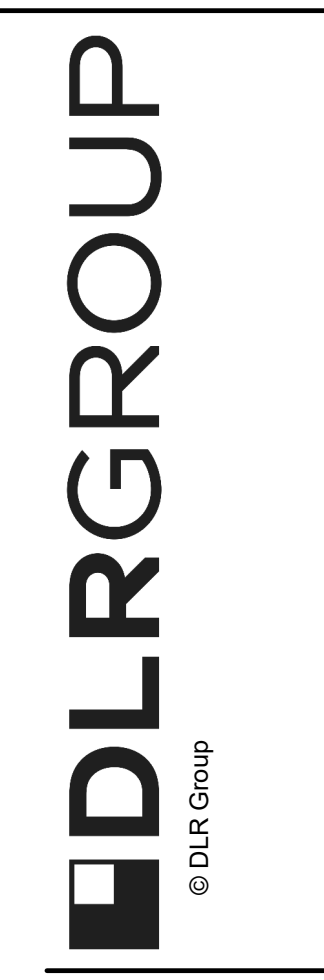
**REFLECTED CEILING DEMOLITION PLAN**  
SCALE: 1/8" = 1'-0"

**DEMOLITION GENERAL NOTES**

- DEMOLITION NOTES APPLY TO ALL DEMOLITION SHEETS.
- THE CONTRACTOR SHALL:
- A. COORDINATE ALL DEMOLITION AND PHASING EFFORTS WITH THE ARCHITECT AND OWNER'S REPRESENTATIVE. EVERY EFFORT SHALL BE MADE TO MINIMIZE DISRUPTION OF OWNER'S OPERATIONS. EXCESSIVE NOISE OR VIBRATION SHALL BE PRE-APPROVED AND COORDINATED WITH THE OWNER'S REPRESENTATIVE. IN ALL CASES, PROVISIONS SHALL BE MADE FOR USER'S SAFETY.
  - B. COORDINATE ANY DISRUPTION OF UTILITY SERVICES WITH THE OWNER AND AS SPECIFIED.
  - C. CONSTRUCT TEMPORARY CONSTRUCTION PARTITIONS WITHIN THE EXISTING BUILDING WHICH OFFER A ONE-HOUR ENCLOSURE TO ISOLATE ANY DEMOLITION/CONSTRUCTION WORK FROM THE GENERAL PUBLIC AND AS DEEMED NECESSARY BY THE OWNER AND CODE OFFICIAL HAVING JURISDICTION. COORDINATE LOCATIONS WITH THE OWNER AND MAINTAIN MEANS OF EGRESS THROUGHOUT THE WORK.
  - D. MAINTAIN A SECURE, WEATHER-TIGHT ENCLOSURE AT ALL TIMES.
  - E. VERIFY ALL EXISTING CONDITIONS, DIMENSIONS AND ELEVATIONS AND NOTIFY THE ARCHITECT OF ANY DISCREPANCIES.
  - F. REMOVE IN THEIR ENTIRETY ALL EXISTING WALLS, DOORS, MILLWORK, PLUMBING FIXTURES, CEILINGS, SOFFITS, MARKERS/BARDS, AND OTHER ITEMS, AS REQUIRED TO EXECUTE THE DEMOLITION/CONSTRUCTION WORK DESCRIBED BY THE DRAWINGS.
  - G. THE OWNER SHALL RESERVE THE RIGHT TO SALVAGE ANY MATERIALS.
  - H. PROVIDE PROTECTION FOR ALL EXISTING BUILDING MATERIALS AND EQUIPMENT FROM DAMAGE DUE TO ANY DEMOLITION OR CONSTRUCTION-RELATED INCIDENT PERFORMED UNDER THIS CONTRACT.
  - I. REPAIR OR REPLACE ITEMS THAT ARE DAMAGED AS A RESULT OF DEMOLITION OR CONSTRUCTION TO MATCH EXISTING FINISH AND/OR CONDITION.
  - J. EXISTING MATERIALS SHALL NOT BE REUSED UNLESS NOTED OTHERWISE OR AS AUTHORIZED BY ARCHITECT.
  - K. VERIFY AND MAINTAIN THE LOCATION OF EXISTING POWER, COMMUNICATION AND DATA CABLES TO PREVENT INTERRUPTION OF THEIR SERVICE.
  - L. PATCH FLOOR, WALL AND CEILING PENETRATIONS RESULTING FROM REMOVAL OR RE-ROUTING OF NEW OR EXISTING PIPING, DUCTWORK, CONDUIT, AND OTHER ITEMS, AS REQUIRED TO MAINTAIN FIRE-RESISTANCE-RATED SEPARATIONS. FINISH AS REQUIRED FOR NEW OR EXISTING ADJACENT SURFACES.
  - M. CAP ALL DISCONNECTED MECHANICAL PIPING LINES WITHIN THE WALL OR FLOOR. PATCH AND FINISH AS REQUIRED TO MATCH NEW OR EXISTING ADJACENT SURFACES.
  - N. SEE MECHANICAL AND ELECTRICAL DRAWINGS AND NOTES FOR FURTHER SEQUENCING AND SCOPE OF WORK.
  - O. AVOID ANY DISTURBANCE OF SOILS WITHIN THE ZONE OF INFLUENCE AROUND EXISTING FOOTINGS AND FLOOR SLABS AS DIRECTED BY GEOTECHNICAL ENGINEER.
  - P. WHERE CMU WALLS ARE INDICATED TO BE REMOVED, PREPARE ADJACENT WALLS TO RECEIVE NEW PATCH-FINISH BY REMOVING CMU IN TOOTH-IN PATTERN BOTH SIDES OF DEMOLITION FOR CONTRACTOR TO TOOTH-IN NEW CMU PATCHES.
  - Q. WHERE PLASTER/STUD WALLS ARE INDICATED TO BE REMOVED, PREPARE ADJACENT WALLS TO RECEIVE NEW PATCH-FINISH BY SAWCUTTING ADJACENT PLASTER FINISH A MINIMUM OF 1'-0" BEYOND DEMOLITION.

**REFERENCE KEYNOTES**

- D.08 REMOVE PLASTER CEILING.
- D.09 REMOVE PORTION OF ACOUSTICAL TILE CEILING AS REQUIRED BY NEW WORK.
- D.14 REMOVE LIGHT FIXTURE(S). SEE ELECTRICAL DRAWINGS.



**FLOWING WELLS UNIFIED SCHOOL DISTRICT**  
FLOWING WELLS JUNIOR HIGH BUILDING K RESTROOMS  
4656 N LA CHOLLA BLVD, TUCSON, AZ 85705

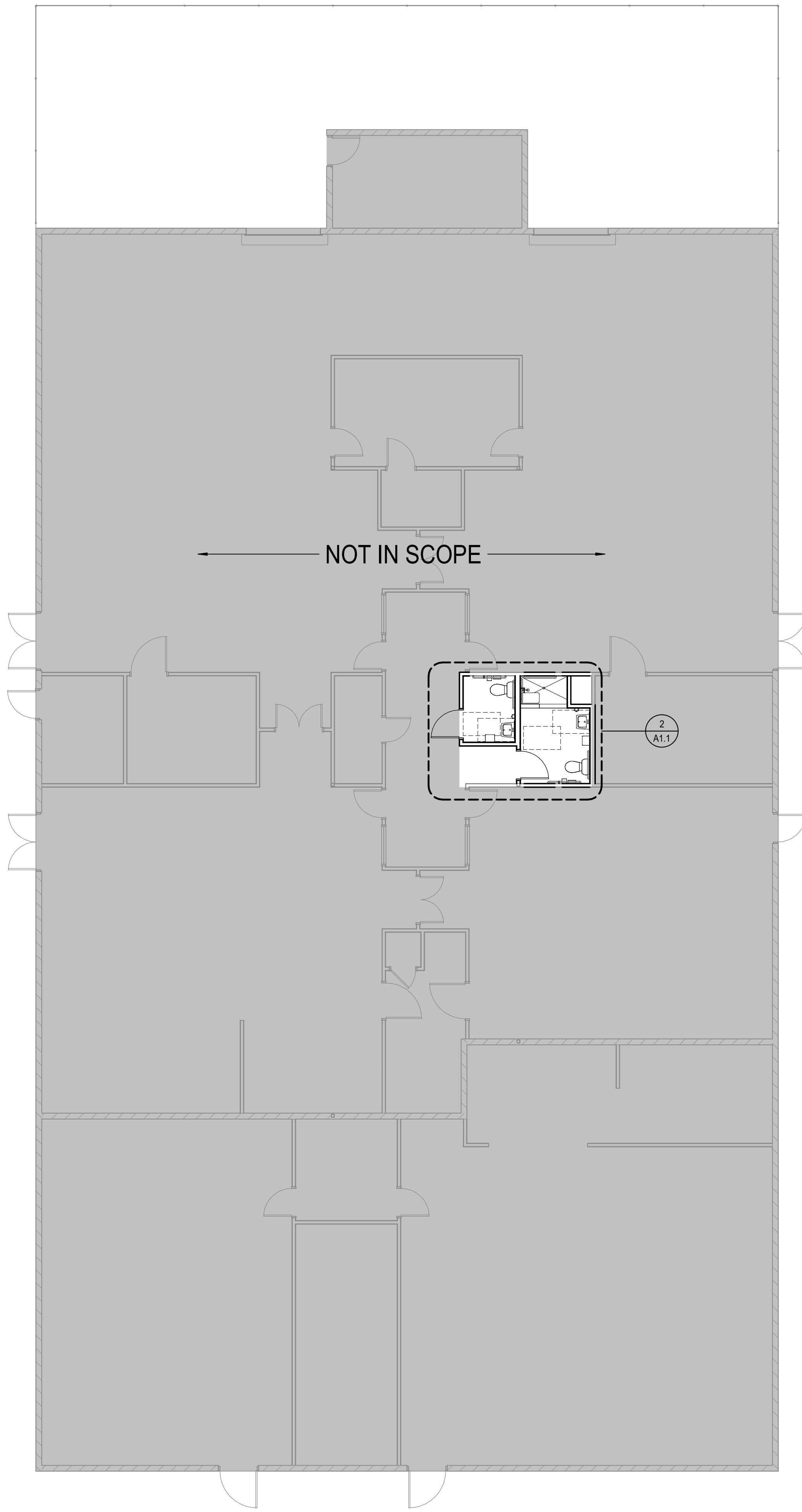
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DEMOLITION  
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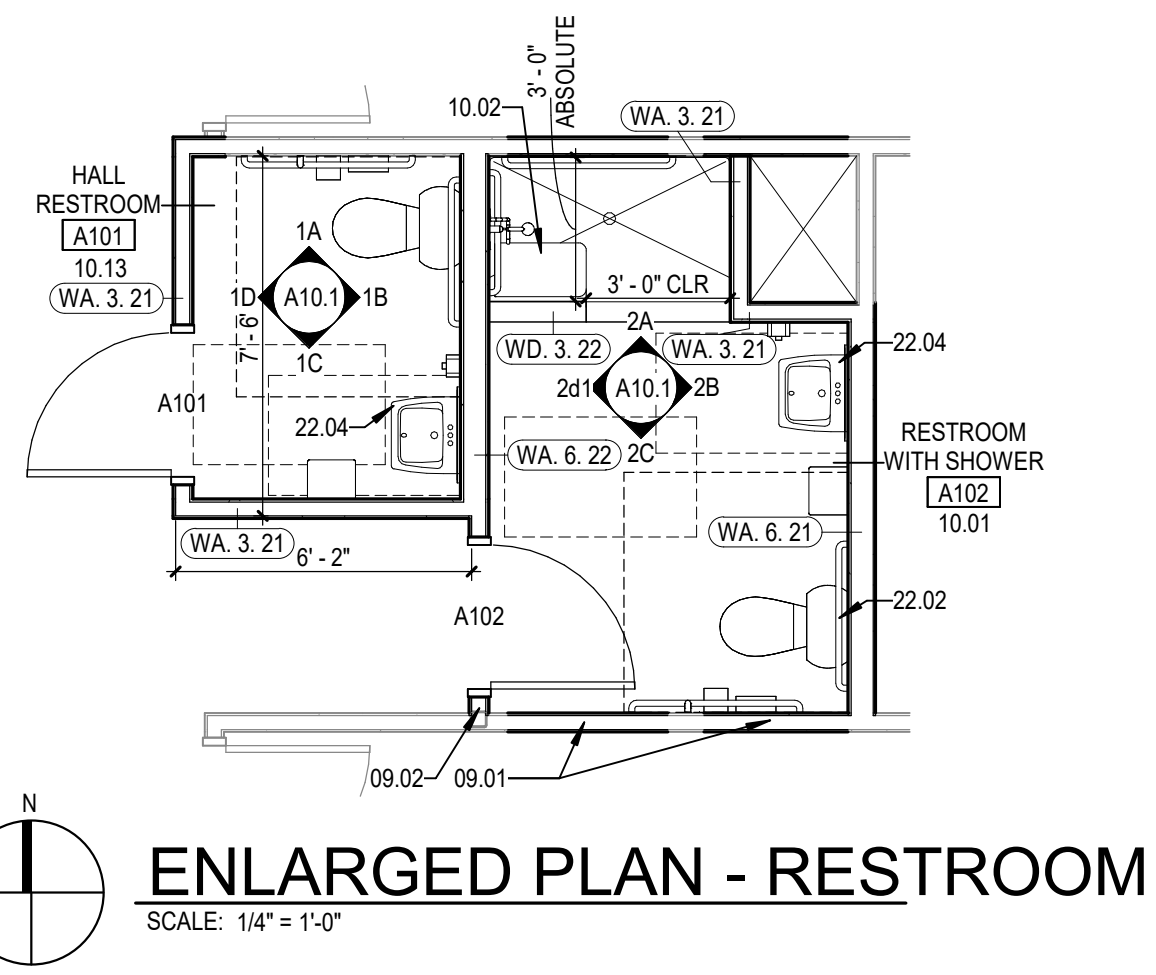
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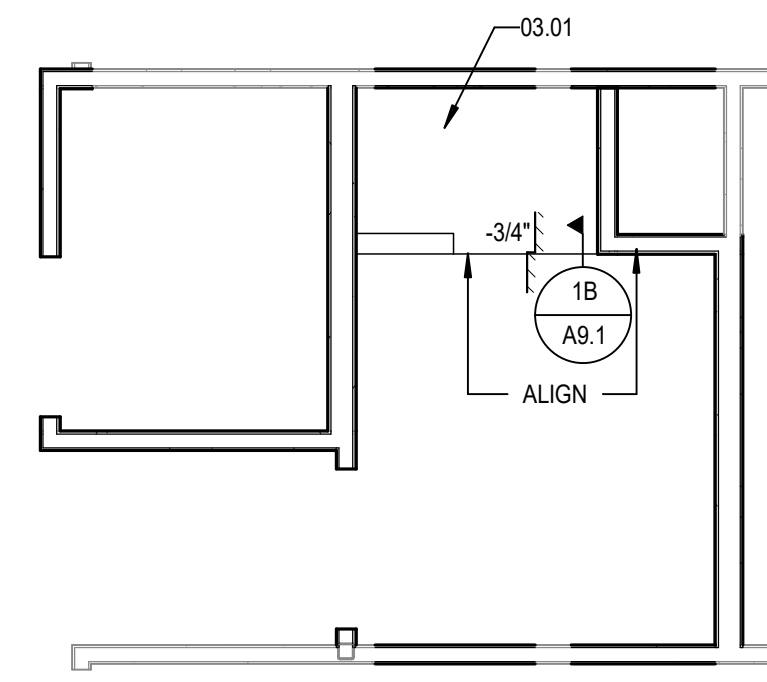




**OVERALL FLOOR PLAN**  
SCALE: 1/8" = 1'-0"



**ENLARGED PLAN - RESTROOM**  
SCALE: 1/4" = 1'-0"



**ENLARGED SLAB PLAN - RESTROOM**  
SCALE: 1/4" = 1'-0"

**GENERAL ARCHITECTURAL NOTES**

- ALL INTERIOR CMU WALLS SHALL BE 8 INCHES NOMINAL THICKNESS, UNLESS NOTED OTHERWISE.
- PARTITION TYPES SHALL BE DESIGNATED ON FLOOR PLANS THIS: (XX, X, XX) - SEE SHEET G1.1 FOR TYPES. ALL INTERIOR PARTITIONS ARE TYPE WA 3.21 UNLESS NOTED OTHERWISE.
- ALL MASONRY WALLS AND INTERIOR STUD WALLS SHALL EXTEND TO UNDERSIDE OF FLOOR OR ROOF DECK ABOVE UNLESS NOTED OTHERWISE, PER PARTITION TYPE.
- PROVISIONS SHALL BE MADE AT ALL FULL HEIGHT NON-BEARING WALLS FOR 1/4" VERTICAL MOVEMENT OF THE BUILDING STRUCTURE WITHOUT TRANSFER OF COMPRESSIVE LOADS TO WALL. FILL IRREGULARITIES BETWEEN TOP OF WALL AND DECK ABOVE WITH MINERAL WOOL INSULATION OR FIRE STOPPING MATERIALS AS REQUIRED TO MEET FIRE RATING OF RESPECTIVE WALLS.
- FURNISH AND INSTALL FIRE-TREATED WOOD BLOCKING OR METAL BACKING PLATE IN WOOD STUD PARTITIONS FOR THE PROPER ANCHORAGE OF ALL WALL ATTACHED ITEMS. I.E. TOILET ACCESSORIES, CASEWORK, MILLWORK, WALL-MOUNTED FIXTURES, MARKER BOARDS, TACK BOARDS, DOOR STOPS, AUDIO VISUAL BRACKETS, AND OTHER WALL ATTACHED ITEMS.
- GYPSUM BOARD SURFACES SHALL BE ISOLATED WITH CONTROL JOINTS AS DESCRIBED IN THE SPECIFICATIONS.
- SCRIBE GYPSUM WALL BOARD OF WALLS AND PARTITIONS TO IRREGULARITIES OF DECK ABOVE. SEAL TIGHTLY AROUND ALL PENETRATIONS.
- PROVIDE SEISMIC BRACING FOR SUSPENDED CEILING OR AS SHOWN ON THE DRAWINGS.

**REFERENCE KEYNOTES**

- 03.01 POUR BACK CONCRETE SLAB, DEPRESS 3/4" TO ALLOW FLUSH SHOWER.
- 09.01 INFILL WALL, MATCH ADJACENT IN WALL CONSTRUCTION AND FINISH.
- 09.02 CENTER NEW WALL ON EXISTING COLUMN.
- 10.01 FULL HEIGHT FRP, ALL WALLS.
- 10.02 FSS-1 FOLDING SHOWER SEAT (ADA)
- 10.13 4" FRP, ALL WALLS.
- 22.02 TOILET, SEE PLUMBING FIXTURE SCHEDULE FOR MODEL INFORMATION.
- 22.04 SINK WITH FAUCET, SEE PLUMBING FIXTURE SCHEDULE FOR MODEL INFORMATION.

**GENERAL NOTES FOR ACCESSIBILITY**

- A. ACCESSIBLE URINAL SHALL PROVIDE CLEAR FLOOR SPACE PER ADA SAD 2010 - 605.3
- B. ACCESSIBLE WATER CLOSETS SHALL PROVIDE CLEAR SPACE PER ADA SAD 2010 - 604.3.1
- C. ACCESSIBLE LAVATORIES AND SINKS SHALL PROVIDE CLEAR SPACE PER ADA SAD 2010 - 606.2
- D. ACCESSIBLE TOILET ROOMS SHALL PROVIDE A TURNING SPACE OF 60 INCHES IN DIAMETER PER ADA SAD 2010 - 304.3.1
- E. ACCESSIBLE WATER FOUNTAINS SHALL PROVIDE CLEAR FLOOR SPACE PER ADA SAD 2010 - 602.2
- F. ACCESSIBLE TOILET PARTITIONS SHALL COMPLY WITH ADA SAD 2010 - 604.8.1
- G. EXPOSED PIPES AND SURFACES UNDER LAVATORIES AND SINKS SHALL BE INSULATED PER ADA SAD 2010 - 606.5.

**TOILET ACCESSORIES ABBREVIATIONS**

ABBREV	DESCRIPTION
ACC	ADA ACCESSIBLE
BCS	BABY CHANGING STATION
EWC	ELECTRIC WATER COOLER
GB-1	GRAB BAR (BACK WALL)
GB-2	GRAB BAR (SIDE WALL)
GB-3	GRAB BAR (VERTICAL)
GB-4	GRAB BAR (SHOWER BACK)
GB-5	GRAB BAR (SHOWER SIDE)
HD	HAND DRYER
LAV	LAVATORY
MEH	MOPROOM HOLDER
MR	MIRROR
MRS	MIRROR WITH SHELF
PTD	PAPER TOWEL DISPENSER
PTDR	COMBINATION TOWEL DISPENSER/RECEPTACLE
RH	ROBE HOOK
SC	SHOWER CURTAIN
SCD	SEAT COVER DISPENSER
SCR	SHOWER CURTAIN ROD
SD	SOAP DISPENSER
SND	SANITARY NAPKIN DISPOSAL
SNV	SANITARY NAPKIN VENDOR
SSS	STAINLESS STEEL SHELF
TTD	TOILET TISSUE DISPENSER
US	UTILITY SHELF
WC	WATER CLOSET
WR	WASTE RECEPTACLE



**FLOWING WELLS UNIFIED SCHOOL DISTRICT**  
FLOWING WELLS JUNIOR HIGH BUILDING K RESTROOMS  
4656 N LA CHOLLA BLVD, TUCSON, AZ 85705

100%  
CONSTRUCTION  
DOCUMENTS  
3/12/2024  
REVISIONS

30-23107-04  
OVERALL FLOOR  
PLAN

**A1.1**

Autodesk Docs/030-23107-04-FWUSD Flowing Wells - RHKK Restrooms/30-23107-04-FWUSD Flowing Wells - RHKK Restrooms\_A1\_2024.rvt  
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A

B

C

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E

F

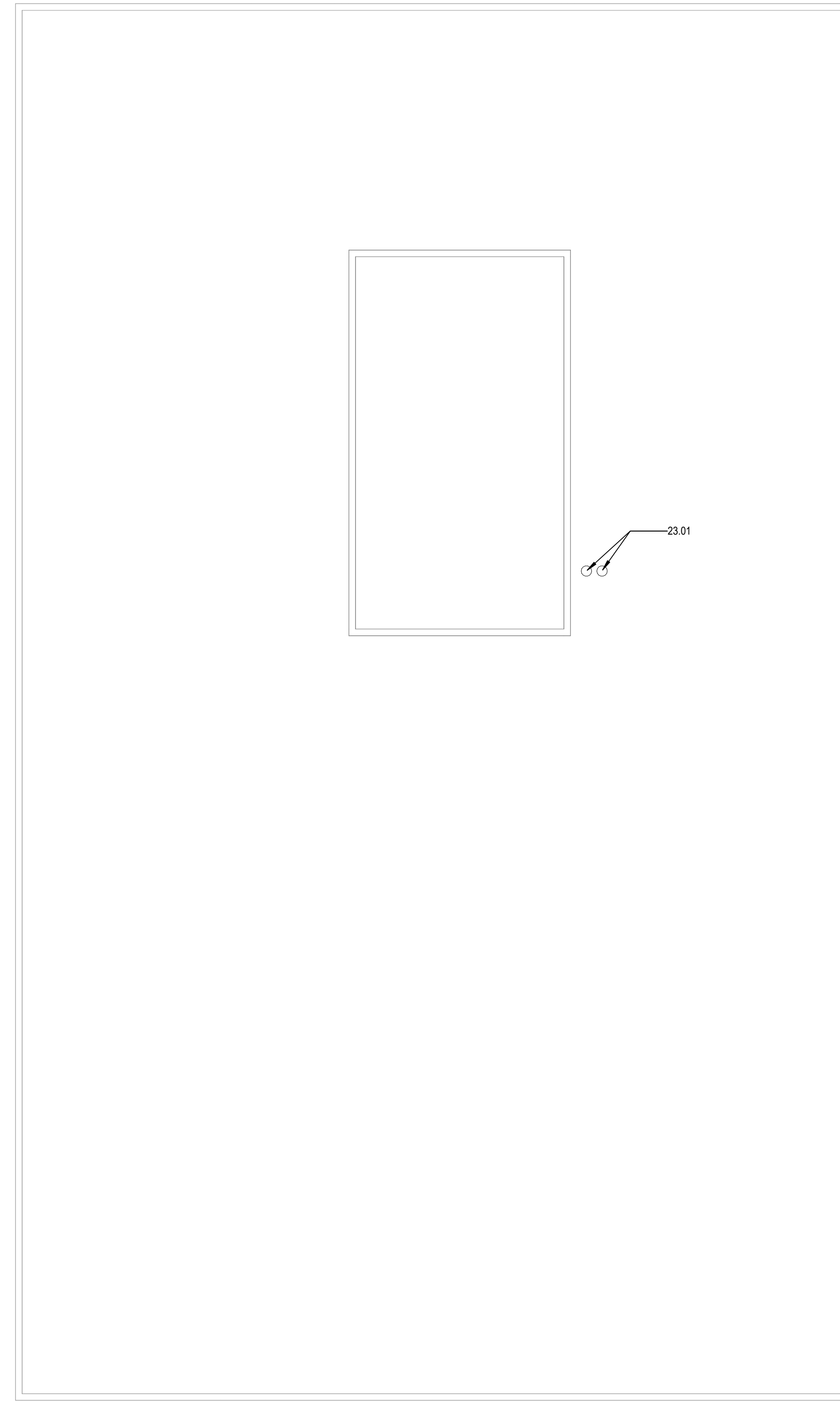
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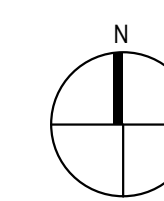
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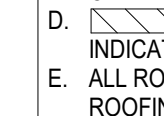
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 **ROOF PLAN**  
SCALE: 1/8" = 1'-0"

**ROOF PLAN GENERAL NOTES**

- A. ROOF PLAN GENERAL NOTES APPLY TO ALL ROOF PLAN SHEETS.
- B. ROOF SLOPES ARE CREATED BY SLOPING THE ROOF STRUCTURE UNLESS NOTED OTHERWISE. SEE STRUCTURAL DRAWINGS FOR ELEVATIONS OF THE HIGH AND LOW POINTS TO DETERMINE PROPER TAPER IN INSULATION.
- C. TAPERED INSULATION SHALL PROVIDE A MINIMUM OF 1/4-INCH PER FOOT OF SLOPE TO ROOF DRAINS, UNLESS NOTED OTHERWISE.
- D.  AREAS MARKED WITH A HATCHED PATTERN INDICATE TAPERED INSULATION.
- E. ALL ROOF CURBS TO BE A MINIMUM OF 8 INCHES ABOVE ROOFING LEVELS. PROVIDE TAPERED INSULATION ROOF SADDLES AT ROOF CURBS TO PROVIDE DRAINAGE AROUND CURBS.
- F. SEE STRUCTURAL DRAWINGS FOR FRAMING AROUND ROOF PENETRATIONS.
- G. COORDINATE THE SIZE AND LOCATION OF ROOF PENETRATIONS FOR MECHANICAL AND ELECTRICAL EQUIPMENT. REFER TO MECHANICAL AND ELECTRICAL DRAWINGS FOR PENETRATIONS NOT SHOWN ON THIS DRAWING.
- H. FLASH DRAINS, CURBS, VENTS AND STACKS PER MANUFACTURER'S RECOMMENDATIONS IF DETAIL NOT SHOWN ON DRAWINGS.
- I. NO ROOF PENETRATIONS ALLOWED WITHIN 4'-0" EACH SIDE OF FIREWALL. SEE CODE PLAN FOR FIRE WALL LOCATIONS.

**REFERENCE KEYNOTES**

- 23.01 ROOFTOP EXHAUST VENT. LOCATE AT LEAST 10' FROM OUTSIDE AIR INTAKE. SEE MECHANICAL DRAWINGS.



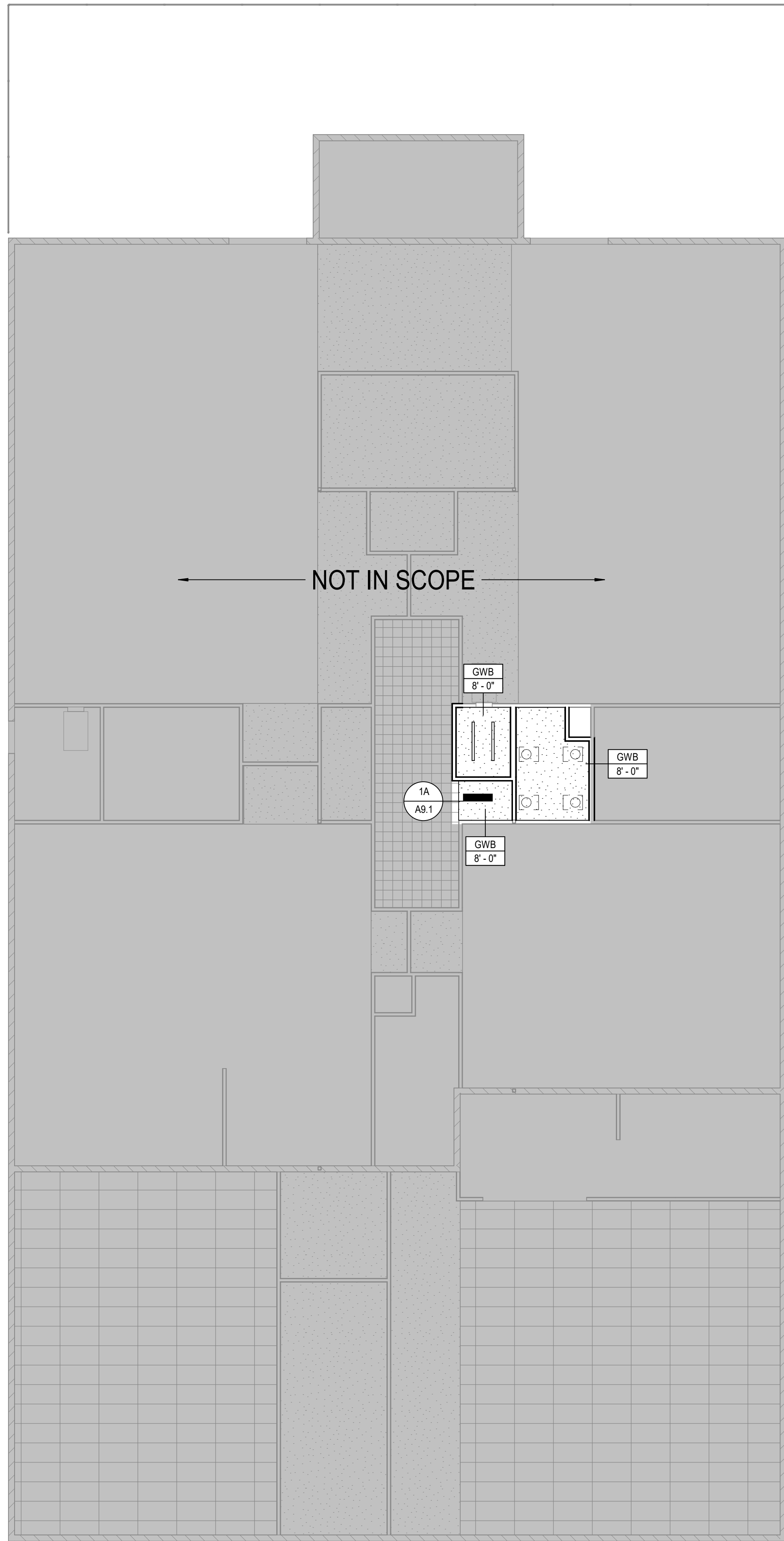
**FLOWING WELLS UNIFIED SCHOOL DISTRICT**  
FLOWING WELLS JUNIOR HIGH BUILDING K RESTROOMS  
4656 N LA CHOLLA BLVD, TUCSON, AZ 85705

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30-23107-04  
ROOF PLAN

**A1.3**

Autodesk Docs://30-23107-04-FWUSD Flowing Wells - RHJK Restrooms-30-23107-04-FWUSD Flowing Wells-RHJK Restrooms\_AS\_2024.rvt  
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 **OVERALL REFLECTED CEILING PLAN**  
SCALE: 1/8" = 1'-0"

**REFLECTED CEILING PLAN  
GENERAL NOTES**

- A. REFLECTED CEILING PLAN GENERAL NOTES APPLY TO ALL REFLECTED CEILING PLAN SHEETS.
- B. ALL CEILING GRID SPANELS SHALL BE CENTERED IN EACH ROOM UNLESS NOTED OTHERWISE.
- C. CEILING HEIGHTS ARE NOTED ON THE REFLECTED CEILING PLANS ARE MEASURED FROM THE FINISH FLOOR OF THE ROOM.
- D. ALL ELECTRICAL FIXTURES, SPEAKERS, SMOKE AND THERMAL DETECTORS, MECHANICAL GRILLES, SPRINKLER HEADS AND OTHER CEILING MOUNTED DEVICES, SHALL BE CENTERED BETWEEN CEILING GRIDS UNLESS NOTED OTHERWISE. SPRINKLER HEADS SHALL BE WITH A 3-INCH RADIUS CENTERED BETWEEN CEILING GRIDS.
- E. IN ACOUSTICAL CEILING PANELS WITH SCORE IN THE CENTER, CENTER DEVICES REFERENCE IN NOTE D IN ONE HALF OF THE TILE. DO NOT LOCATE ON THE SCORE. FOR ACP WITH MULTIPLE SCORED PATTERNS, COORDINATE LOCATION WITH THE ARCHITECT.
- F. PROVIDE SUSPENSION SYSTEM AROUND ELECTRICAL FIXTURES, MECHANICAL GRILLES, DIFFUSERS, AND OTHER CEILING MOUNTED DEVICES. AT ACOUSTICAL PANEL CEILING.
- G. ALL DIMENSIONS ON REFLECTED CEILING PLANS ARE ACTUAL AND ARE TO THE FOLLOWING UNLESS NOTED OTHERWISE:
  - a. FACE OF FINISHED WALL
  - b. FACE OF FINISHED BULKHEADS
  - c. CENTERLINE OF COLUMNS
  - d. CENTERLINE OF TEES
- H. IN AREAS WITH EXPOSED STRUCTURE CEILINGS, COORDINATE EXACT LOCATIONS OF MECHANICAL GRILLES, DIFFUSERS, DUCTWORK AND ELECTRICAL FIXTURES WITH EACH REPRESENTATIVE SUBCONTRACTOR.
- I. ALL WALLS EXTEND TO UNDERSIDE OF DECK EXCEPT THOSE SHOWN SHADED IN WHICH GYPSUM BOARD OR MASONRY EXTENDS MIN 4 INCHES ABOVE FINISHED CEILING. ALL METAL STUDS EXTEND TO UNDERSIDE OF FLOOR OR ROOF DECK.

**REFERENCE KEYNOTES**



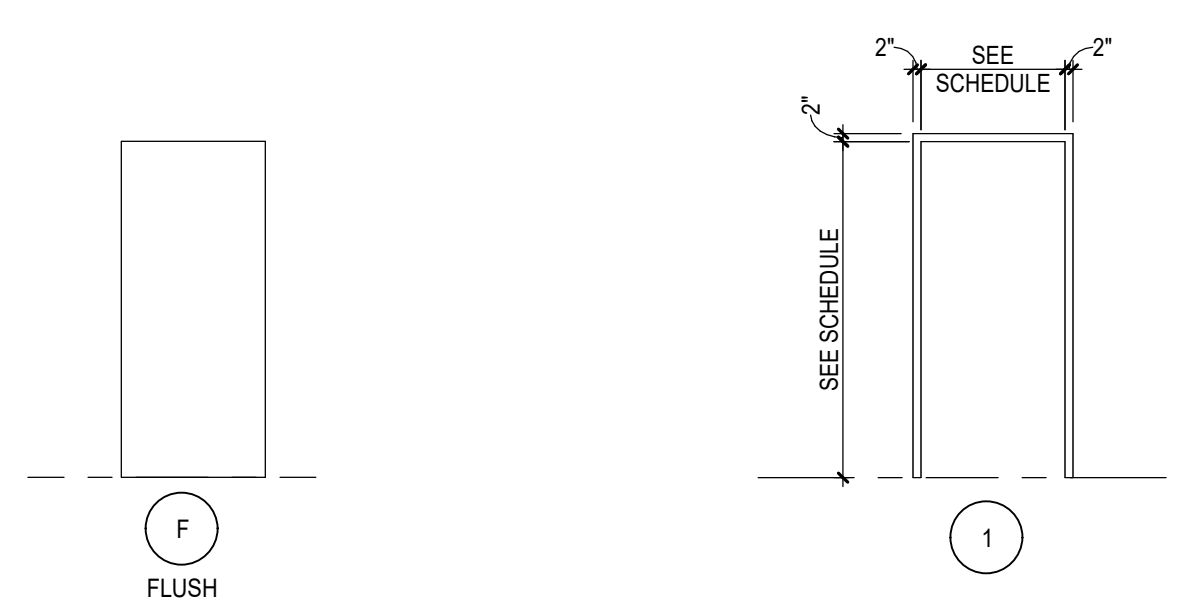
**FLOWING WELLS UNIFIED SCHOOL DISTRICT**  
FLOWING WELLS JUNIOR HIGH BUILDING K RESTROOMS  
4656 N LA CHOLLA BLVD, TUCSON, AZ 85705

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REFLECTED  
CEILING PLAN

**A3.1**

DOOR AND FRAME SCHEDULE																
NUMBER	NO. OF PANELS	PANEL					FRAME		DETAILS							
		WIDTH	HEIGHT	THICKNESS	MATERIAL	GLASS	TYPE	MATERIAL	TYPE	FIRE RATING	HARDWARE SET	HEAD	JAMB LEFT	JAMB RIGHT	SILL	COMMENTS
A101	1	3'-0"	7'-0"	1 3/4"	WD	-	F	HM	1	-	01	1C/A9.1	1C/A9.1	1C/A9.1		
A102	1	3'-0"	7'-0"	1 3/4"	WD	-	F	HM	1	-	02	1C/A9.1	1C/A9.1	1C/A9.1		ADO



DOOR PANEL TYPES

INTERIOR FRAME TYPES

FINISH SCHEDULE							
TAG	DESCRIPTION	MANUFACTURER	PRODUCT	COLOR/FINISH	SIZE	COMMENTS	
033300 CONCRETE FINISHING							
PLC-01	POLISHED CONCRETE			SALT AND PEPPER		CLEAR SEALER, PREMIUM QUALITY, LOW VOC	
066400 PLASTIC PANELING							
FRP-01	RESTROOM WALLS	CRANE COMPOSITES	GLASBORD CLASS A	WHITE 85 SMOOTH			
SS-01	SHOWER SURROUNDS			WHITE SMOOTH			
096500 RESILIENT FLOORING							
B-01	RESILIENT BASE	ROPPE	700 SERIES	193 BLACK BROWN	4"		
096000 PAINTING							
P-01	CEILING PAINT	DUNN-EDWARDS OR SHERWIN WILLIAMS	LATEX	COLOR TBD, FLAT FINISH			
P-02	WALL PAINT	DUNN-EDWARDS OR SHERWIN WILLIAMS	EPOXY MODIFIED LATEX	COLOR TBD, EGGSHELL FINISH (OR SATIN)			
P-03	HM DOOR FRAMES	DUNN-EDWARDS OR SHERWIN WILLIAMS	WATER-BASED LIGHT INDUSTRIAL COATING	COLOR TBD, SEMI-GLOSS FINISH			

ROOM FINISH SCHEDULE									
NUMBER	ROOM NAME	FLOOR FINISH	BASE FINISH	CEILING FINISH	WALL FINISH				COMMENTS
					NORTH	EAST	SOUTH	WEST	
A101	HALL RESTROOM	PLC-01	B-01	P-01	FRP-01/P-02	FRP-01/P-02	FRP-01/P-02	FRP-01/P-02	
A102	RESTROOM WITH SHOWER	PLC-01	B-01	P-01	FRP-01	FRP-01	FRP-01	FRP-01	

DOOR AND FRAME SCHEDULE GENERAL NOTES

- A. ALL HOLLOW METAL FRAMES SET IN WOOD STUD WALLS SHALL BE FILLED WITH MINERAL WOOL BLANKET INSULATION.
- B. FRAME MANUFACTURER SHALL COORDINATE LOCATIONS OF ALL CONCEALED CONDUIT AND J-BOXES REQUIRED FOR ELECTRIFIED HARDWARE PRIOR TO MANUFACTURING OF HOLLOW METAL FRAMES AND COORDINATE WITH ELECTRIFIED HARDWARE AND DEVICES.

DOOR PANEL TYPE DESCRIPTIONS

F FLUSH

ROOM FINISH SCHEDULE GENERAL NOTES

- A. SEE SPECIFICATION FOR PAINTING OF ITEMS NOT NOTED IN THE ROOM FINISH SCHEDULE OR FINISH PLANS.
- B. EXPOSED CONCRETE FLOORS NOT SHOWN TO RECEIVE A FINISH SHALL RECEIVE LIQUID FLOOR TREATMENT OR CURING AND SEALING COMPOUND UNLESS NOTED OTHERWISE. SEE SPEC SECTION 033000.
- C. ALL GYPSUM WALLBOARD BULKHEADS SHALL BE PAINTED P-1 UNLESS NOTED OTHERWISE.
- D. SEE REFLECTED CEILING PLANS FOR CEILING MATERIAL AND HEIGHT.
- E. CEILING HEIGHTS AS NOTED ON THE REFLECTED CEILING PLANS ARE MEASURED FROM FINISH FLOOR OF THE ROOM.
- F. WHERE FLOOR FINISH CHANGES FROM ONE ROOM TO ANOTHER, SET JOINT OF THE MATERIALS AT THE CENTER OF THE COMMUNICATING DOOR.



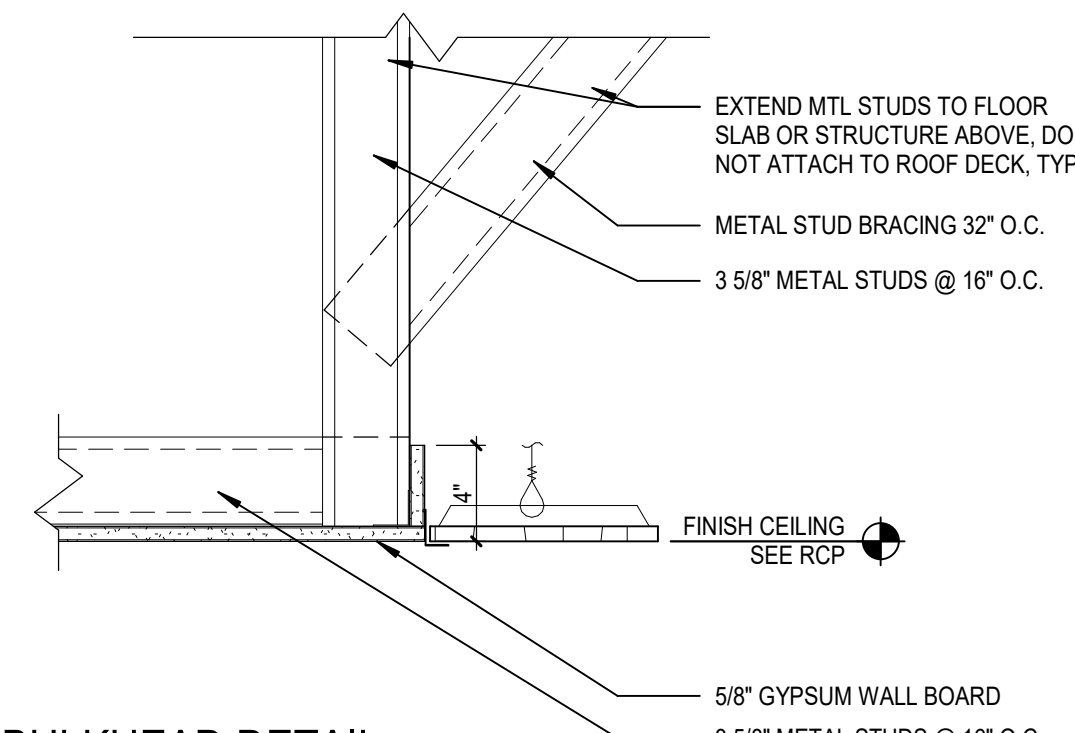
FLOWING WELLS UNIFIED SCHOOL DISTRICT  
 FLOWING WELLS JUNIOR HIGH BUILDING K RESTROOMS  
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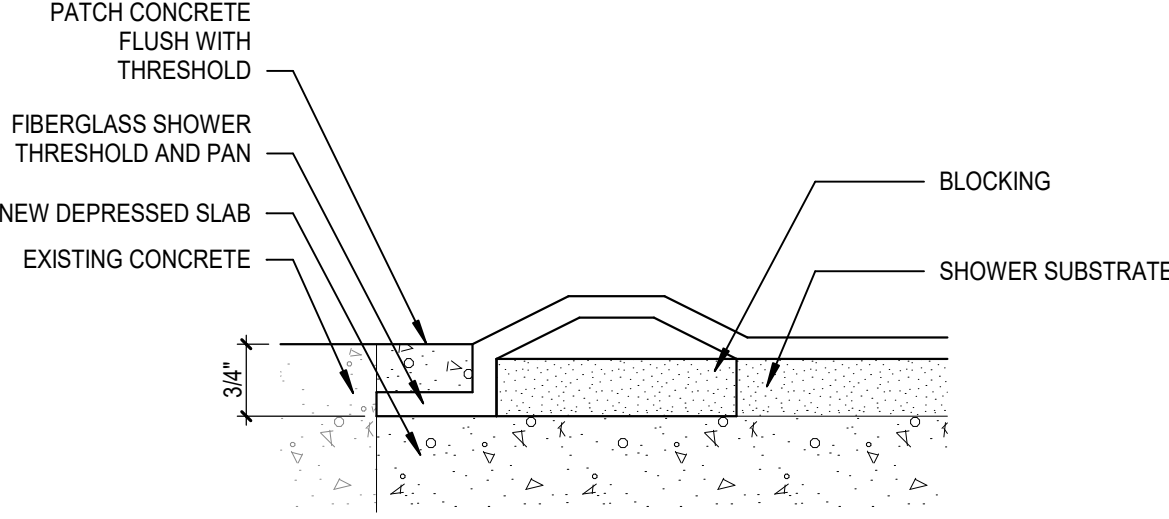
30-23107-04  
 DOOR, WINDOW & FRAME TYPE & SCHEDULES, FINISH SCHEDULES

A8.1

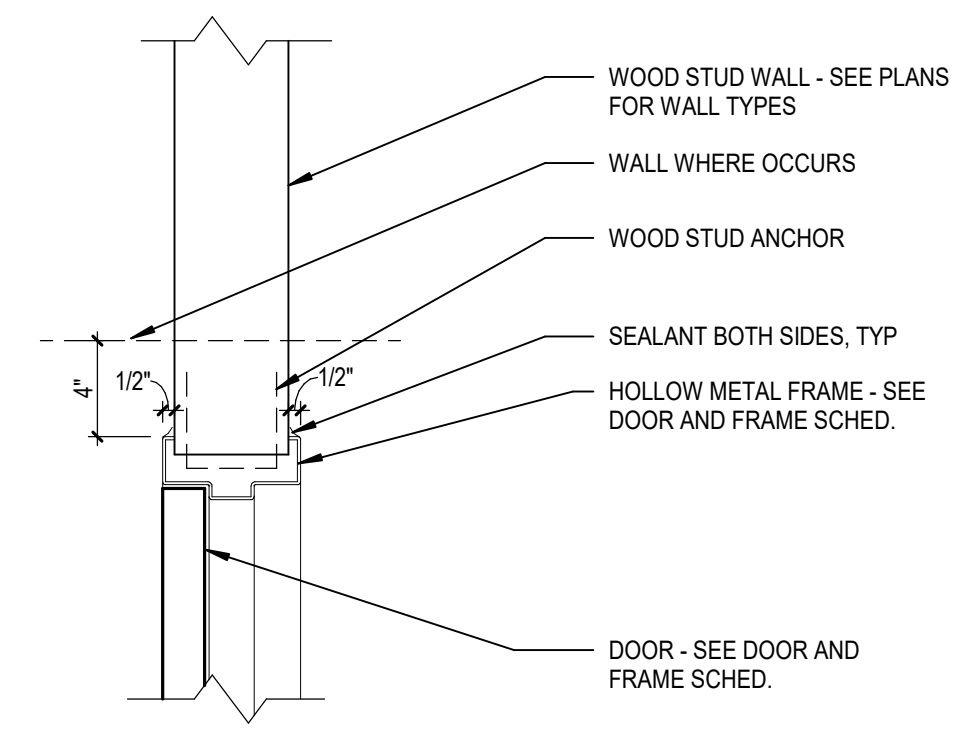
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1A BULKHEAD DETAIL  
SCALE: 1 1/2" = 1'-0"



1B SHOWER THRESHOLD  
SCALE: 6" = 1'-0"



1C HEAD / JAMB @ DOOR  
SCALE: 1 1/2" = 1'-0"

Autodesk Docs://30-23107-04-FWUSD Flowing Wells - RHK Restrooms 30-23107-04-FWUSD Flowing Wells.RHK  
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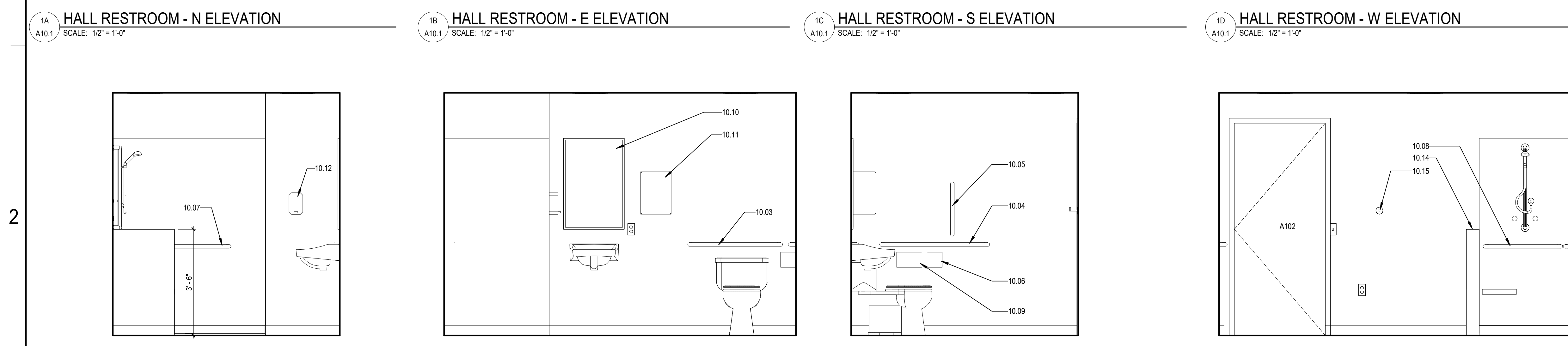
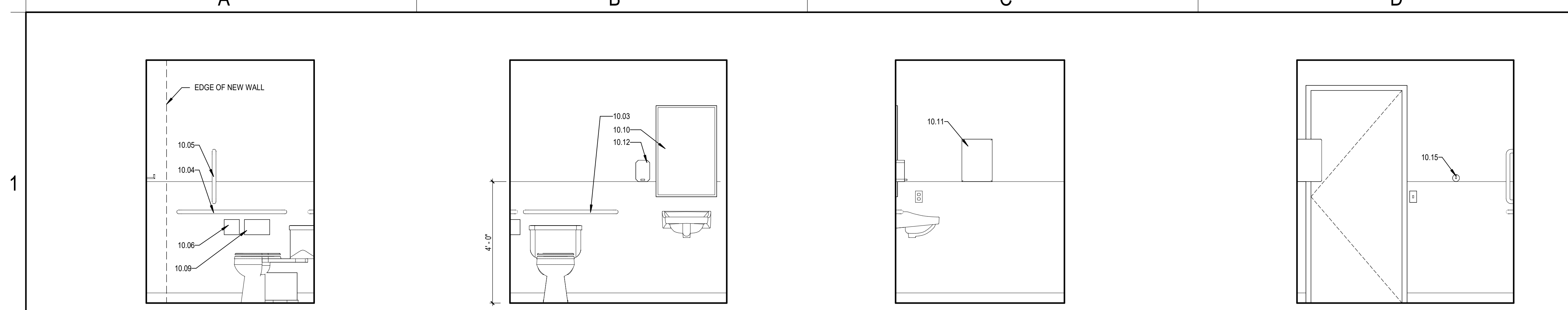


**FLOWING WELLS UNIFIED SCHOOL DISTRICT**  
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 4656 N LA CHOLLA BLVD, TUCSON, AZ 85705

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 3/12/2024  
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30-23107-04  
 GENERAL  
 DETAILS

A9.1



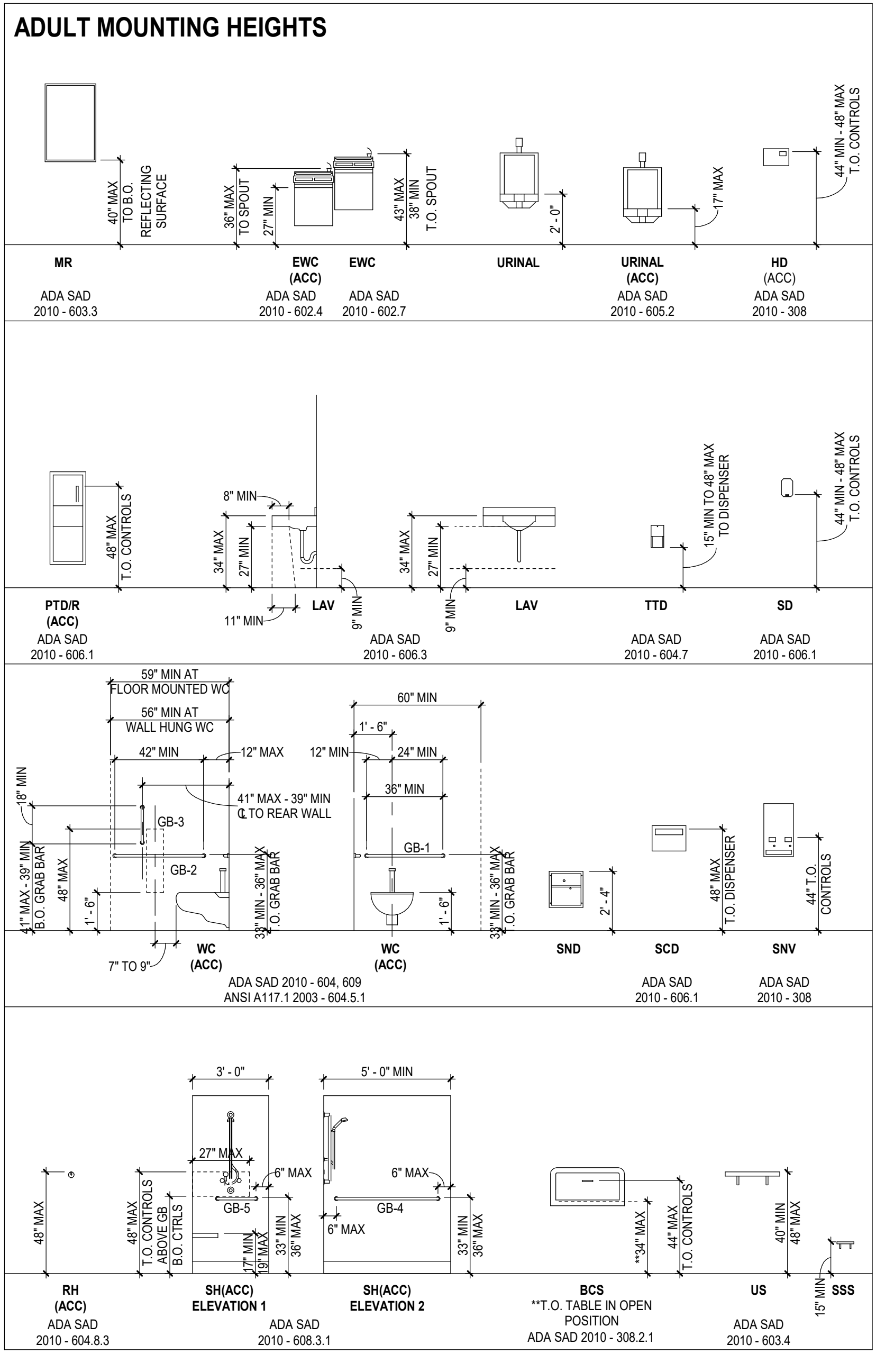
**REFERENCE KEYNOTES**

- 10.03 GB-1 HORIZONTAL GRAB BAR - 30"
- 10.04 GB-2 HORIZONTAL GRAB BAR - 42"
- 10.05 GB-3 VERTICAL GRAB BAR - 18"
- 10.06 TTD TOILET TISSUE DISPENSER OFOI
- 10.07 GB-4 SHOWER GRAB BAR - BACK
- 10.08 GB-5 SHOWER GRAB BAR - SIDE
- 10.09 SND SANITARY NAPKIN DISPOSAL OFOI
- 10.10 MR MIRROR
- 10.11 PTD PAPER TOWEL DISPENSER OFOI
- 10.12 SD SOAP DISPENSER OFOI
- 10.14 INSTALL SHOWER WALL CAP ON TOP OF PONY WALL
- 10.15 RH ROBE HOOK

**DLR GROUP**  
© DLR Group

47804 SHANE J. CHISM  
REGISTERED ARCHITECT  
STATE OF ARIZONA  
12114 N 10TH AVENUE

Flowing Wells Unified School District  
Potential Future Opportunity



**TOILET ACCESSORIES ABBREVIATIONS**

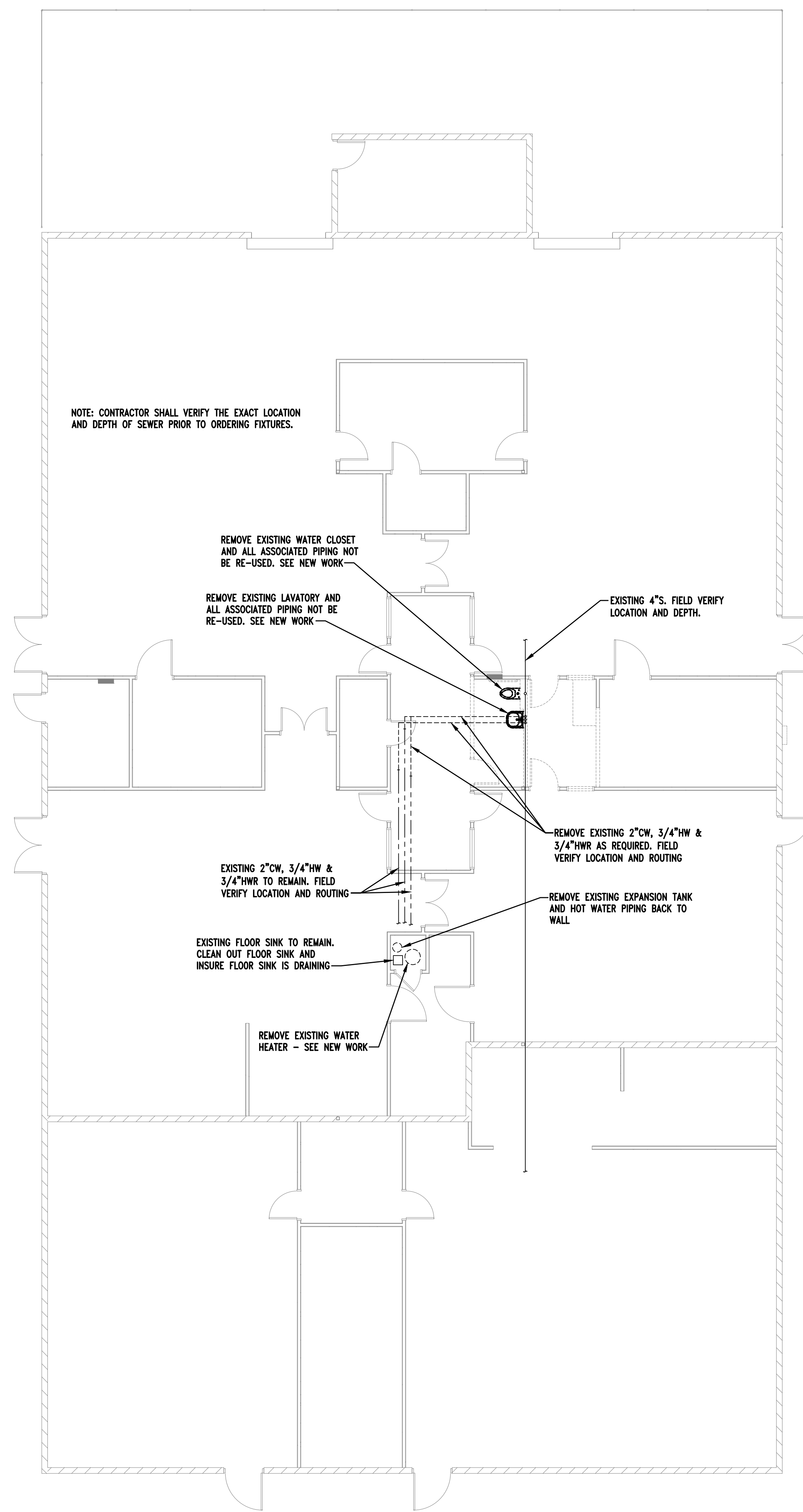
ABBREV	DESCRIPTION
ACC	ADA ACCESSIBLE
BCS	BABY CHANGING STATION
EWC	ELECTRIC WATER COOLER
GB-1	GRAB BAR (BACK WALL)
GB-2	GRAB BAR (SIDE WALL)
GB-3	GRAB BAR (VERTICAL)
GB-4	GRAB BAR (SHOWER BACK)
GB-5	GRAB BAR (SHOWER SIDE)
HD	HAND DRYER
LAV	LAVATORY
MBH	MICROBROOM HOLDER
MR	MIRROR
MR/S	MIRROR WITH SHELF
PTD	PAPER TOWEL DISPENSER
PTD/R	COMBINATION TOWEL DISPENSER/RECEPTACLE
RH	ROBE HOOK
SC	SHOWER CURTAIN
SCD	SEAT COVER DISPENSER
SCR	SHOWER CURTAIN ROD
SD	SOAP DISPENSER
SND	SANITARY NAPKIN DISPOSAL
SNV	SANITARY NAPKIN VENDOR
SSS	STAINLESS STEEL SHELF
TTD	TOILET TISSUE DISPENSER
US	UTILITY SHELF
WC	WATER CLOSET
WR	WASTE RECEPTACLE

**FLOWING WELLS UNIFIED SCHOOL DISTRICT**  
FLOWING WELLS JUNIOR HIGH BUILDING K RESTROOMS  
4656 N LA CHOLLA BLVD, TUCSON AZ 85705

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30-23107-04  
INTERIOR ELEVATIONS  
A10.1

Autodesk Docs/30-23107-04-FWUSD Flowing Wells - RH/K Restrooms/30-23107-04-FWUSD Flowing Wells.RHK  
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NOTE: CONTRACTOR SHALL VERIFY THE EXACT LOCATION AND DEPTH OF SEWER PRIOR TO ORDERING FIXTURES.

REMOVE EXISTING WATER CLOSET AND ALL ASSOCIATED PIPING NOT BE RE-USED. SEE NEW WORK

REMOVE EXISTING LAVATORY AND ALL ASSOCIATED PIPING NOT BE RE-USED. SEE NEW WORK

EXISTING 4" S. FIELD VERIFY LOCATION AND DEPTH.

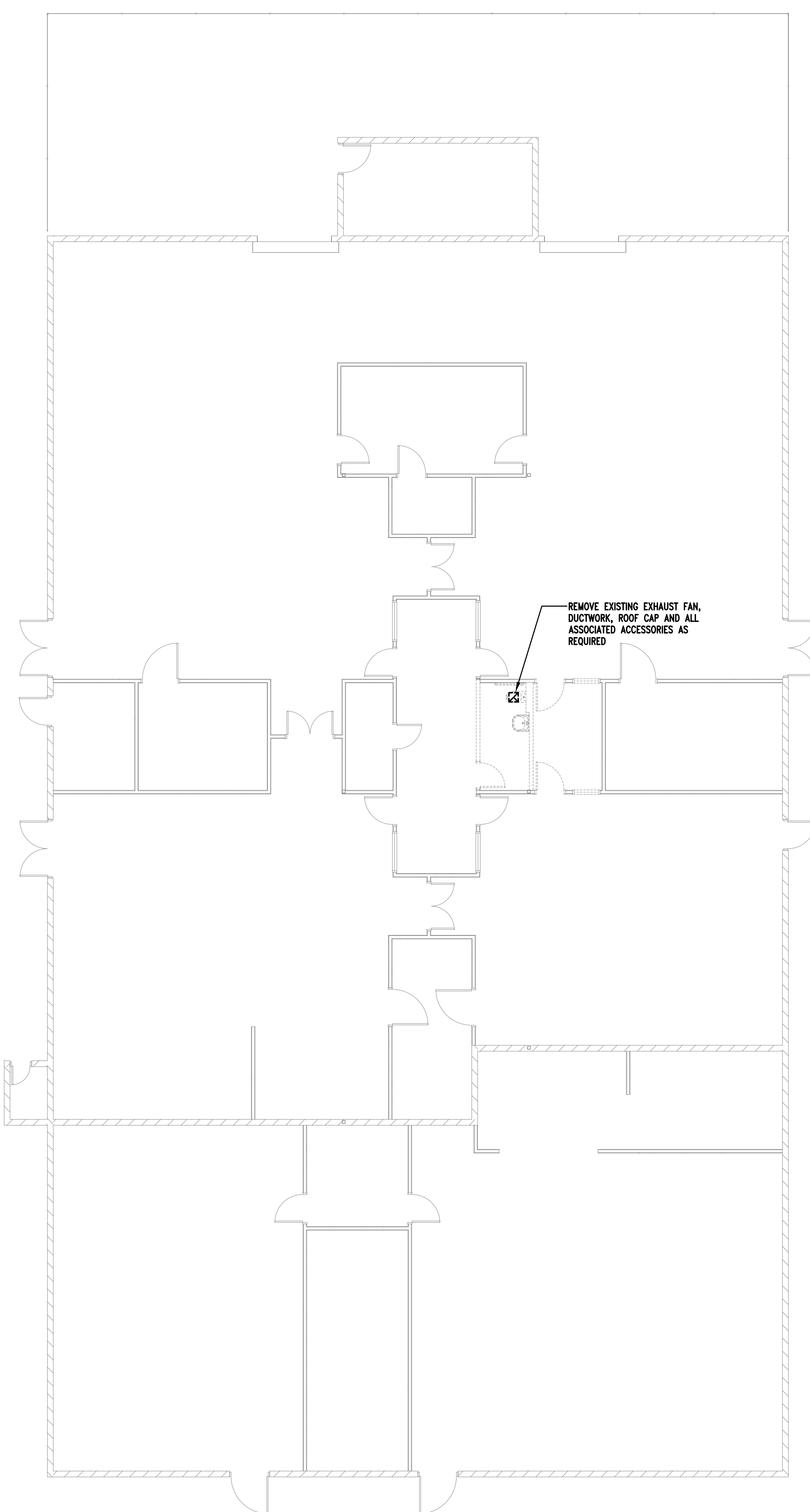
REMOVE EXISTING 2" CW, 3/4" HW & 3/4" HW AS REQUIRED. FIELD VERIFY LOCATION AND ROUTING

EXISTING 2" CW, 3/4" HW & 3/4" HW TO REMAIN. FIELD VERIFY LOCATION AND ROUTING

REMOVE EXISTING EXPANSION TANK AND HOT WATER PIPING BACK TO WALL

EXISTING FLOOR SINK TO REMAIN. CLEAN OUT FLOOR SINK AND INSURE FLOOR SINK IS DRAINING

REMOVE EXISTING WATER HEATER - SEE NEW WORK



REMOVE EXISTING EXHAUST FAN, DUCTWORK, ROOF CAP AND ALL ASSOCIATED ACCESSORIES AS REQUIRED

 **PLUMBING DEMOLITION PLAN**  
SCALE: 1/8" = 1'-0"

**PLUMBING GENERAL NOTES**

- COORDINATE ALL WORK WITH ALL OTHER TRADES. EXACT ROUTING OF ALL PIPING SHALL BE CAREFULLY COORDINATED WITH ALL STRUCTURAL CONDITIONS.
- CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS INCLUDING PIPING LOCATIONS, SIZES, INVERTS AND DIRECTION OF FLOW BEFORE THE START OF WORK.
- PROVIDE REQUIRED DEMOLITION OF EXISTING PLUMBING EQUIPMENT, FIXTURES, MATERIALS AND OTHER ITEMS WHICH ARE NOT TO BE REUSED IN NEW DESIGN. ALL ITEMS WHICH THE OWNER DOES NOT WISH TO SALVAGE SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM THE SITE.
- ALL PLUMBING FIXTURES AND EQUIPMENT IDENTIFIED BY A "P" NUMBER SHALL BE FURNISHED AND INSTALLED BY THIS CONTRACTOR, UNLESS NOTED OTHERWISE. SEE PLUMBING SCHEDULES.
- OFFSET ALL PLUMBING VENTS AS REQUIRED INSURING MINIMUM 10'-0" CLEARANCE FROM ALL OUTSIDE AIR INTAKES.
- PROVIDE ACCESS DOORS WHERE SHUT-OFF VALVE OR OTHER DEVICES ARE CONCEALED IN A HARD CEILING. SEE SPECIFICATIONS. COORDINATE WITH ARCHITECT.
- ALL SEWER PIPING SHALL BE SLOPED AT A MINIMUM OF 1/4" PER FOOT UNLESS NOTED OTHERWISE.

 **MECHANICAL DEMOLITION PLAN**  
SCALE: 1/8" = 1'-0"

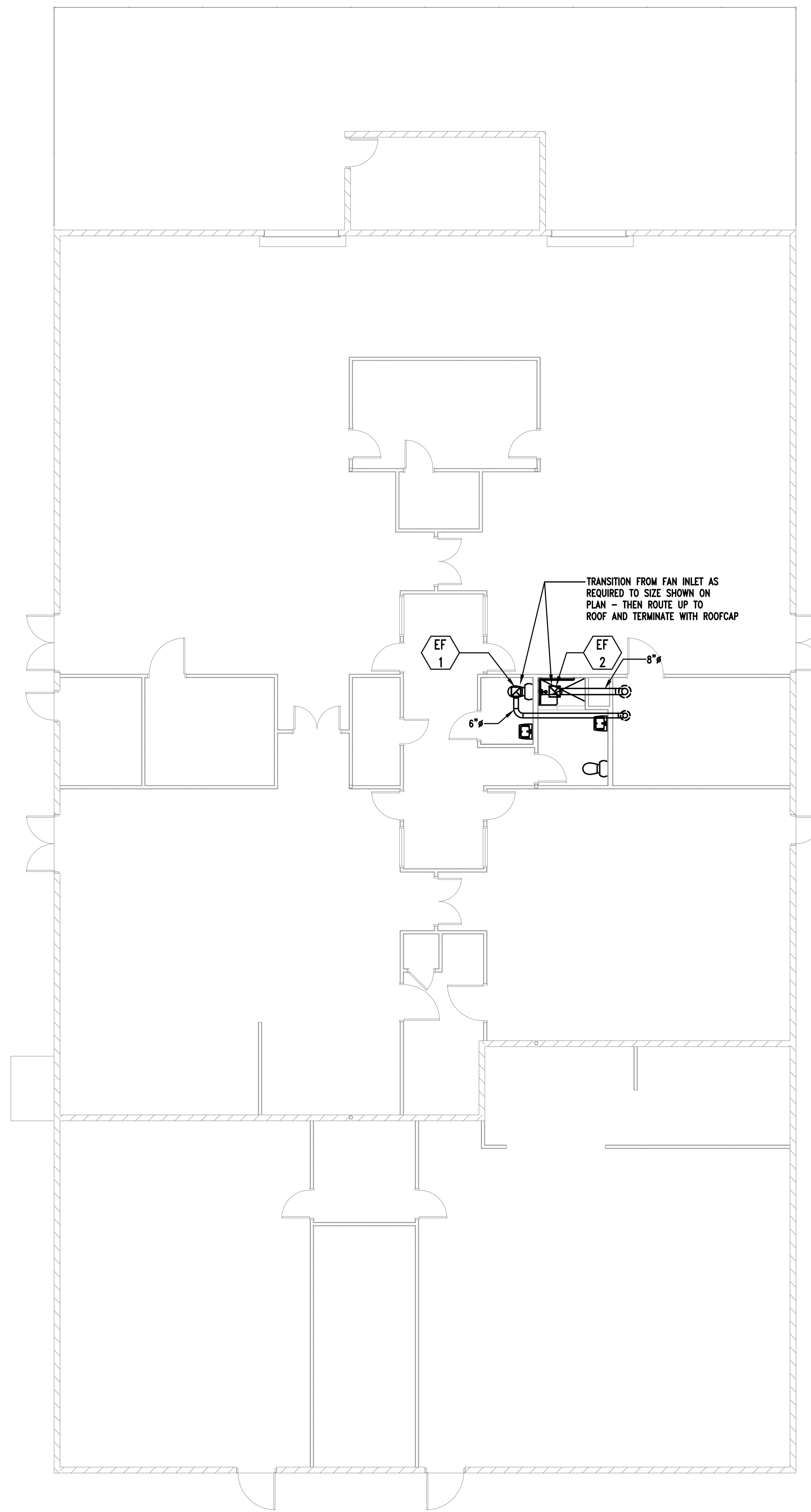
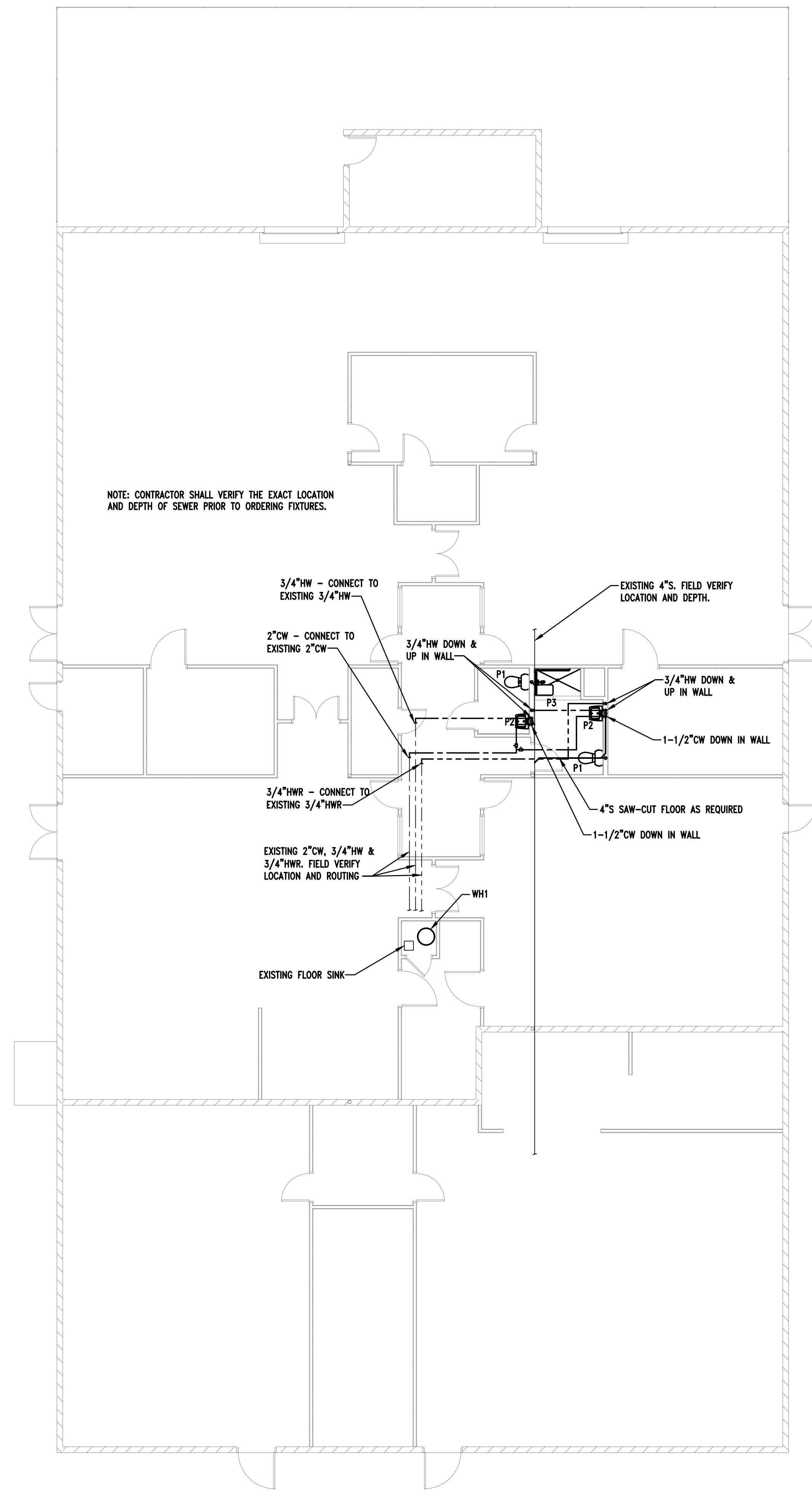
**MECHANICAL GENERAL NOTES**

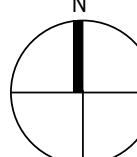
- COORDINATE ALL MECHANICAL WORK WITH ALL OTHER TRADES. VERIFY ALL EXISTING CONDITIONS BEFORE THE START OF WORK.
- PROVIDE ALL REQUIRED DEMOLITION OF EXISTING MECHANICAL EQUIPMENT, MATERIALS AND OTHER ITEMS WHICH ARE NOT TO BE REUSED IN NEW DESIGN. ALL ITEMS WHICH THE OWNER DOES NOT WISH TO SALVAGE SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM THE SITE.
- COORDINATE EXACT LOCATION OF EXHAUST FANS WITH ARCHITECTURAL REFLECTED CEILING PLAN.
- ROUTE DUCTS FROM TOILET EXHAUST FANS TO ROOF CAPS. CONCEAL DUCTWORK. ROOF CAPS SHALL BE FLASHED WEATHERTIGHT. OFFSET EXHAUST DISCHARGE AS REQUIRED INSURING A MINIMUM 10'-0" CLEARANCE FROM ALL OUTSIDE AIR INTAKES.

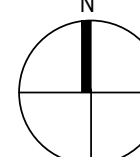
**KC** MECHANICAL ENGINEERING, L.L.C.  
5447 East Fifth Street # 112  
Tucson, Arizona 85711  
Designers Mech: KGW Plumb: KGW Project #: 23-388

25035  
KENNETH M.  
CAWTHORNE  
REGISTERED PROFESSIONAL ENGINEER  
EXPIRES 6/30/2026





 **PLUMBING PLAN**  
SCALE: 1/8" = 1'-0"

 **MECHANICAL PLAN**  
SCALE: 1/8" = 1'-0"



**MECHANICAL GENERAL REQUIREMENTS**

CODES: CONTRACTOR SHALL COMPLY WITH ALL REQUIREMENTS OF THE FOLLOWING CODES: INTERNATIONAL BUILDING CODE (2018 EDITION), INTERNATIONAL MECHANICAL CODE (2018 EDITION), INTERNATIONAL PLUMBING CODE (2018 EDITION), INTERNATIONAL FUEL GAS CODE (2018 EDITION), INTERNATIONAL ENERGY CONSERVATION CODE (2018 EDITION) AND THE INTERNATIONAL FIRE CODE (2018 EDITION) AS AMENDED BY THE LOCAL GOVERNING AGENCY.

GENERAL: THE WORK COVERED BY THIS SPECIFICATION SHALL INCLUDE THE FURNISHING OF ALL MATERIALS, LABOR, TRANSPORTATION, TOOLS, PERMITS, FEES, INSPECTIONS, UTILITIES AND INCIDENTALS NECESSARY FOR THE COMPLETE INSTALLATION OF ALL WORK REQUIRED BY THE CONTRACT DRAWINGS.

DRAWINGS: THE DRAWINGS ARE DIAGNAMATIC IN CHARACTER AND CANNOT SHOW EVERY CONNECTION IN DETAIL OR EVERY PIPE OR DUCT IN ITS EXACT LOCATION. THESE DETAILS ARE SUBJECT TO THE REQUIREMENTS OF ORDINANCES AND ALSO STRUCTURAL AND ARCHITECTURAL CONDITIONS. THE CONTRACTOR SHALL CAREFULLY INVESTIGATE STRUCTURAL AND FINISH CONDITIONS AND SHALL COORDINATE WITH THE SEPARATE TRADES IN ORDER TO AVOID INTERFERENCE BETWEEN THE VARIOUS PHASES OF WORK. WORK SHALL BE LAID OUT SO THAT IT WILL BE CONCEALED IN FURRED CHASES OR ABOVE CEILINGS, ETC., IN FINISHED PORTIONS OF THE BUILDING, UNLESS SPECIFICALLY NOTED OR INDICATED TO BE EXPOSED. WORK SHALL BE INSTALLED TO AVOID CRIPPLING OF STRUCTURAL MEMBERS. ALL WORK SHALL BE RUN PARALLEL OR PERPENDICULAR TO THE LINES OF THE BUILDING UNLESS OTHERWISE NOTED. THE APPROXIMATE LOCATION OF EACH ITEM IS INDICATED ON THE DRAWINGS. THESE DRAWINGS ARE NOT INTENDED TO GIVE COMPLETE AND EXACT DETAILS IN REGARD TO LOCATION. EXACT LOCATIONS ARE TO BE DETERMINED BY ACTUAL MEASUREMENTS OF THE BUILDING.

EQUIPMENT INSTALLATION: PROVIDE AND INSTALL UNIONS AT PROPER POINTS TO PERMIT REMOVAL OF PIPE AND EQUIPMENT WITHOUT DAMAGE TO OTHER PARTS OF THE SYSTEM. ALL EQUIPMENT SHALL BE INSTALLED IN A MANNER TO PERMIT ACCESS TO PARTS REQUIRING SERVICE WITHOUT DISASSEMBLY OF OTHER EQUIPMENT.

EXCAVATION AND BACKFILL: THE CONTRACTOR SHALL PROVIDE ALL EXCAVATION REQUIRED FOR THE INSTALLATION OF THE WORK. CONTRACTOR SHALL BACKFILL, COMPACT AND REPAIR CONCRETE OR PAVING TO MATCH EXISTING FINISH AS CLOSELY AS POSSIBLE.

EXISTING FACILITIES: LOSS OR DAMAGE TO EXISTING FACILITY CAUSED BY THE CONTRACTOR SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR TO THE OWNER'S SATISFACTION AT NO COST TO THE OWNER. THE CONTRACTOR SHALL COORDINATE ALL WORK REQUIRED IN EXISTING AREAS WITH THE OWNER AND SHALL ARRANGE FOR ALL TEMPORARY UTILITY SERVICES, PROTECTION OF THE FACILITY AND ITS CONTENTS, BARRICADES, SAFETY DEVICES, ETC., REQUIRED TO ACCOMPLISH THE WORK. THE CONTRACTOR SHALL REMOVE AND REINSTALL EXISTING CONSTRUCTION IF REQUIRED TO ACCOMPLISH THE WORK. NOTIFY THE OWNER AT LEAST TWO DAYS IN ADVANCE OF ALL REQUIRED SERVICE OUTAGES.

SUBSTITUTIONS: EQUIPMENT OF EQUAL QUALITY TO THAT SPECIFIED MAY BE SUBSTITUTED PROVIDED IT MEETS OR EXCEEDS THE CAPACITY SCHEDULED, IS OF SIMILAR CONSTRUCTION, AND WILL FIT IN THE SPACE ALLOTTED WITH AMPLE SERVICE CLEARANCE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COORDINATION WITH ALL OTHER TRADES (SUCH AS ELECTRICAL AND STRUCTURAL) OF ANY PRODUCT REQUIRING A CHANGE IN THE WORK OF THAT TRADE. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR ANY ADDITIONAL COSTS ASSOCIATED WITH SUCH A CHANGE. MATERIALS OF CONSTRUCTION SHALL BE AS SPECIFIED.

SUPPORTS, ANCHORS AND SLEEVES: SUPPORT HORIZONTAL PIPING WITH STEEL CLAVIS HANGERS AND VERTICAL PIPING WITH RISER CLAMPS. PROVIDE COPPER PLATED HANGERS AND CLAMPS FOR COPPER PIPING OR WRAP THE COPPER PIPE AT HANGERS WITH TWO LAYERS OF PVC TAPE OR EQUIVALENT. HANGER SPACING AND RISE SIZE SHALL BE IN ACCORDANCE WITH THE LOCAL CODE AND/OR ASHRAE STANDARDS. SUPPORT DUCTWORK IN ACCORDANCE WITH SMACNA STANDARDS. DUCTWORK SHALL BE SUPPORTED INDEPENDENT FROM OTHER DUCTWORK AND EQUIPMENT. PROVIDE MINIMUM 18 GAUGE GALVANIZED STEEL SLEEVES FOR DUCTWORK, FLASHINGS, AND ESCUTCHEONS. SEAL ALL WALL, ROOF, AND FLOOR PENETRATIONS.

SHOP DRAWINGS: PROVIDE SHOP DRAWINGS AND MANUFACTURER'S DATA ON ALL PLUMBING FIXTURES AND TRIM, EQUIPMENT, AND MECHANICAL DEVICES FOR APPROVAL.

WARRANTY: PROVIDE TWO YEAR WARRANTY FROM DATE OF FINAL ACCEPTANCE ON ALL LABOR AND MATERIALS PROVIDED UNDER THIS CONTRACT.

OPERATION AND MAINTENANCE MANUAL: PROVIDE A COMPLETE INDEXED, BOUND MANUAL OF ALL EQUIPMENT REQUIRING MAINTENANCE.

CLEAN\_UP: CONTRACTOR SHALL MAINTAIN PREMISES IN CLEAN CONDITION AT END OF EACH DAY AND THOROUGHLY CLEAN\_UP AT END OF CONSTRUCTION.

**PLUMBING:**

PIPING: SANITARY SOIL AND VENT PIPING SHALL BE SCHEDULE 40 SOLID CORE PVC PIPING WITH DWV FITTINGS AND LOW VOC SOLVENT JOINTS AS APPROVED BY CODE AGENCIES. FOAM CORE PIPING WILL NOT BE ACCEPTED.

DOMESTIC WATER PIPING ABOVE GRADE SHALL BE TYPE "L" HARD TEMPER COPPER PIPE WITH WROUGHT FITTINGS AND 95.5 LEAD FREE SOLDER JOINTS.

INSULATION: INSULATE ALL DOMESTIC HOT WATER SUPPLY AND HOT WATER RETURN PIPING UP TO 140F OPERATING TEMPERATURE, 1-1/4" DIAMETER & SMALLER, WITH 1" THICK GLASS FIBER SECTIONAL PIPE INSULATION WITH ALL SERVICE JACKET OR EQUIVALENT ARMAFLEX FOAM. PIPING 1-1/2" DIAMETER AND LARGER SHALL BE PROVIDED WITH 1-1/2" INSULATION. INSTALL INSULATION IN ACCORDANCE WITH MANUFACTURER'S PRINTED INSTRUCTIONS. PROVIDE SHEET METAL SADDLES AT HANGER LOCATIONS. INSULATION SHALL BE INSTALLED CONTINUOUS THROUGH ALL HANGERS. ALL PIPING SYSTEMS SHALL BE TESTED PRIOR TO THE APPLICATION OF INSULATION.

PIPING SPECIALTIES: CONTRACTOR SHALL INSTALL DIELECTRIC UNIONS OR FLANGES AT ALL LOCATIONS WHERE COPPER OR BRASS PIPING CONNECTS TO FERROUS PIPING OR EQUIPMENT. INSTALL WATER HAMMER ARRESTORS (EQUAL TO J.R. SMITH SERIES #5000) WITH ACCESS DOORS (EQUAL TO J.R. SMITH SERIES #4760) WHERE SHOWN ON PLAN.

VALVES: VALVES FOR DOMESTIC HOT AND COLD WATER SHALL BE LEAD-FREE AND AS MANUFACTURED BY KITZ, STOCKHAM, NIBCO, APOLLO, MILWAUKEE OR JENKINS.

BALL VALVES SHALL BE BRONZE, TWO PIECE BODY, FULL PORT FORGED BRASS BALL, SILICON BRONZE STEM, PTFE OR HOPE SEAT, PACKING AND GASKET, THREADED OR SOLDERED ENDS. VALVES SHALL CONFORM TO MSS SP-110 CHECK VALVES SHALL BE CLASS 125, BRONZE BODY, BRONZE DISC, Y-PATTERN, SWING CHECK DESIGN, THREADED OR SOLDERED ENDS. VALVES SHALL CONFORM TO MSS SP-80.

WHERE VALVE INSTALLATION IS CONCEALED: PROVIDE J.R. SMITH SERIES 4760 OR APPROVED EQUAL ACCESS DOORS WITH CONCEALED HINGE AND KEY OPERATED LOCKS. DOORS SHALL BE LARGE ENOUGH TO SERVICE VALVES AND SHALL BE INSTALLED FLUSH WITH FINISHED WALLS OR CEILINGS.

PLUMBING FIXTURES: FURNISH ALL STANDARD PRODUCTS OF AMERICAN STANDARD, KOHLER, DELTA, MOEN, CHICAGO, T&S BRASS, WIFAR, SLOAN, DELANY OR APPROVED EQUAL. ALL FIXTURES SHALL BE WHITE UNLESS OTHERWISE NOTED. REFER TO SCHEDULE FOR SPECIFIC REQUIREMENTS. PROVIDE STOPS AT HOT AND COLD WATER CONNECTIONS TO EACH FIXTURE.

EXECUTION: SLOPE DRAINAGE PIPING INSIDE AND OUTSIDE OF BUILDING IN ACCORDANCE WITH REQUIREMENTS OF THE GOVERNING PLUMBING CODES.

ESTABLISH GRADE LINES WITH SURVEYOR'S LEVEL. VERIFY LOCATION OF SEWER TAPS BEFORE START OF WORK AND MAKE NECESSARY GRADE ADJUSTMENTS. DRAIN VENT LINES BACK TO SOIL LINES.

INSTALL WATER PIPING TO AVOID CONTACT WITH STRUCTURE WHEN POSSIBLE TO PREVENT EXCESSIVE WATER HAMMER NOISE TRANSMISSION.

ALL PIPING SHALL BE INSTALLED AT RIGHT ANGLES TO THE BUILDING LINES AND PLUMB.

WRAP METALLIC PIPE IN CONTACT WITH CONCRETE BLOCK, SLABS OR STUCCO WITH 10 MIL THICK PVC TAPE TO PREVENT CORROSION.

FLUSH PIPING CLEAN WITH WATER AFTER INSTALLATION. DISINFECT POTABLE WATER SYSTEM PER CODE, ANWA C651, OR ANWA C652 AND SUBMIT TEST RESULTS.

TEST ALL PIPING PRIOR TO COVERING OR BACKFILLING.

TEST WATER PIPING AT 100 PSIG FOR A CONTINUOUS PERIOD OF NOT LESS THAN FOUR (4) HOURS. DURING THIS TIME, CAREFULLY INSPECT THE SYSTEM FOR LEAKS. CONTRACTOR SHALL REPAIR ALL LEAKS IF NECESSARY AND TEST AGAIN UNTIL NO LEAKAGE IS DETECTED.

TEST SOIL, WASTE AND VENT SYSTEMS BY PLUGGING LINES AND FILLING SYSTEMS WITH WATER TO A STATIC HEAD OF 10 FEET OF WATER. OBSERVE WATER LEVEL FOR A TWO (2) HOUR PERIOD. IF LEVEL IS LOWERED, INDICATING LEAKAGE, REPAIR LEAKS AND TEST AGAIN UNTIL NO FURTHER LEAKAGE IS DETECTED.

HEATING, VENTILATING AND AIR CONDITIONING:

EQUIPMENT: EQUIPMENT CAPACITIES AND CHARACTERISTICS SHALL BE AS SCHEDULED ON THE DRAWINGS. INSTALL AS INDICATED ON DRAWINGS AND AS PER MANUFACTURER'S PRINTED INSTRUCTIONS. EXHAUST FANS MANUFACTURED BY GREENHECK, LOREN COOK, BROAN, OR DELTA ARE ACCEPTABLE.

DUCT SIZES: DIMENSIONS ON DRAWINGS ARE SHEET METAL DUCT SIZES. DO NOT INCREASE DUCT SIZE FOR ACOUSTICALLY LINED OR INTERNALLY INSULATED DUCTS.

ALL LOW PRESSURE DUCTWORK SHALL BE CONSTRUCTED WITH A MIN. 2" W.G. PRESSURE CLASSIFICATION AND SEAL CLASS C. SEAL ALL TRANSVERSE JOINTS WITH HARDCAST.

DUCT GAUGES: FABRICATION AND SUPPORT SHALL BE IN ACCORDANCE WITH SMACNA STANDARDS.

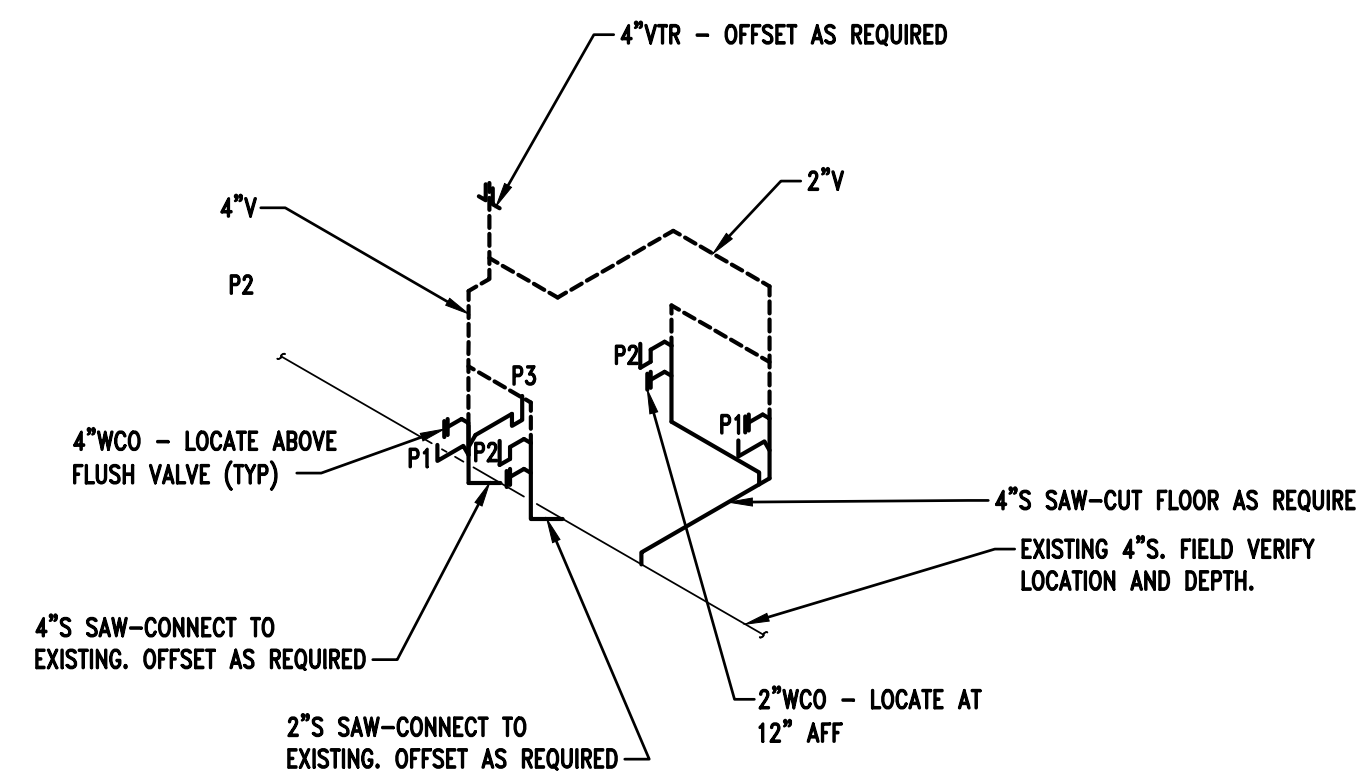
ROUND DUCTWORK: GALVANIZED STEEL LOCK FORMING QUALITY, MINIMUM 0.028 INCH THICK CONTINUOUS SPIRAL SEAM. FABRICATE ROUND DUCT ELBOWS OF MINIMUM FIVE (5) PIECE CONSTRUCTION.

GALVANIZED DUCTWORK: GALVANIZED STEEL LOCK FORMING QUALITY HAVING ZINC COATING OF 1.25 OUNCES PER SQUARE FOOT FOR EACH SIDE PER ASTM A653. ALL DUCTWORK SHALL BE GALVANIZED UNLESS OTHERWISE NOTED. ALL DUCTWORK EXPOSED TO WEATHER SHALL BE SEALED (JOINTS AND SEAMS) WITH SILICONE SEALANT. ALL DUCTWORK JOINTS, LONGITUDINAL AND TRANSVERSE SEAMS AND CONNECTIONS IN DUCTWORK MUST BE SECURELY SEALED USING WELDMENTS; MECHANICAL FASTENERS WITH SEALS, GASKETS, OR MASTICS; MESH AND MASTIC SEALING SYSTEMS; OR TAPES. TAPES AND MASTICS MUST BE LISTED AND LABELED IN ACCORDANCE WITH UL 181A OR UL 181B.

TESTING AND BALANCING: AIR SYSTEMS SHALL BE BALANCED BY CERTIFIED TESTING & BALANCING CONTRACTOR IN ACCORDANCE WITH AABC STANDARDS AND METHODS. SUBMIT AIR BALANCE REPORT ON AABC STANDARD FORMS FOR APPROVAL.

PLUMBING FIXTURE SCHEDULE												
MARK	FIXTURE	DESCRIPTION	WASTE			WATER			CONNECTION SIZES (INCHES) **			
			QTY	FU	TOTAL	FU	TOTAL	WASTE	VENT	HOT	COLD	
P1	WATER CLOSET (ADA)	KOHLER "HIGHCLIFF" #K-96057, 1.6 GAL./FLUSH MAXIMUM, VITREOUS CHINA, FLOOR MOUNTED, FLUSH VALVE WATER CLOSET W/ADA COMPLIANT HIGH BOWL. PROVIDE SLOAN G2 8111-1.6 BATTERY OPERATED FLUSH VALVE, BEMIS #16555CCT SELF-SUSTAINING CHECK HINGES, OPEN FRONT SEAT	2	4	8	5	10	4	2	-	1 1/4	
P2	LAVATORY	KOHLER "KINGSTON" #K-2005, VIT. CHINA WALL HUNG LAVATORY. PROVIDE SLOAN SF-2350 BATTERY OPERATED FAUCET (0.5 GPM, 0.25 GALS. MAX PER CYCLE) & GRID DRAIN, CAST BRASS "P" TRAP MCGUIRE CHROME PLATED LOOSE KEY, QUARTER TURN ANGLE STOPS & SUPPLIES, FLOOR MOUNTED FIXTURE CARRIER & WASTE & STOP INSULATION EQUAL TO TRUEBRO #102. PROVIDE ASSE 1070 CERTIFIED THERMOSTATIC MIXING VALVE EQUAL OF WATTS MODEL # LFUSG-8 W/ 3/8" FITTINGS.	2	1	2	1	2	2	1 1/2	1/2	1/2	
P3	SHOWER TRIM	STAMONS MODEL JC-96-5003-830-L-V THERMOSTATIC PRESSURE BALANCING MIXING VALVE, HAND HELD SPRAY UNIT AND FIXED SHOWER HEAD, 60" LONG HOSE, INTEGRAL STOPS/VACUUM BREAKER, AND 30"SLIDE BAR FOR HAND HELD SPRAY UNIT. PROVIDE 2" SHOWER DRAIN WITH STAINLESS STEEL GRID DRAIN SIMILAR TO KOHLER K-22676	1	-	-	2	2	-	-	1/2	1/2	
TOTAL FIXTURE UNITS					10		14					

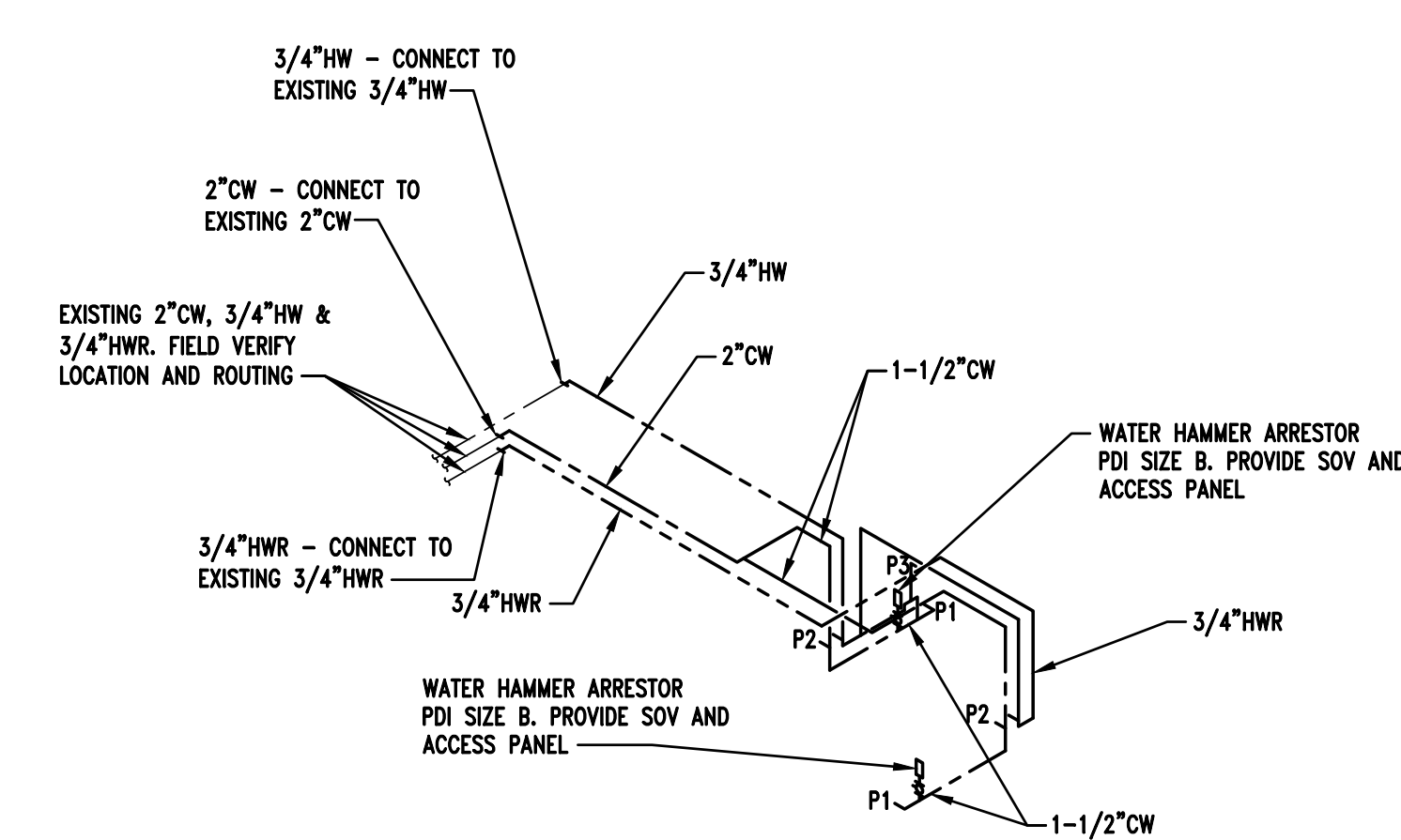
\* PER 2018 IPC SECTION 604.1, THE WATER PIPE SIZE TO CONFORM TO AN ACCEPTED ENGINEERING PRACTICE.  
 PIPE SIZE IS BASED ON USING IAMPO RECOMMENDATIONS THAT IS AN ACCEPTED ENGINEERING PRACTICE AND IS BASED ON LOW FLOW FIXTURES.  
 \*\* FIXTURE SERVICE PIPE SIZE SHALL BE THE SIZE INDICATED WITH REDUCER (IF REQ'D) AS CLOSE TO FIXTURE CONNECTION AS POSSIBLE



**SOIL & VENT RISER DIAGRAM**

NO SCALE

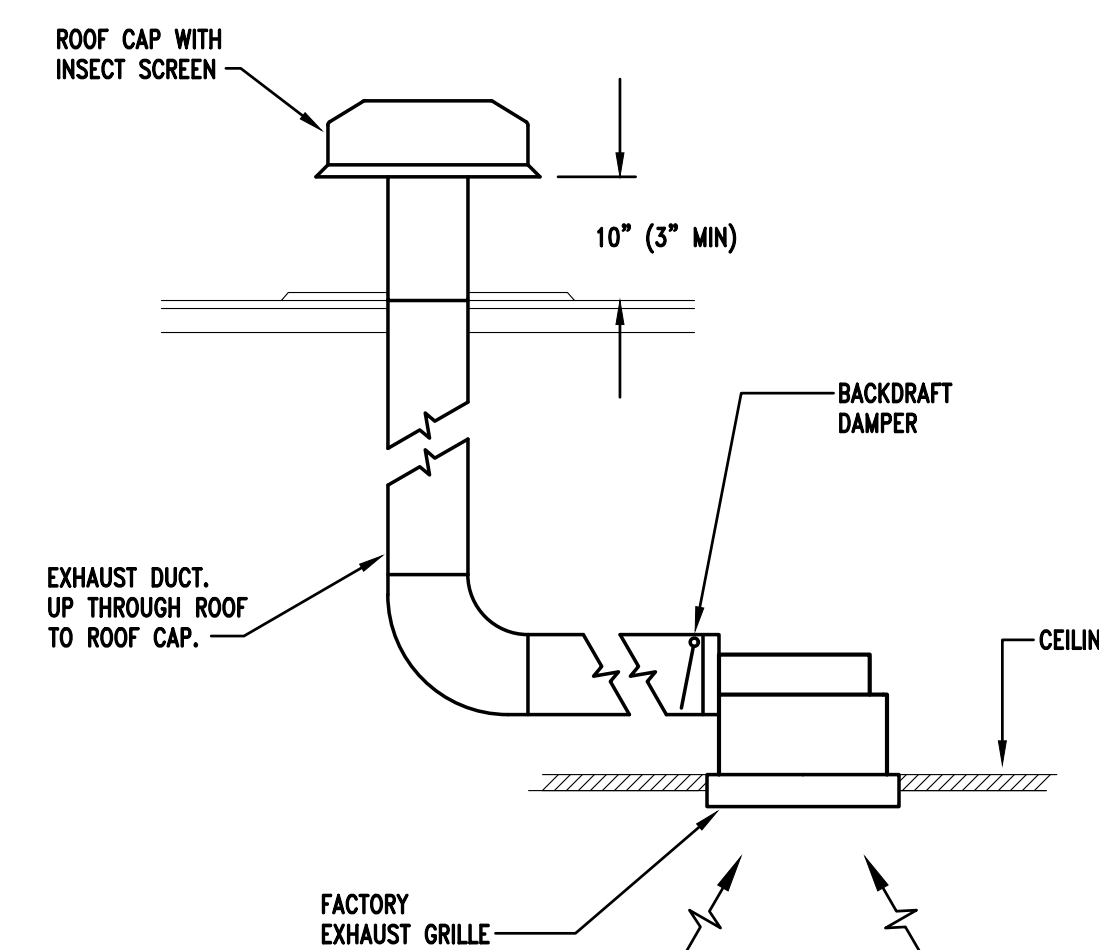
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**CW & HW RISER DIAGRAM**

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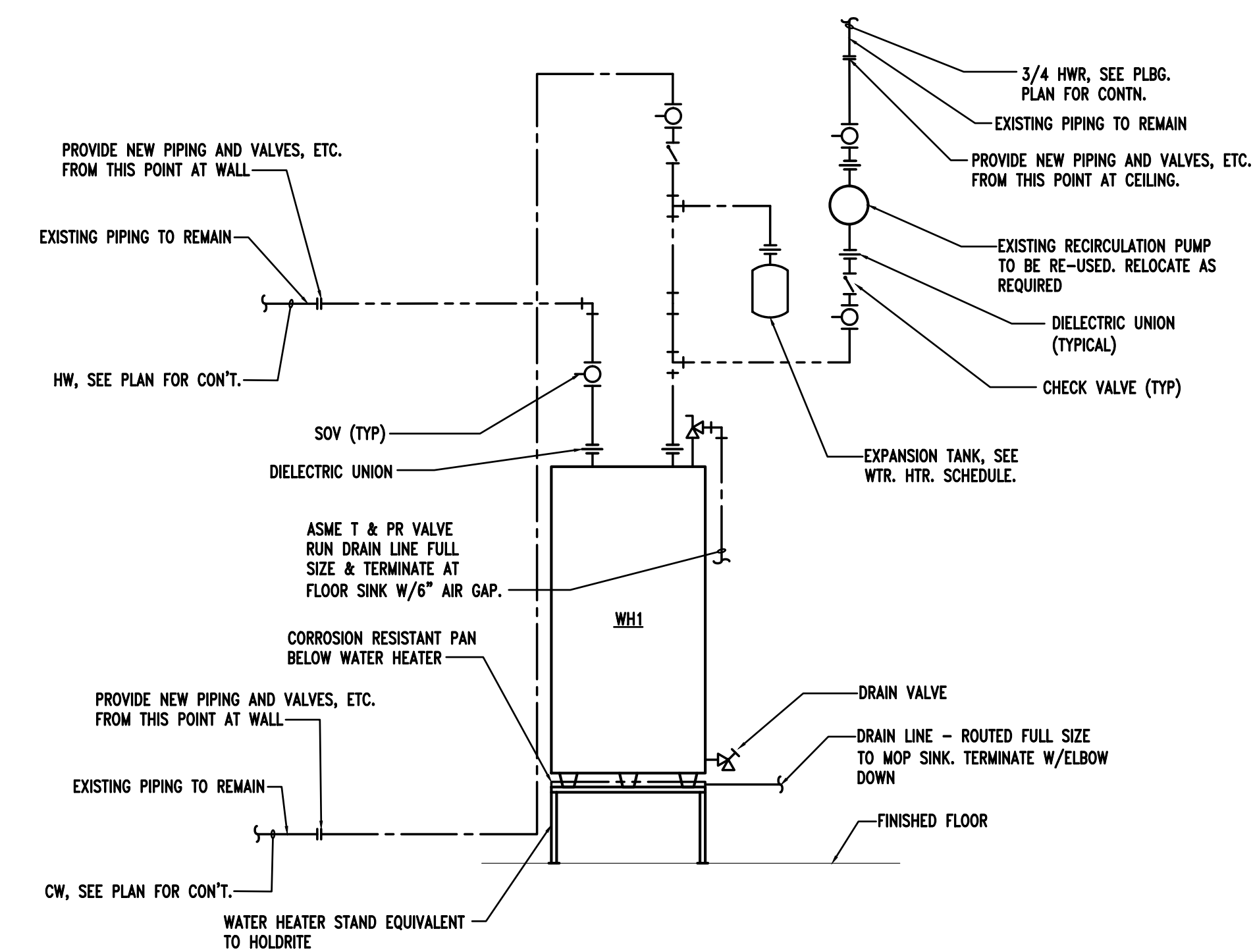
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MP2.1



**CEILING MOUNTED EXHAUST FAN**

NO SCALE

3  
MP2.1



**WATER HEATER DETAIL**

NO SCALE

4  
MP2.1

WATER HEATER SCHEDULE	
MARK	WH-1
ENTERING WATER TEMPERATURE (DEG. F)	60
LEAVING WATER TEMPERATURE (DEG. F)	120
RECOVERY RATE (GPH)	10
STORAGE VOLUME (GAL.)	40
ELECTRICAL INPUT (KW)	1.5
VOLTS/PHASE/HZ	120/1/60
REFERENCE	BRADFORD WHITE LE340S3-3
EXPANSION TANK	AMTROL
REFERENCE	ST-12
RELIEF VALVE SETTING (PSIG)	150
NOTES	1 THRU 3

1. WATER HEATER SHALL BE UL LISTED.
2. RECOVERY RATE SCHEDULED IS FOR SEA LEVEL.
3. HEATING ELEMENTS ARE NON-SIMULTANEOUS.





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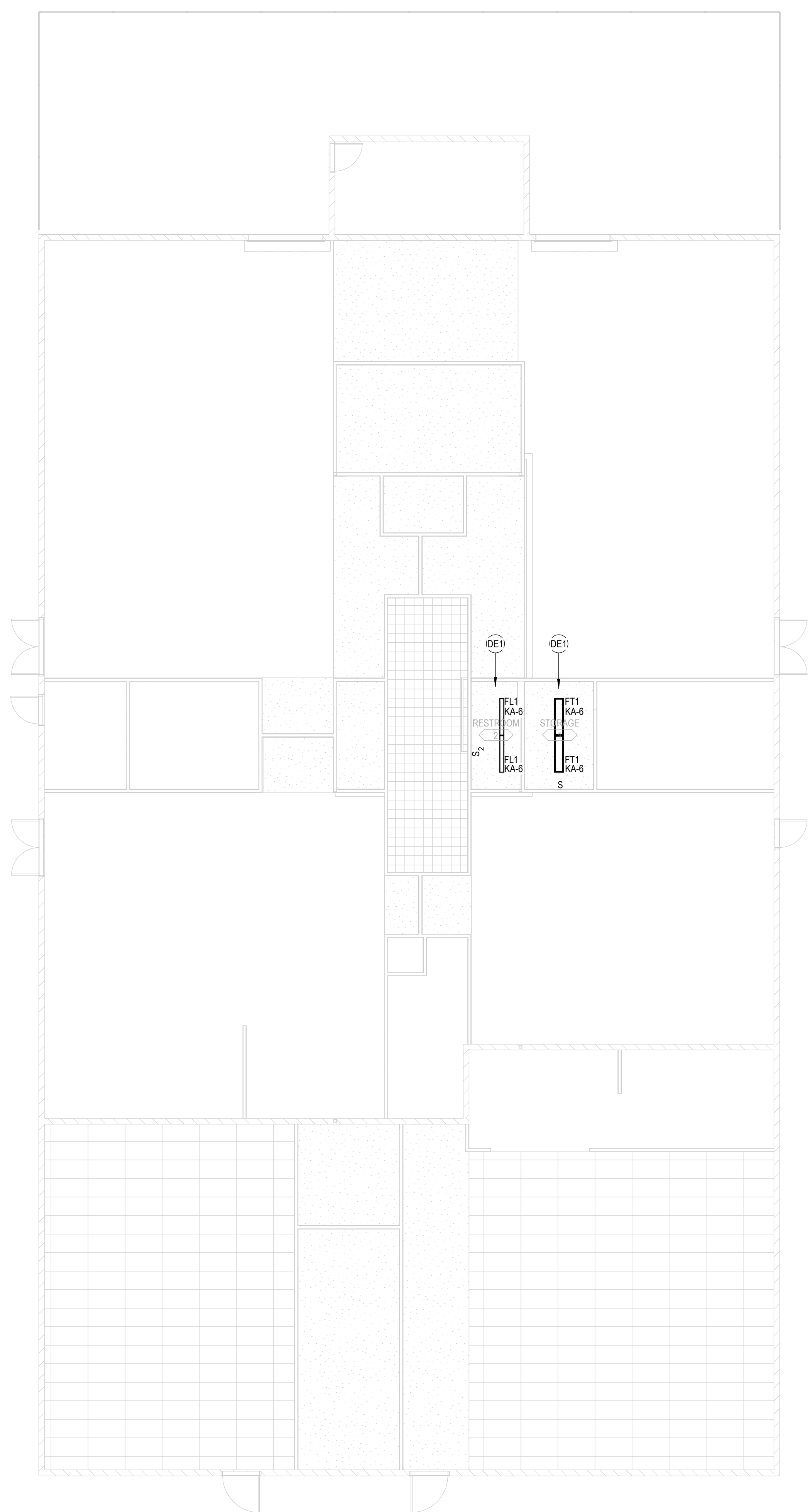
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C

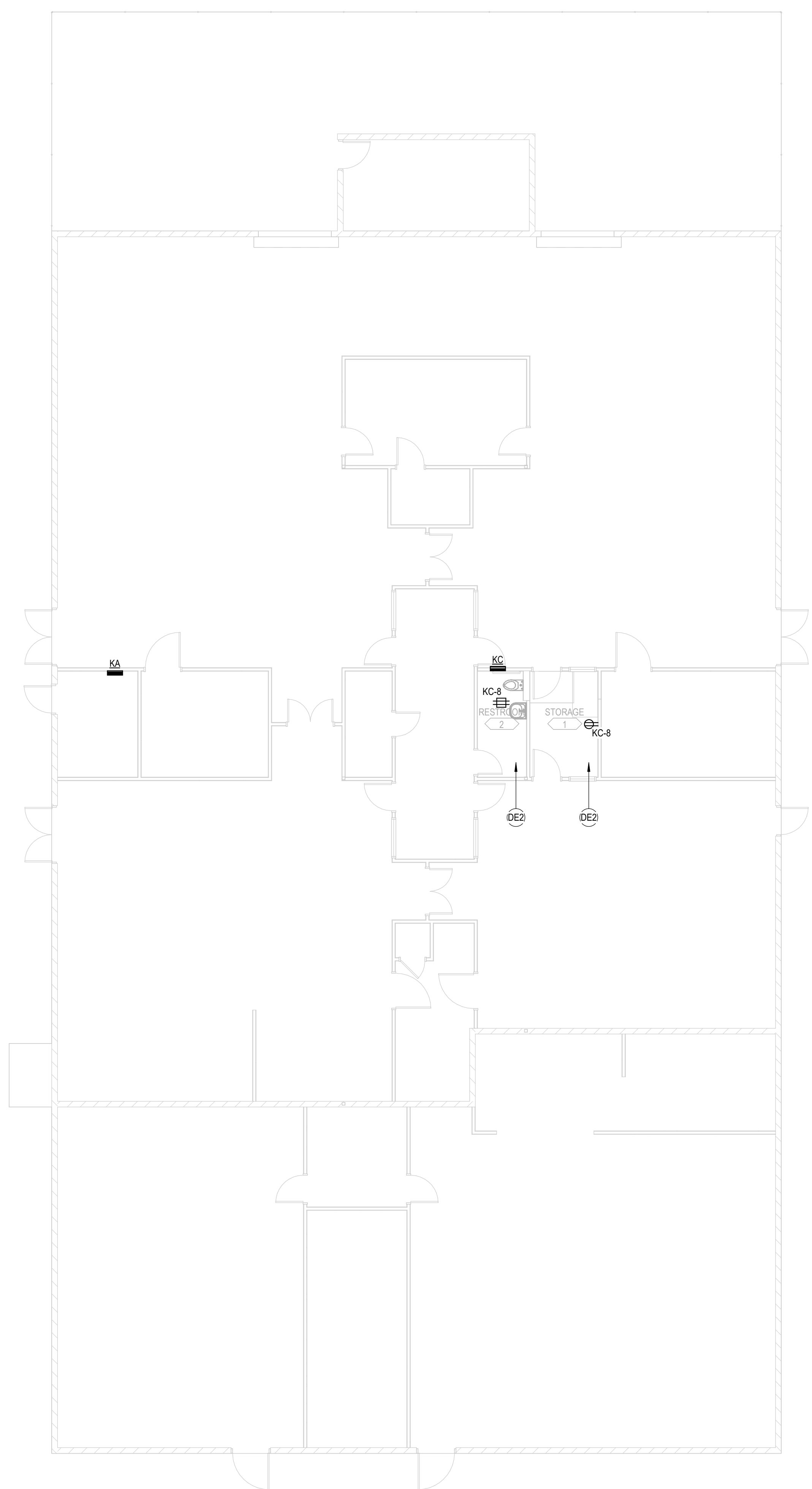
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E

F



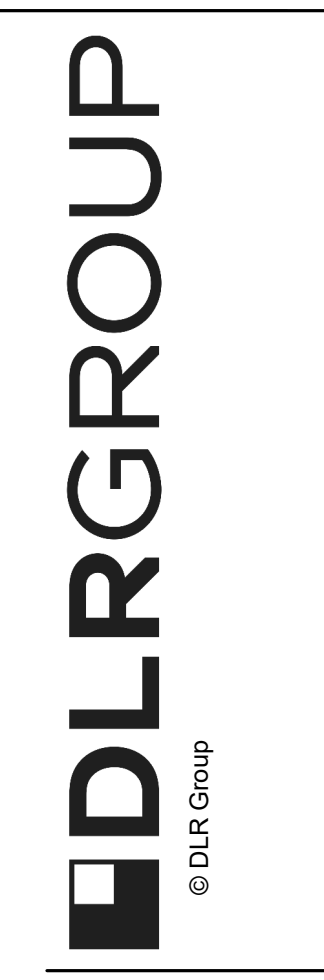
 **DEMOLITION LIGHTING PLAN**  
SCALE: 1/8" = 1'-0"



 **DEMOLITION POWER PLAN**  
SCALE: 1/8" = 1'-0"

**SHEET NOTES**

- DE1 REMOVE ALL LIGHTING AND RACEWAY IN THIS SPACE BACK TO SOURCE. MAINTAIN EXISTING 277V LIGHTING CIRCUIT FOR REUSE.
- DE2 REMOVE ALL POWER AND RACEWAY IN THIS SPACE BACK TO SOURCE MAINTAIN EXISTING 120V POWER CIRCUIT FOR REUSE.



**FLOWING WELLS UNIFIED SCHOOL DISTRICT**  
FLOWING WELLS JUNIOR HIGH BUILDING K RESTROOMS  
4645 N LA CHOLLA BLVD, TUCSON AZ 85705

100%  
CONSTRUCTION  
DOCUMENTS  
3/12/2024  
REVISIONS

30-23107-04  
ELECTRICAL  
DEMOLITION  
PLAN

**ED1.1**

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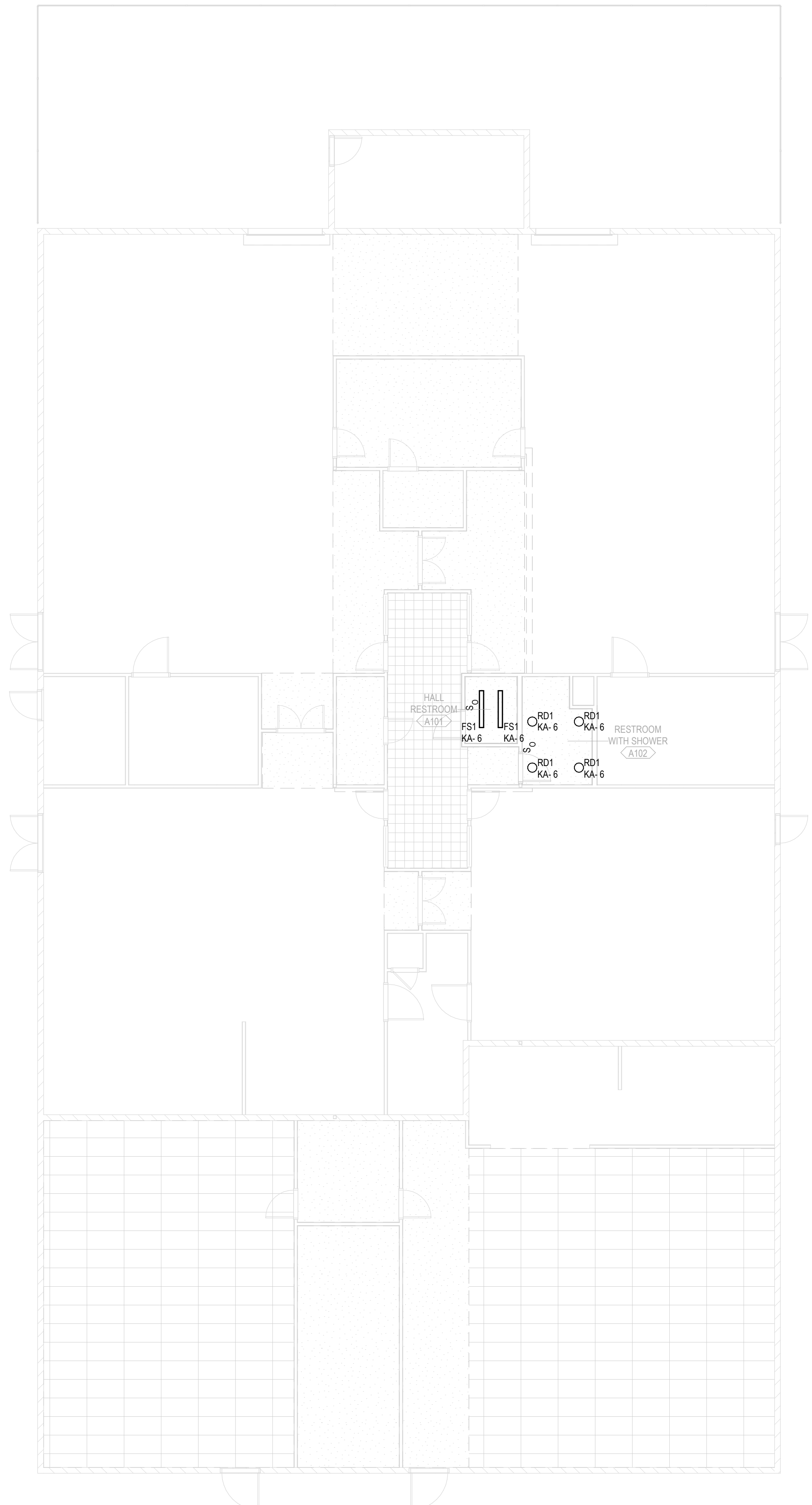
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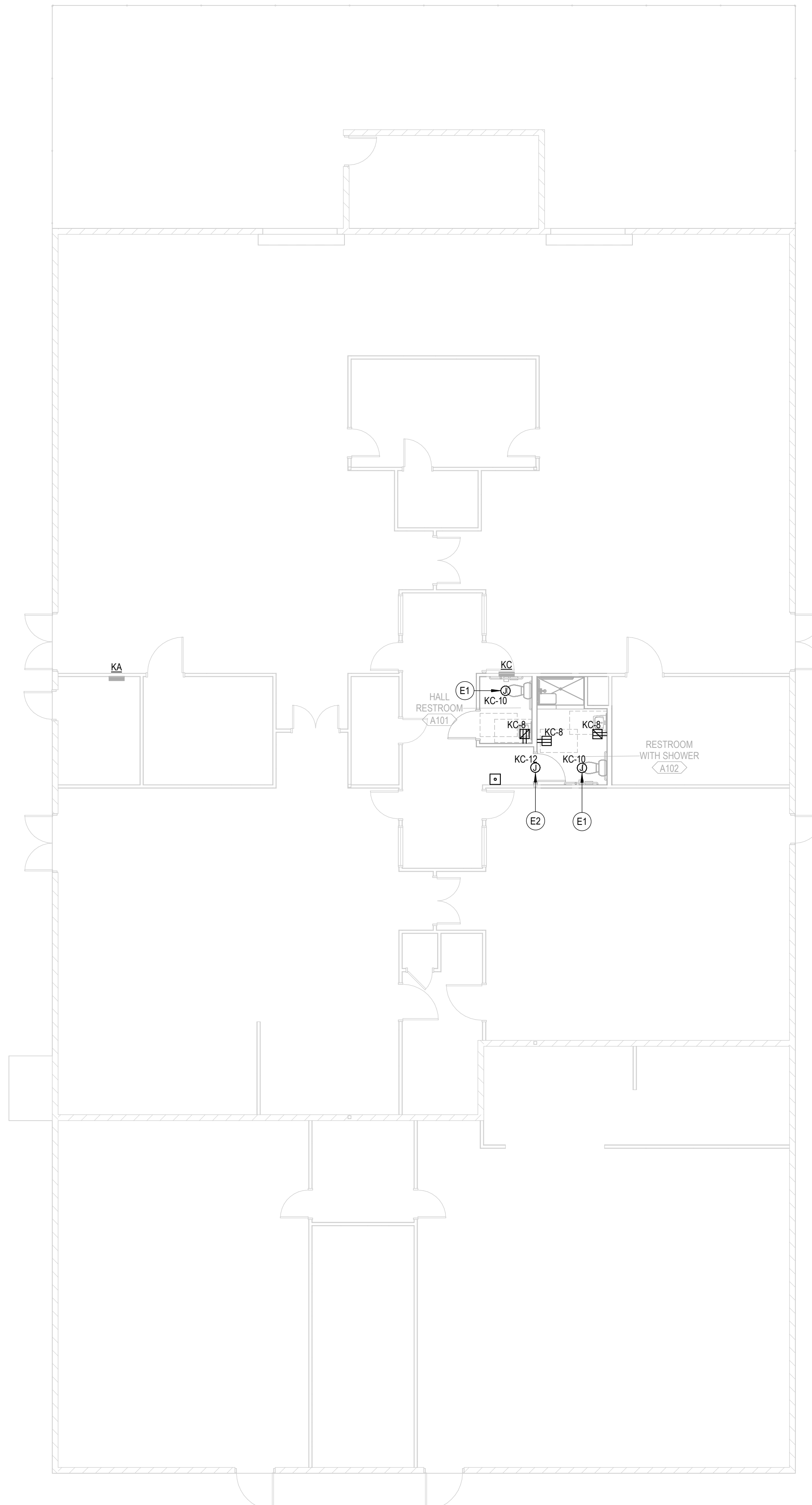
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5

LIGHTING FIXTURE SCHEDULE																
TYPE	CONSTRUCTION			LIGHT SOURCE				ELECTRICAL				PRODUCT			NOTE	
	DESCRIPTION	LENS/LOUVER	MOUNTING	LAMP	LUMENS DOWN	CCT	CRI	BALLAST/DRIVER	VOLT	WATTS (W)	WATTS PER FOOT (W/LF)	EMERGENCY COMPONENT	MFR	MODEL		CATALOG NUMBER
FS1	LED LINEAR SURFACE MOUNTED	FLAT DIFFUSE	SURFACE	LED	3000 lm	3500K	80	0-10V DIMMING, 10%	277 V	32 W	8 W		LITHONIA	CRX LED LINEAR	CLX L48 3000LM SEF RDL MVOLT G210 35K 80CRI WH	
RD1	6-INCH NOMINAL ROUND RECESSED DOWNLIGHT WITH WIDE OPTICS, WET-RATED	OPEN	RECESSED IN ACT CEILING	LED	1500 lm	3500K	80	0-10V DIMMING, 10%	277 V	18 W			LITHONIA	LDN6 STATIC WHITE	LDN6 3515 L06 AR LSS MVOLT G210	



**LIGHTING PLAN**  
SCALE: 1/8" = 1'-0"



**POWER PLAN**  
SCALE: 1/8" = 1'-0"

**SHEET NOTES**  
E1 PROVIDE POWER FOR EXHAUST FAN  
E2 PROVIDE DEDICATED CIRCUIT FOR ADO



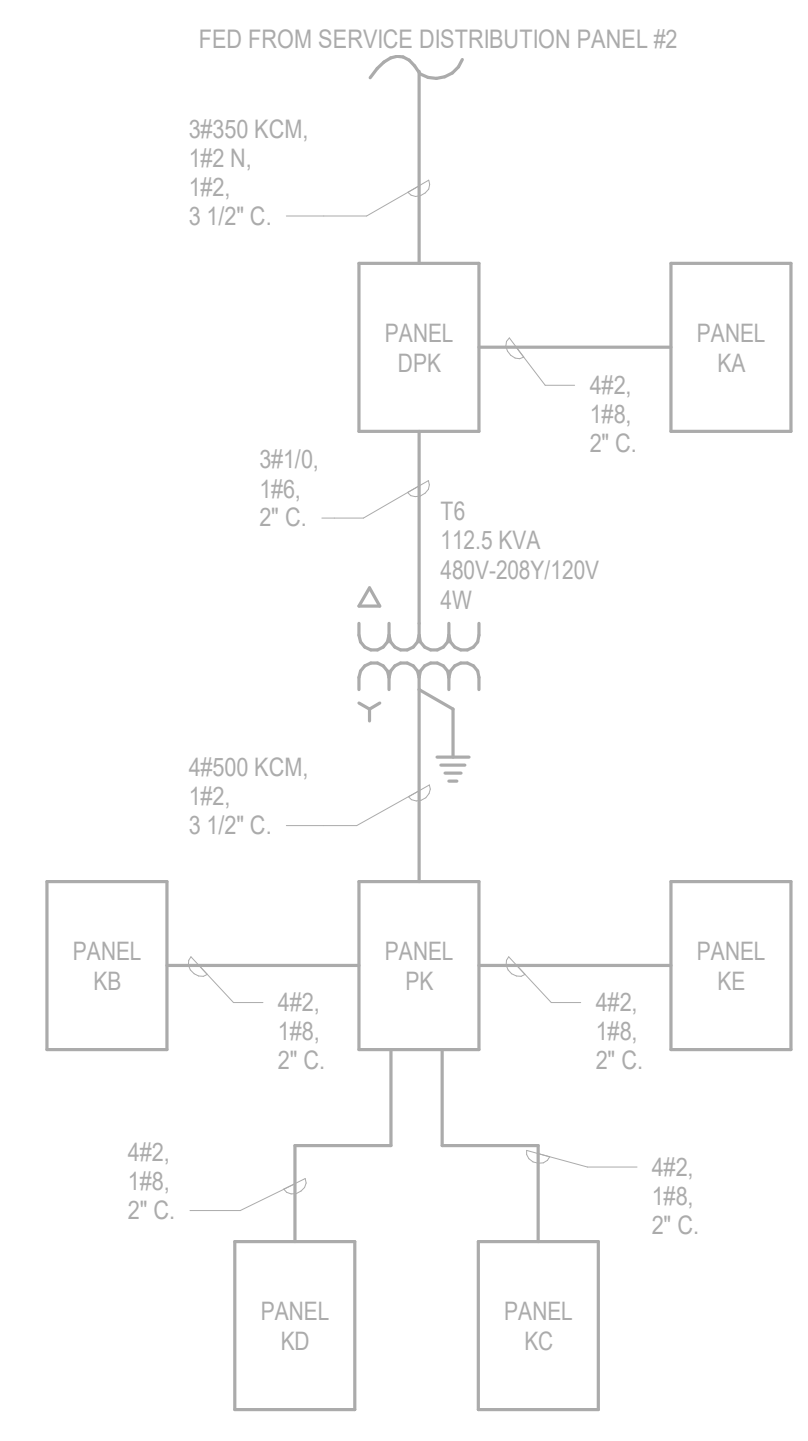
**FLOWING WELLS UNIFIED SCHOOL DISTRICT**  
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4645 N LA CHOLLA BLVD, TUCSON, AZ 85705

100%  
CONSTRUCTION  
DOCUMENTS  
3/12/2024  
REVISIONS

30-23107-04  
ELECTRICAL  
PLAN

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1 ONE-LINE DIAGRAM (FOR REFERENCE ONLY)  
E5.1 NO SCALE

PANEL: KA  
SERVICE: 480Y/277V - 3P - 4W  
PROJECT: FWUSD FLOWINGWELLS JRH-K RESTROOMS  
MAIN BUS: 100 A  
M.L.O.: --  
SCCR: \_\_\_\_\_  
MOUNTING: SURFACE  
NOTE: \_\_\_\_\_  
LOCATION: ROOM 20  
NEMA TYPE: 1

CKT NO.	BREAKER	AMP	P	RM*	LOAD				LOAD				BREAKER	CKT NO.		
					DESCRIPTION	TYPE	KVA	A <sub>φ</sub>	B <sub>φ</sub>	C <sub>φ</sub>	KVA	TYPE			DESCRIPTION	AMP
1	20	1	EX	LIGHTS - SHOP #1 OFFICE WASH	L	3.3	6.288		3.0	L	LIGHTS - COMMUNICATIONS	20	1	EX	2	
3	20	1	EX	LIGHTS - SHOP #1 OPEN STOR	L	3.3	6.898		3.6	L	LIGHTS - CRAFTS	20	1	EX	4	
5	20	1	EX	LIGHTS - SHOP #2	L	4.0		6.176	2.1	L	LIGHTS - RR A101, A102	20	1	NL	6	
7	20	1	EX	LIGHTS - METALS STOR K-9, 16, 20	L	3.0	2.991				SPARE	20	1	EX	8	
9	20	1	EX	LIGHTS - METALS PROJ. STOR.	L	2.1		3.35		1.2	L	SITE LIGHTING	20	1	EX	10
11	20	1	EX	LIGHTS - ART OFFICE STOR.	L	3.6			3.601		SPARE	20	1	EX	12	
13	20	1	EX	SPARE							SPARE	20	1	EX	14	
15	20	1	EX	SPARE							SPARE	20	1	EX	16	
17	20	1	EX	SPARE							SPARE	20	1	EX	18	
19	15	3	EX	ROTOCLONE SHAKER - 1/2HP	D	0.3	0.277				SPARE	20	1	EX	20	
21	15	3	EX		D	0.3	0.277				SPARE	20	1	EX	22	
23	15	3	EX		D	0.3	0.277				SPARE	20	1	EX	24	
25	20	3	EX	ROTOCLONE BLOWER - 7 1/2HP	D	3.0	4.378			1.3	D	AIR COMPRESSOR	15	3	EX	26
27	20	3	EX		D	3.0	4.378			1.3	D		15	3	EX	28
29	20	3	EX		D	3.0		4.378		1.3	D		15	3	EX	30
					CONNECTED LOAD (KVA):			13.9	14.9	14.4						

\* BREAKER REMARKS:  
S=SHUNT TRIP, H=HACR, G=GFCI, L= CB Lock,  
T=TIME CLK, S=SWITCH CTRL, C=CONTACTOR CTRL,  
N=NEW BREAKER (INSTALLED IN EXISTING PANEL),  
NL=NEW LOAD ON EXISTING BREAKER, EX=EXISTING LOAD ON EXISTING BREAKER, RV=EXISTING CIRCUIT MODIFIED ON EXISTING BREAKER.

LOAD TYPE	KVA CONN.	DEMAND FACTOR	KVA DEMAND
(D) DEDICATED	14.0	1	14.0
(H) HVAC		1	
(M) MISC.		1	
(L) LIGHTING	29.3	1.25	36.6
(C) CONT.		1.25	
(K) KITCHEN		1	
(R) RECEPT.		NEC	

TOTAL CONNECTED (KVA): 43.3  
TOTAL DEMAND (KVA): 50.6  
TOTAL DEMAND AMPS (A): 60.8  
HIGHEST PHASE CONNECTED (A): 53.8

NOTE:  
FOR NEW PANELS, ALL BREAKERS ARE NEW, UON.  
FOR EXISTING PANELS, ALL BREAKERS ARE EXISTING, UON.

LOAD CALC - PANEL KA  
REMOVED 192VA FROM PANEL KA  
ADDED 132VA TO PANEL KA  
NET REDUCTION OF LOAD = 58VA

PANEL: KC  
SERVICE: 208Y/120V - 3P - 4W  
PROJECT: FWUSD FLOWINGWELLS JRH-K RESTROOMS  
MAIN BUS: 100 A  
M.L.O.: --  
SCCR: \_\_\_\_\_  
MOUNTING: FLUSH  
NOTE: \_\_\_\_\_  
LOCATION: SHOP #2  
NEMA TYPE: 1

CKT NO.	BREAKER	AMP	P	RM*	LOAD				LOAD				BREAKER	CKT NO.		
					DESCRIPTION	TYPE	KVA	A <sub>φ</sub>	B <sub>φ</sub>	C <sub>φ</sub>	KVA	TYPE			DESCRIPTION	AMP
1	20	1	EX	REC - RECEPT & RDF (4)	R	1.2	2.378		1.2	R	REC - LATHE (1)	20	1	EX	2	
3	20	1	EX	GRINDER (1)	D	1.2		2.352		1.2	R	REC - LATHE (1)	20	1	EX	4
5	20	1	EX	SCROLL SAW (1)	D	1.2			2.352	1.2	R	REC - SAW (1)	20	1	EX	6
7	20	1	EX	SCROLL SAW (1)	D	1.2	1.716			0.5	R	REC - RR A101 & A102	20	1	NL	8
9	20	1	EX	BAND SAW (1)	D	1.2		1.536		0.4	R	REC - E.F. A101 & A102	20	1	NL	10
11	20	1	EX	REC - GRINDER (1)	R	1.2			1.676	0.5	D	JUNCTION - ADD DOOR A102	20	1	NL	12
13	20	1	EX	SPARE							SPARE	20	1	EX	14	
15	20	1	EX	SPARE							SPARE	20	1	EX	16	
17	20	1	EX	SPARE							SPARE	20	1	EX	18	
19	20	1	EX	SPARE							SPARE	20	1	EX	20	
21	20	1	EX	SPARE							SPARE	20	1	EX	22	
23	20	1	EX	SPARE							SPARE	20	1	EX	24	
25	20	1	EX	SPARE							SPARE	20	1	EX	26	
27	20	1	EX	SPARE							SPARE	20	1	EX	28	
29	20	1	EX	SPARE							SPARE	20	1	EX	30	
					CONNECTED LOAD (KVA):			4.1	3.9	4.0						

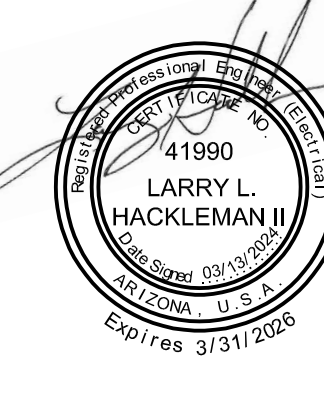
\* BREAKER REMARKS:  
S=SHUNT TRIP, H=HACR, G=GFCI, L= CB Lock,  
T=TIME CLK, S=SWITCH CTRL, C=CONTACTOR CTRL,  
N=NEW BREAKER (INSTALLED IN EXISTING PANEL),  
NL=NEW LOAD ON EXISTING BREAKER, EX=EXISTING LOAD ON EXISTING BREAKER, RV=EXISTING CIRCUIT MODIFIED ON EXISTING BREAKER.

LOAD TYPE	KVA CONN.	DEMAND FACTOR	KVA DEMAND
(D) DEDICATED	5.2	1	5.2
(H) HVAC		1	
(M) MISC.		1	
(L) LIGHTING		1.25	
(C) CONT.		1.25	
(K) KITCHEN		1	
(R) RECEPT.	6.8	NEC	6.8

TOTAL CONNECTED (KVA): 12.0  
TOTAL DEMAND (KVA): 12.0  
TOTAL DEMAND AMPS (A): 33.3  
HIGHEST PHASE CONNECTED (A): 34.1

NOTE:  
FOR NEW PANELS, ALL BREAKERS ARE NEW, UON.  
FOR EXISTING PANELS, ALL BREAKERS ARE EXISTING, UON.

LOAD CALC - PANEL KC  
REMOVED 36VA FROM PANEL KC  
ADDED 140VA TO PANEL KC  
NET ADD OF LOAD = 104VA



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**Flowing Wells Unified School District  
Flowing Wells Junior High Building K Restrooms  
Tucson, Arizona 85705**

**Project Manual**  
100% Construction Documents  
**DLR Group Project No. 30-23107-04**

March 12, 2024

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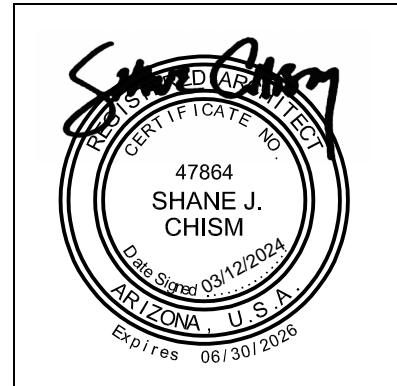


DOCUMENT 000107 - SEALS PAGE

1.1 DESIGN PROFESSIONALS OF RECORD

A. Architect:

1. Name: Shane J. Chism.
2. License No.: 47864.
3. Responsible for Divisions 01-14 Sections except where indicated as prepared by other design professionals of record.



END OF DOCUMENT 000107

## **VOLUME 1**

### **DIVISION 00 – PROCUREMENT AND CONTRACTING DOCUMENTS**

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000110	TABLE OF CONTENTS
003119	EXISTING CONDITION INFORMATION
003126	EXISTING HAZARDOUS MATERIAL INFORMATION

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011000	SUMMARY
012500	SUBSTITUTION PROCEDURES
012500.01	SUBSTITUTION REQUEST FORM
012600	CONTRACT MODIFICATION PROCEDURES
012900	PAYMENT PROCEDURES
013100	PROJECT MANAGEMENT AND COORDINATION
013200	CONSTRUCTION PROGRESS DOCUMENTATION
013300	SUBMITTAL PROCEDURES
013333	ELECTRONIC DRAWINGS
013333.01	ELECTRONIC FILE TRANSFER AGREEMENT
013516	ALTERATION PROJECT PROCEDURES
014000	QUALITY REQUIREMENTS
015000	TEMPORARY FACILITIES AND CONTROLS
016000	PRODUCT REQUIREMENTS
017300	EXECUTION
017700	CLOSEOUT PROCEDURES
017823	OPERATION AND MAINTENANCE DATA
017839	PROJECT RECORD DOCUMENTS
	SAMPLE AIA DOCUMENTS
G701	CHANGE ORDER
G702	APPLICATION AND CERTIFICATE FOR PAYMENT
G703	CONTINUATION SHEET
G706	CONTRACTOR’S AFFADAVIT OF PAYMENT OF DEBTS AND CLAIMS
G706A	CONTRACTOR’S AFFADAVIT OF RELEASE OF LIENS
G710	ARCHITECT’S SUPPLEMENTAL INSTRUCTIONS
G714	CONSTRUCTION CHANGE DIRECTIVE

### **DIVISION 02 – EXISTING CONDITIONS**

024119	SELECTIVE DEMOLITION
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**DIVISION 03 – CONCRETE**

032000 CONCRETE REINFORCING  
033000 CAST-IN-PLACE CONCRETE  
033543 POLISHED CONCRETE FINISHING

**DIVISION 04 – MASONRY**

N/A

**DIVISION 05 – METALS**

N/A

**DIVISION 06 – WOOD, PLASTICS, AND COMPOSITES**

061000 ROUGH CARPENTRY  
066400 PLASTIC PANELING

**DIVISION 07 – THERMAL AND MOISTURE PROTECTION**

079200 JOINT SEALANTS

**DIVISION 08 – OPENINGS**

081213 HOLLOW METAL FRAMES  
081416 FLUSH WOOD DOORS  
087100 DOOR HARDWARE

**DIVISION 09 – FINISHES**

092900 GYPSUM BOARD  
096513 RESILIENT BASE AND ACCESSORIES  
099124 INTERIOR PAINTING (MPI STANDARDS)

**DIVISION 10 – SPECIALTIES**

102800 TOILET, BATH, AND LAUNDRY ACCESSORIES

**DIVISION 11 – EQUIPMENT**

N/A

**DIVISION 12 – FURNISHINGS**

N/A

**DIVISION 13 – SPECIAL CONSTRUCTION**

N/A

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FLOWING WELLS JUNIOR HIGH BUILDING K RESTROOMS  
FLOWING WELLS UNIFIED SCHOOL DISTRICT  
TUCSON, ARIZONA

30-23107-04  
MARCH 12, 2024  
100% CONSTRUCTION DOCUMENTS

**DIVISION 14 – CONVEYING EQUIPMENT**

N/A

DOCUMENT 003119 - EXISTING CONDITION INFORMATION

1.1 EXISTING CONDITION INFORMATION

- A. This Document with its referenced attachments is part of the Procurement and Contracting Requirements for Project. They provide Owner's information for Bidders' convenience and are intended to supplement rather than serve in lieu of the Bidders' own investigations. They are made available for Bidders' convenience and information, but are not a warranty of existing conditions. This Document and its attachments are not part of the Contract Documents.
- B. Existing drawings that include information on existing conditions including previous construction at Project site are available for viewing at the office of Owner.

END OF DOCUMENT 003119

DOCUMENT 003126 - EXISTING HAZARDOUS MATERIAL INFORMATION

1.1 EXISTING HAZARDOUS MATERIAL INFORMATION

- A. This Document with its referenced attachments is part of the Procurement and Contracting Requirements for Project. They provide Owner's information for Bidders' convenience and are intended to supplement rather than serve in lieu of Bidders' own investigations. They are made available for Bidders' convenience and information, but are not a warranty of existing conditions. This Document and its attachments are not part of the Contract Documents.
- B. An existing asbestos report for Project, prepared by ACT Environmental Incorporated, dated August 21, 2014, is available for viewing as appended to this Document.
- C. Related Requirements:
  - 1. Document 003119 "Existing Condition Information" for information about existing conditions that is made available to bidders.
  - 2. Section 024119 "Selective Demolition" for notification requirements if materials suspected of containing hazardous materials are encountered.

END OF DOCUMENT 003126



Prepared For:

Mr. Michael Medeiros  
Director of Maintenance  
Flowing Wells School District  
2390 West Wetmore  
Tucson, Arizona 85705

Submitted By:

A handwritten signature in black ink, appearing to read 'Kevin S. Martin', is written over a horizontal line.

Kevin S. Martin, PE

ACT Environmental Incorporated  
7592 N. La Cholla Blvd.  
Tucson, Arizona 85741

**ASBESTOS 3 YEAR RE-INSPECTION  
AUGUST 2014  
FLOWING WELLS SCHOOL DISTRICT  
JUNIOR HIGH SCHOOL  
AEI 14123**

**Date Submitted:**

August 21, 2014

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2.0 Introduction .....	2
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5.0 Physical Assessments .....	2

*List of Appendices:*

Appendix A- Accreditation Certificates for AEI personnel



## 1.0 EXECUTIVE SUMMARY AND ASBESTOS-CONTAINING BUILDING MATERIAL INVENTORY

ACT Environmental, Incorporated (AEI) performed an asbestos re-inspection of Flowing Wells Junior High School located at 4545 North La Cholla, Tucson, Arizona.

The facilities were inspected on August 7, 2014. The re-inspection was performed to comply with EPA's Asbestos Emergency Response Act (AHERA) required three year re-inspection of school facilities. All Asbestos Containing Building Material (ACBM) identified in the initial inspection report was assessed. The initial inspection was performed in 1988 by Tabershaw & Associates, Inc. A three year inspection was completed by AEI in 2005, 2008 and 2011.

The following is a general inventory of asbestos-containing materials identified at the school.

### Floor Tile Adhesive

Location: Women's First Aid Room

This material is classified as non-friable miscellaneous material, in good condition.

This material could not be visually/physically inspected. Until evidence of removal is presented, it is assumed to be present

The recommended response action is to continue O & M activities and reduce disturbance. Remove prior to renovation or demolition.

## 2.0 INTRODUCTION

This asbestos survey was conducted at the request of Mr. Michael Medeiros, Director of Maintenance, Flowing Wells School District. The intent of the survey was to complete an AHERA required three year re-inspection of facilities.

## 3.0 SCOPE OF WORK

The purpose of this project was to re-inspect asbestos-containing building materials identified in the initial inspection report performed in 1988, or in subsequent re-inspection reports.

The inspection was performed by AHERA-accredited inspectors.

## 4.0 LIMITATIONS

The randomly selected areas which were originally inspected cannot be relied upon as an absolute assurance that suspect asbestos-containing materials are not present. If tile is found under carpeting or if concealed materials such as duct seam tape, Transite panels or Transite pipes are found at a later date, they should be assumed to contain asbestos until further testing proves otherwise. Likewise, if fire doors or fire dampers are found, they should be assumed to contain asbestos until further testing proves otherwise.

## 5.0 PHYSICAL ASSESSMENTS

AHERA requires physical assessments of all friable known and assumed asbestos-containing building materials. No friable ACBM was identified. However, the following information is provided in order to document the location and general condition of the identified ACBM.

### 5.1 Non-Friable ACBM

Material Type: Floor Tile Adhesive

Location: Women's First Aid Room

Assessment: This material is classified as non-friable miscellaneous material, in good condition.

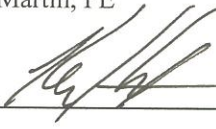
Comments: This material could not be visually/physically inspected and is assumed to be present below new floor tile.

The recommended response action is to continue O & M activities and reduce disturbance. Remove prior to renovation or demolition.



The re-inspection was performed by Kevin Martin, an AHERA-accredited Building Inspector. This report was reviewed by William Martin, CIH, an AHERA-accredited Building Inspector and Management Planner. Copies of accreditation certificates are included in Appendix A.

Kevin S. Martin, PE

Signature  Date 8/21/14

William F. Martin, CIH

Signature  Date 8/21/14



AHERA Three Year Re-inspection  
Junior High School, Tucson, Arizona, AEI 14123

ENVIRONMENTAL INCORPORATED

7592 N. La Cholla Blvd. • Tucson, Arizona 85741 • [www.actenv.com](http://www.actenv.com) • (520) 791-9029 fax (520) 791-9062

**APPENDIX A**

**ACCREDITATION CERTIFICATES FOR AEI PERSONNEL**

# Certificate of Training

Kevin Martin

Has completed the AHERA Course:  
4 Hour Building Inspector Refresher on  
November 19, 2013

Cal-OSHA Course Approval Number: CA-038-06

As approved by California Division of Occupational Safety and Health and AHERA under TSCA Title II.

November 19, 2014

Expiration Date

Steven J Travers  
Training Director

Steven Travers  
Training Director

Allstate Services  
2279 Eagle Glen Pkwy, Suite 112-206  
Corona, California 92883  
(951) 245-3700

AA3582

Digitally signed by Steven J Travers  
DN: cn=Steven J Travers, o=Allstate Services, ou=Allstate Services, email=stj@allstate.com, c=US  
Date: 2013.12.01 12:51:48Z

## SECTION 011000 - SUMMARY

### PART 1 - GENERAL

#### 1.1 SUMMARY

##### A. Section Includes:

1. Project information.
2. Work covered by Contract Documents.
3. Contractor's use of site and premises.
4. Coordination with occupants.
5. Work restrictions.
6. Specification and Drawing conventions.

#### 1.2 PROJECT INFORMATION

##### A. Project Identification: Flowing Wells Junior High Building K Restrooms.

1. Project Location: 4545 N. La Cholla Blvd., Tucson, Arizona, 85705.

##### B. Owner: Flowing Wells Unified School District, 1556 W. Prince Road, Tucson, Arizona, 85705.

1. Owner's Representative: Tony Young, (520) 850-6415, [anthony.young@fwusd.org](mailto:anthony.young@fwusd.org).

##### C. Architect: DLR Group, 177 North Church Avenue, Suite 755, Tucson, Arizona 85701.

1. Architect's Representative: Shane Chism, (520) 497-2817, [schism@dlrgroup.com](mailto:schism@dlrgroup.com).

#### 1.3 WORK COVERED BY CONTRACT DOCUMENTS

##### A. The Work of Project is defined by the Contract Documents and consists of the following:

1. Selective demolition, materials, labor, transportation, security, temporary facilities, and other items identified in, or reasonably inferable from the Construction Drawings and Project Manual for the following:
  - a. Remodel of the Flowing Wells Junior High Building K Restrooms. Materials included in the new construction will be concrete, rough carpentry, plastic paneling, joint sealants, non-structural metal framing, gypsum board, painting, plumbing, HVAC, electrical, and lighting, and other Work indicated in the Contract Documents. The total square footage of the renovation is estimated at 200 square feet.

## SUMMARY

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- B. This work may be conducted during school session and as such the General Contractor shall make provisions for separating, with fencing and similar non-traversable barriers, the functioning school facilities including interior corridors, classrooms, exterior walkways and outdoor areas from all construction activities and areas, including but not limited to outdoor equipment, material storage, contractor parking, staging areas and equipment access routes.
- C. Type of Contract:
  - 1. Project will be constructed under a single prime contract.

#### 1.4 CONTRACTOR'S USE OF SITE AND PREMISES

- A. Restricted Use of Site: Contractor shall have limited use of Project site for construction operations as indicated on Drawings by the Contract limits and as indicated by requirements of this Section.
- B. The Project site may be used by staff and students throughout the project and improvements may need be coordinated with the campus schedule.
- C. Limits on Use of Site: Limit use of Project site to areas within the Contract limits designated by Owner. Do not disturb portions of Project site beyond areas in which the Work is indicated.
  - 1. Driveways, Walkways, and Entrances: Keep driveways and entrances serving premises clear and available to Owner, Owner's employees, and emergency vehicles at all times. Do not use these areas for parking or for storage of materials.
- D. Condition of Existing Building: Maintain portions of existing building affected by construction operations in a weathertight condition throughout construction period. Repair damage caused by construction operations.
- E. Condition of Existing Grounds: Maintain portions of existing grounds, landscaping, and hardscaping affected by construction operations throughout construction period. Repair damage caused by construction operations.

#### 1.5 COORDINATION WITH OCCUPANTS

- A. Full Owner Occupancy: Owner will occupy site and adjacent building(s) during entire construction period. Cooperate with Owner during construction operations to minimize conflicts and facilitate Owner usage. Perform the Work so as not to interfere with Owner's day-to-day operations. Maintain existing exits unless otherwise indicated.
- B. Owner Limited Occupancy of Completed Areas of Construction: Owner reserves the right to occupy and to place and install equipment in completed portions of the Work, prior to Substantial Completion of the Work, provided such occupancy does not interfere with completion of the Work. Such placement of equipment and limited occupancy shall not constitute acceptance of the total Work.

## 1.6 WORK RESTRICTIONS

- A. Comply with restrictions on construction operations.
  - 1. Comply with limitations on use of public streets and with other requirements of authorities having jurisdiction.
- B. On-Site Work Hours: No limits to work in the existing building, unless otherwise indicated.
- C. Existing Utility Interruptions: Do not interrupt utilities serving facilities occupied by Owner or others unless permitted under the following conditions and then only after providing temporary utility services according to requirements indicated:
  - 1. Notify Owner not less than two days in advance of proposed utility interruptions.
  - 2. Obtain Owner's written permission before proceeding with utility interruptions.
- D. Smoking and Controlled Substance Restrictions: Use of tobacco products including vaping and other controlled substances on Project site is not permitted.
- E. Employee Identification: Provide identification tags for Contractor personnel working on Project site. Require personnel to use identification tags at all times.
- F. Employee Screening: Comply with Owner's requirements for background screening of Contractor personnel working on Project site.
  - 1. Maintain list of approved screened personnel with Owner's representative.
- G. The contractor shall remember and remind its subcontractors that school may be in session during the construction period and proper behavior by all construction personnel is required. This shall include but not be limited to the following:
  - 1. School District campuses maintain a "No Tobacco" policy. This includes all tobacco product types including e-cigarettes.
  - 2. Inappropriate language is not tolerated at any time.
  - 3. Staring at students and staff is considered inappropriate and shall be avoided. School District policy adheres to the "Two Second Rule" which means, no vendors will look at (stare at) a student or staff member for more than two seconds.
  - 4. Use of any school facilities including toilets, break areas, phones, computers, copiers / printers, office or classrooms, etcetera are not allowed at any time.
  - 5. Contractor is responsible for protection of all furniture and equipment in occupied campus areas.
  - 6. Any furniture that is moved or altered to perform work is to be replaced at the end of daily work shifts to its original position and condition.
  - 7. The use of music radios when school is in session is prohibited.
- H. School District maintains a "zero tolerance policy" on these points of emphasis and any breach of this policy shall be grounds for removing the party from the project and at the sole discretion of School District Staff.

## 1.7 SPECIFICATION AND DRAWING CONVENTIONS

- A. Specification Content: The Specifications use certain conventions for the style of language and the intended meaning of certain terms, words, and phrases when used in particular situations. These conventions are as follows:
1. Imperative mood and streamlined language are generally used in the Specifications. The words "shall," "shall be," or "shall comply with," depending on the context, are implied where a colon (:) is used within a sentence or phrase.
  2. Text Color: Text used in the Specifications, including units of measure, manufacturer and product names, and other text may appear in multiple colors or underlined as part of a hyperlink; no emphasis is implied by text with these characteristics.
  3. Hypertext: Text used in the Specifications may contain hyperlinks. Hyperlinks may allow for access to linked information that is not residing in the Specifications. Unless otherwise indicated, linked information is not part of the Contract Documents.
  4. Specification requirements are to be performed by Contractor unless specifically stated otherwise.
- B. Division 01 General Requirements: Requirements of Sections in Division 01 apply to the Work of all Sections in the Specifications.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 011000

SUMMARY

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## SECTION 012500 - SUBSTITUTION PROCEDURES

### PART 1 - GENERAL

#### 1.1 SUMMARY

- A. Section includes administrative and procedural requirements for substitutions.
- B. Related Requirements:
  - 1. Section 016000 "Product Requirements" for requirements for submitting comparable product submittals for products by listed manufacturers.

#### 1.2 DEFINITIONS

- A. Substitutions: Changes in products, materials, equipment, and methods of construction from those required by the Contract Documents and proposed by Contractor.
  - 1. Substitutions for Cause: Changes proposed by Contractor that are required due to changed Project conditions, such as unavailability of product, regulatory changes, or unavailability of required warranty terms.
  - 2. Substitutions for Convenience: Changes proposed by Contractor or Owner that are not required in order to meet other Project requirements but may offer advantage to Contractor or Owner.

#### 1.3 ACTION SUBMITTALS

- A. Substitution Requests: Submit three copies of each request for consideration. Identify product or fabrication or installation method to be replaced. Include Specification Section number and title and Drawing numbers and titles.
  - 1. Substitution Request Form: Use facsimile of form provided following this Section in the Project Manual.
  - 2. Documentation: Show compliance with requirements for substitutions and the following, as applicable:
    - a. Statement indicating why specified product or fabrication or installation method cannot be provided, if applicable.
    - b. Coordination of information, including a list of changes or revisions needed to other parts of the Work and to construction performed by Owner and separate contractors that will be necessary to accommodate proposed substitution.
    - c. Detailed comparison of significant qualities of proposed substitutions with those of the Work specified. Include annotated copy of applicable Specification Section. Significant qualities may include attributes, such as performance, weight, size, durability, visual effect, sustainable design characteristics, warranties, and specific



- features and requirements indicated. Indicate deviations, if any, from the Work specified.
- d. Product Data, including drawings and descriptions of products and fabrication and installation procedures.
  - e. Samples, where applicable or requested.
  - f. Certificates and qualification data, where applicable or requested.
  - g. List of similar installations for completed projects, with project names and addresses as well as names and addresses of architects and owners.
  - h. Material test reports from a qualified testing agency, indicating and interpreting test results for compliance with requirements indicated.
  - i. Research reports evidencing compliance with building code in effect for Project, from ICC-ES.
  - j. Detailed comparison of Contractor's construction schedule using proposed substitutions with products specified for the Work, including effect on the overall Contract Time. If specified product or method of construction cannot be provided within the Contract Time, include letter from manufacturer, on manufacturer's letterhead, stating date of receipt of purchase order, lack of availability, or delays in delivery.
  - k. Cost information, including a proposal of change, if any, in the Contract Sum.
  - l. Contractor's certification that proposed substitution complies with requirements in the Contract Documents, except as indicated in substitution request, is compatible with related materials and is appropriate for applications indicated.
  - m. Contractor's waiver of rights to additional payment or time that may subsequently become necessary because of failure of proposed substitution to produce indicated results.
3. Architect's Action: If necessary, Architect will request additional information or documentation for evaluation within seven days of receipt of a request for substitution. Architect will notify Contractor of acceptance or rejection of proposed substitution within 15 days of receipt of request, or seven days of receipt of additional information or documentation, whichever is later.
- a. Forms of Acceptance: Change Order, Construction Change Directive, or Architect's Supplemental Instructions for minor changes in the Work.
  - b. Use product specified if Architect does not issue a decision on use of a proposed substitution within time allocated.

#### 1.4 QUALITY ASSURANCE

- A. Compatibility of Substitutions: Investigate and document compatibility of proposed substitution with related products and materials. Engage a qualified testing agency to perform compatibility tests recommended by manufacturers.

#### 1.5 PROCEDURES

- A. Coordination: Revise or adjust affected work as necessary to integrate work of the approved substitutions.

#### SUBSTITUTION PROCEDURES

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## 1.6 SUBSTITUTIONS

- A. General: A request for substitution of a product shall not occur through the Request for Information (RFI) process during construction. All substitution requests and prior approvals must follow procedures and timelines specified herein. RFI's submitted during construction including a request for substitution will be rejected. Additionally, substitution requests made through the submittal process during construction will be rejected.
- B. Substitutions for Cause: Submit requests for substitution immediately on discovery of need for change, but not later than 15 days prior to time required for preparation and review of related submittals.
1. Conditions: Architect will consider Contractor's request for substitution when the following conditions are satisfied. If the following conditions are not satisfied, Architect will return requests without action, except to record noncompliance with these requirements:
    - a. Requested substitution is consistent with the Contract Documents and will produce indicated results.
    - b. Substitution request is fully documented and properly submitted.
    - c. Requested substitution will not adversely affect Contractor's construction schedule.
    - d. Requested substitution has received necessary approvals of authorities having jurisdiction.
    - e. Requested substitution is compatible with other portions of the Work.
    - f. Requested substitution has been coordinated with other portions of the Work.
    - g. Requested substitution provides specified warranty.
    - h. If requested substitution involves more than one contractor, requested substitution has been coordinated with other portions of the Work, is uniform and consistent, is compatible with other products, and is acceptable to all contractors involved.
- C. Substitutions for Convenience: Not allowed unless otherwise indicated.
- D. Substitutions for Convenience: Only if Architect agrees to consider Substitutions for Convenience, requests for substitution must be made within 60 days of the Notice to Proceed. Requests received after that time may be considered or rejected at discretion of Architect.
1. Conditions: Architect will consider Contractor's request for substitution when the following conditions are satisfied. If the following conditions are not satisfied, Architect will return requests without action, except to record noncompliance with these requirements:
    - a. Requested substitution offers Owner a substantial advantage in cost, time, energy conservation, or other considerations, after deducting additional responsibilities Owner must assume. Owner's additional responsibilities may include compensation to Architect for redesign and evaluation services, increased cost of other construction by Owner, and similar considerations.
    - b. Requested substitution does not require extensive revisions to the Contract Documents.

- c. Requested substitution is consistent with the Contract Documents and will produce indicated results.
- d. Substitution request is fully documented and properly submitted.
- e. Requested substitution will not adversely affect Contractor's construction schedule.
- f. Requested substitution has received necessary approvals of authorities having jurisdiction.
- g. Requested substitution is compatible with other portions of the Work.
- h. Requested substitution has been coordinated with other portions of the Work.
- i. Requested substitution provides specified warranty.
- j. If requested substitution involves more than one contractor, requested substitution has been coordinated with other portions of the Work, is uniform and consistent, is compatible with other products, and is acceptable to all contractors involved.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 012500

## SUBSTITUTION REQUEST FORM

### 1.1 CONDITIONS OF SUBSTITUTIONS

- A. Substitution indicated on this Form is a proposed substitute to requirements indicated in the Specifications and Drawings. Substitution listed has not been included in an Addendum. Submit one Form for each proposed substitution.
- B. For each proposed Substitution, state difference in price or "No Change" where Substitution is offered.
- C. Attach complete technical data, specifications, and description of substitutions.
- D. Architect reserves the right to accept or reject any or all proposed substitutions.

### 1.2 SUBSTITUTION REQUEST

The following information is hereby submitted for a substitution to the specified item.

Specification Section and Title: \_\_\_\_\_

Paragraph: \_\_\_\_\_ Page: \_\_\_\_\_ Specified Item: \_\_\_\_\_

Proposed Substitution: \_\_\_\_\_

Manufacturer: \_\_\_\_\_ Address: \_\_\_\_\_ Phone: \_\_\_\_\_

Trade Name: \_\_\_\_\_ Model No: \_\_\_\_\_

Price Difference: \_\_\_\_\_ or No Change: \_\_\_\_\_

The Undersigned certifies:

- A. Proposed substitution has been fully investigated and determined to be equal or superior in all respects to specified product.
- B. Same warranty will be furnished for proposed substitution as for specified product.
- C. Same maintenance service and source of replacement parts, as applicable, is available.
- D. Proposed substitution will have no adverse effect on other trades and will not affect or delay progress schedule.
- E. Proposed substitution does not affect dimensions and functional clearances.
- F. Payment will be made for changes to the building design, including A/E design, detailing, and construction costs caused by the substitution.

Submitted by: \_\_\_\_\_

Signed by: \_\_\_\_\_

Firm: \_\_\_\_\_

Address: \_\_\_\_\_

Telephone: \_\_\_\_\_ Email: \_\_\_\_\_

1.3 ARCHITECT'S REVIEW AND ACTION

- Substitution Approved – Make submittals in accordance with Section 013300 – Submittal Procedures.
- Substitution Approved as Noted – Make submittals in accordance with Section 013300 – Submittal Procedures.
- Substitution Rejected – Use specified materials.
- Substitution Request Received Too Late – Use specified materials.

Signed by: \_\_\_\_\_

Supporting Data Attached:     Drawings     Product Data     Samples     Tests  
                                          Reports     Other\_\_\_\_\_

## SECTION 012600 - CONTRACT MODIFICATION PROCEDURES

### PART 1 - GENERAL

#### 1.1 SUMMARY

- A. Section includes administrative and procedural requirements for handling and processing Contract modifications.

#### 1.2 MINOR CHANGES IN THE WORK

- A. Architect will issue supplemental instructions authorizing minor changes in the Work, not involving adjustment to the Contract Sum or the Contract Time, on AIA Document G710.

#### 1.3 PROPOSAL REQUESTS

- A. Owner-Initiated Proposal Requests: Architect will issue a detailed description of proposed changes in the Work that may require adjustment to the Contract Sum or the Contract Time. If necessary, the description will include supplemental or revised Drawings and Specifications.
  - 1. Work Change Proposal Requests issued by Architect are not instructions either to stop work in progress or to execute the proposed change.
  - 2. Within time specified in Proposal Request or 20 days, when not otherwise specified, after receipt of Proposal Request, submit a quotation estimating cost adjustments to the Contract Sum and the Contract Time necessary to execute the change.
    - a. Include a list of quantities of products required or eliminated and unit costs, with total amount of purchases and credits to be made. If requested, furnish survey data to substantiate quantities.
    - b. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
    - c. Include costs of labor and supervision directly attributable to the change.
    - d. Include an updated Contractor's construction schedule that indicates the effect of the change, including, but not limited to, changes in activity duration, start and finish times, and activity relationship. Use available total float before requesting an extension of the Contract Time.
- B. Contractor-Initiated Proposals: If latent or changed conditions require modifications to the Contract, Contractor may initiate a claim by submitting a request for a change to Architect.
  - 1. Include a statement outlining reasons for the change and the effect of the change on the Work. Provide a complete description of the proposed change. Indicate the effect of the proposed change on the Contract Sum and the Contract Time.

2. Include a list of quantities of products required or eliminated and unit costs, with total amount of purchases and credits to be made. If requested, furnish survey data to substantiate quantities.
3. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
4. Include costs of labor and supervision directly attributable to the change.
5. Include an updated Contractor's construction schedule that indicates the effect of the change, including, but not limited to, changes in activity duration, start and finish times, and activity relationship. Use available total float before requesting an extension of the Contract Time.
6. Comply with requirements in Section 012500 "Substitution Procedures" if the proposed change requires substitution of one product or system for product or system specified.

#### 1.4 CHANGE ORDER PROCEDURES

- A. On Owner's approval of a Work Change Proposal Request, Architect will issue a Change Order for signatures of Owner and Contractor on AIA Document G701.

#### 1.5 CONSTRUCTION CHANGE DIRECTIVE

- A. Construction Change Directive: Architect may issue a Construction Change Directive on AIA Document G714. Construction Change Directive instructs Contractor to proceed with a change in the Work, for subsequent inclusion in a Change Order.
  1. Construction Change Directive contains a complete description of change in the Work. It also designates method to be followed to determine change in the Contract Sum or the Contract Time.
- B. Documentation: Maintain detailed records on a time and material basis of work required by the Construction Change Directive.
  1. After completion of change, submit an itemized account and supporting data necessary to substantiate cost and time adjustments to the Contract.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 012600

## SECTION 012900 - PAYMENT PROCEDURES

### PART 1 - GENERAL

#### 1.1 SUMMARY

- A. Section includes administrative and procedural requirements necessary to prepare and process Applications for Payment.

#### 1.2 SCHEDULE OF VALUES

- A. Coordination: Coordinate preparation of the schedule of values with preparation of Contractor's construction schedule.
  - 1. Coordinate line items in the schedule of values with items required to be indicated as separate activities in Contractor's construction schedule.
  - 2. Submit the schedule of values to Architect at earliest possible date, but no later than seven days before the date scheduled for submittal of initial Applications for Payment.
- B. Format and Content: Use Project Manual table of contents as a guide to establish line items for the schedule of values. Provide at least one line item for each Specification Section.
  - 1. Arrange schedule of values consistent with format of AIA Document G703.
  - 2. Provide a breakdown of the Contract Sum in enough detail to facilitate continued evaluation of Applications for Payment and progress reports. Provide multiple line items for principal subcontract amounts in excess of five percent of the Contract Sum.
  - 3. Provide a separate line item in the schedule of values for each part of the Work where Applications for Payment may include materials or equipment purchased or fabricated and stored, but not yet installed.
    - a. Differentiate between items stored on-site and items stored off-site.
  - 4. Allowances: Provide a separate line item in the schedule of values for each allowance. Show line-item value of unit-cost allowances, as a product of the unit cost, multiplied by measured quantity. Use information indicated in the Contract Documents to determine quantities.
  - 5. Overhead Costs: Include total cost and proportionate share of general overhead and profit for each line item.
  - 6. Schedule of Values Revisions: Revise the schedule of values when Change Orders or Construction Change Directives result in a change in the Contract Sum. Include at least one separate line item for each Change Order and Construction Change Directive.



### 1.3 APPLICATIONS FOR PAYMENT

- A. Each Application for Payment following the initial Application for Payment shall be consistent with previous applications and payments as certified by Architect and paid for by Owner.
- B. Payment Application Times: The date for each progress payment is indicated in the Agreement between Owner and Contractor. The period of construction work covered by each Application for Payment is the period indicated in the Agreement.
  - 1. **Submit draft copy of Application for Payment seven days prior to due date for review by Architect.**
- C. Application for Payment Forms: Use AIA Document G702 and AIA Document G703 as form for Applications for Payment.
- D. Application Preparation: Complete every entry on form. Notarize and execute by a person authorized to sign legal documents on behalf of Contractor. Architect will return incomplete applications without action.
  - 1. Entries shall match data on the schedule of values and Contractor's construction schedule. Use updated schedules if revisions were made.
  - 2. Include amounts for work completed following previous Application for Payment, whether or not payment has been received. Include only amounts for work completed at time of Application for Payment.
  - 3. Include amounts of Change Orders and Construction Change Directives issued before last day of construction period covered by application.
- E. Stored Materials: Include in Application for Payment amounts applied for materials or equipment purchased or fabricated and stored, but not yet installed. Differentiate between items stored onsite and items stored off-site.
  - 1. Provide certificate of insurance, evidence of transfer of title to Owner, and consent of surety to payment, for stored materials.
  - 2. Provide supporting documentation that verifies amount requested, such as paid invoices. Match amount requested with amounts indicated on documentation; do not include overhead and profit on stored materials.
  - 3. Provide summary documentation for stored materials indicating the following:
    - a. Value of materials previously stored and remaining stored as of date of previous Applications for Payment.
    - b. Value of previously stored materials put in place after date of previous Application for Payment and on or before date of current Application for Payment.
    - c. Value of materials stored since date of previous Application for Payment and remaining stored as of date of current Application for Payment.
  - 4. Provide pictures of stored items so the items are clearly shown in the photo.
  - 5. Invoices and bills of sale are not acceptable forms of documentation.

- F. Transmittal: Submit one signed and notarized original copies of each Application for Payment to Architect by a method ensuring receipt within 24 hours. One copy shall include waivers of lien and similar attachments if required.
- G. Initial Application for Payment: Administrative actions and submittals that must precede or coincide with submittal of first Application for Payment include the following:
1. List of subcontractors.
  2. Schedule of values.
  3. Contractor's construction schedule (preliminary if not final).
  4. Submittal schedule (preliminary if not final).
  5. Certificates of insurance and insurance policies.
  6. Performance and payment bonds.
- H. Application for Payment at Substantial Completion: After Architect issues the Certificate of Substantial Completion, submit an Application for Payment showing 100 percent completion for portion of the Work claimed as substantially complete.
1. Include documentation supporting claim that the Work is substantially complete and a statement showing an accounting of changes to the Contract Sum.
  2. This application shall reflect Certificate(s) of Substantial Completion issued previously for Owner occupancy of designated portions of the Work.
- I. Final Payment Application: After completing Project closeout requirements, submit final Application for Payment with releases and supporting documentation not previously submitted and accepted, including, but not limited, to the following:
1. Evidence of completion of Project closeout requirements.
  2. Insurance certificates for products and completed operations where required and proof that taxes, fees, and similar obligations were paid.
  3. Updated final statement, accounting for final changes to the Contract Sum.
  4. AIA Document G706.
  5. AIA Document G706A.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 012900

## SECTION 013100 - PROJECT MANAGEMENT AND COORDINATION

### PART 1 - GENERAL

#### 1.1 SUMMARY

- A. Section includes administrative provisions for coordinating construction operations on Project including, but not limited to, the following:
1. General coordination procedures.
  2. RFIs.
  3. Project meetings.
  4. Documents and samples at the site.

#### 1.2 INFORMATIONAL SUBMITTALS

- A. Subcontract List: Prepare a written summary identifying individuals or firms proposed for each portion of the Work, including those who are to furnish products or equipment fabricated to a special design.

#### 1.3 GENERAL COORDINATION PROCEDURES

- A. Coordination: Coordinate construction operations included in different Sections of the Specifications to ensure efficient and orderly installation of each part of the Work. Coordinate construction operations included in different Sections that depend on each other for proper installation, connection, and operation.
1. Schedule construction operations in sequence required to obtain the best results where installation of one part of the Work depends on installation of other components, before or after its own installation.
  2. Coordinate installation of different components to ensure maximum performance and accessibility for required maintenance, service, and repair.
  3. Make adequate provisions to accommodate items scheduled for later installation.

#### 1.4 REQUEST FOR INFORMATION (RFI)

- A. General: Immediately on discovery of the need for additional information, clarification, or interpretation of the Contract Documents, Contractor shall prepare and submit an RFI in the form specified.
1. Architect will return without response those RFIs submitted to Architect by other entities controlled by Contractor.
  2. Coordinate and submit RFIs in a prompt manner so as to avoid delays in Contractor's work or work of subcontractors.

- B. Content of the RFI: Include a detailed, legible description of item needing information or interpretation and the following:
1. Project name.
  2. Project number.
  3. Date.
  4. Name of Contractor.
  5. Name of Architect.
  6. RFI number, numbered sequentially.
  7. RFI subject.
  8. Specification Section number and title and related paragraphs, as appropriate.
  9. Drawing number and detail references, as appropriate.
  10. Field dimensions and conditions, as appropriate.
  11. Contractor's suggested resolution. If Contractor's suggested resolution impacts the Contract Time or the Contract Sum, Contractor shall state impact in the RFI.
  12. Contractor's signature.
  13. Attachments: Include sketches, descriptions, measurements, photos, Product Data, Shop Drawings, coordination drawings, and other information necessary to fully describe items needing interpretation.
- C. Architect's Action: Architect will review each RFI, determine action required, and respond. Allow seven working days for Architect's response for each RFI. RFIs received by Architect after 1:00 p.m. will be considered as received the following working day.
1. Architect's action may include a request for additional information, in which case Architect's time for response will date from time of receipt by Architect additional information.
  2. Architect's action on RFIs that may result in a change to the Contract Time or the Contract Sum may be eligible for Contractor to submit Change Proposal according to Section 012600 "Contract Modification Procedures."
    - a. If Contractor believes the RFI response warrants change in the Contract Time or the Contract Sum, notify Architect in writing within 10 days of receipt of the RFI response.
- D. RFI Log: Prepare, maintain, and submit a tabular log of RFIs organized by the RFI number. Submit log weekly.
- E. On receipt of Architect's action, update the RFI log and immediately distribute the RFI response to affected parties. Review response and notify Architect within three days if Contractor disagrees with response.

## 1.5 PROJECT MEETINGS

- A. General: Schedule and conduct meetings and conferences at Project site unless otherwise indicated.

- B. Preconstruction Conference: Architect will schedule and conduct a preconstruction conference before starting construction, at a time convenient to Owner and Architect, but no later than 15 days after execution of the Agreement.
1. Attendees: Authorized representatives of Owner, Architect, and their consultants; Contractor and its superintendent; major subcontractors; suppliers; and other concerned parties shall attend the conference. Participants at the conference shall be familiar with Project and authorized to conclude matters relating to the Work.
  2. Agenda: Discuss items of significance that could affect progress, including the following:
    - a. Responsibilities and personnel assignments.
    - b. Tentative construction schedule.
    - c. Critical work sequencing and long lead items.
    - d. Designation of key personnel and their duties.
    - e. Lines of communications.
    - f. Procedures for processing field decisions and Change Orders.
    - g. Procedures for RFIs.
    - h. Procedures for testing and inspecting.
    - i. Procedures for processing Applications for Payment.
    - j. Distribution of the Contract Documents.
    - k. Submittal procedures.
    - l. Preparation of Record Documents.
    - m. Use of the premises and existing building.
    - n. Work restrictions.
    - o. Working hours.
    - p. Owner's occupancy requirements.
    - q. Responsibility for temporary facilities and controls.
    - r. Procedures for moisture and mold control.
    - s. Procedures for disruptions and shutdowns.
    - t. Construction waste management and recycling.
    - u. Parking availability.
    - v. Office, work, and storage areas.
    - w. Equipment deliveries and priorities.
    - x. First aid.
    - y. Security.
    - z. Progress cleaning.
  3. Minutes: Entity responsible for conducting meeting will record and distribute meeting minutes.
- C. Preinstallation Conferences: Conduct a preinstallation conference at Project site before each construction activity when required by other sections and when required for coordination with other construction.
1. Attendees: Installer and representatives of manufacturers and fabricators involved in or affected by the installation and its coordination or integration with other materials and installations that have preceded or will follow, shall attend the meeting. Advise Architect of scheduled meeting dates.

2. Agenda: Review progress of other construction activities and preparations for the particular activity under consideration, including requirements for the following:
    - a. Contract Documents.
    - b. Options.
    - c. Related RFIs.
    - d. Related Change Orders.
    - e. Purchases.
    - f. Deliveries.
    - g. Submittals.
    - h. Possible conflicts.
    - i. Compatibility requirements.
    - j. Time schedules.
    - k. Weather limitations.
    - l. Manufacturer's written instructions.
    - m. Warranty requirements.
    - n. Compatibility of materials.
    - o. Acceptability of substrates.
    - p. Temporary facilities and controls.
    - q. Space and access limitations.
    - r. Testing and inspecting requirements.
    - s. Installation procedures.
    - t. Coordination with other work.
    - u. Required performance results.
    - v. Protection of adjacent work.
    - w. Protection of construction and personnel.
  3. Record significant conference discussions, agreements, and disagreements, including required corrective measures and actions.
  4. Reporting: Distribute minutes of the meeting to each party present and to other parties requiring information.
  5. Do not proceed with installation if the conference cannot be successfully concluded. Initiate whatever actions are necessary to resolve impediments to performance of the Work and reconvene the conference at earliest feasible date.
- D. Progress Meetings: Conduct progress meetings at regular intervals or as requested by Owner.
1. Coordinate dates of meetings with preparation of payment requests.
  2. Agenda: Review and correct or approve minutes of previous progress meeting. Review other items of significance that could affect progress. Include topics for discussion as appropriate to status of Project.
  3. Minutes: Entity responsible for conducting the meeting will record and distribute the meeting minutes to each party present and to parties requiring information.

## 1.6 DOCUMENTS AND SAMPLES AT THE SITE

- A. The Contractor shall maintain at the site for the Owner one record copy of the Drawings, Specifications, addenda, Change Orders and other Modifications, in good order and marked

currently to record changes and selections made during construction, and in addition approved Shop Drawings, Product Data, Samples and similar required submittals. These shall be available to the Architect and shall be delivered to the Architect for submittal to the Owner upon completion of the Work.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 013100

## SECTION 013200 - CONSTRUCTION PROGRESS DOCUMENTATION

### PART 1 - GENERAL

#### 1.1 SUMMARY

- A. Section includes administrative and procedural requirements for documenting the progress of construction during performance of the Work, including the following:
1. Contractor's Construction Schedule.
  2. Construction schedule updating reports.
  3. Site condition reports.

#### 1.2 INFORMATIONAL SUBMITTALS

- A. Format for Submittals: Submit required submittals in the following format:
1. Working electronic copy of schedule file, where indicated.
  2. PDF file.
- B. Contractor's Construction Schedule: Initial schedule, of size required to display entire schedule for entire construction period.
- C. Construction Schedule Updating Reports: Submit with Applications for Payment.

#### 1.3 CONTRACTOR'S CONSTRUCTION SCHEDULE, GENERAL

- A. Computer Scheduling Software: Prepare schedules using current version of a program that has been developed specifically to manage construction schedules.
- B. Time Frame: Extend schedule from date established for the Notice to Proceed to date of Substantial Completion.
1. Contract completion date shall not be changed by submission of a schedule that shows an early completion date, unless specifically authorized by Change Order.
- C. Procurement Activities: **Include procurement process activities for long lead items and major items as separate activities in schedule.** Procurement cycle activities include, but are not limited to, submittals, approvals, purchasing, fabrication, and delivery.
- D. Constraints: Include constraints and work restrictions indicated in the Contract Documents.
- E. Milestones: Include milestones indicated in the Contract Documents in schedule, including, but not limited to, the Notice to Proceed, Substantial Completion, and final completion.



- F. Upcoming Work Summary: Prepare summary report indicating activities scheduled to occur or commence prior to submittal of next schedule update. Summarize the following issues:
- G. Contractor's Construction Schedule Updating: At monthly intervals, update schedule to reflect actual construction progress and activities. Issue schedule one week before each regularly scheduled progress meeting.
  - 1. Revise schedule immediately after each meeting or other activity where revisions have been recognized or made. Issue updated schedule concurrently with the report of each such meeting.
- H. Recovery Schedule: When periodic update indicates the Work is 14 or more calendar days behind the current approved schedule, submit a separate recovery schedule indicating means by which Contractor intends to regain compliance with the schedule. Indicate changes to working hours, working days, crew sizes, equipment required to achieve compliance, and date by which recovery will be accomplished.

#### 1.4 GANTT-CHART SCHEDULE REQUIREMENTS

- A. Gantt-Chart Schedule: Submit a comprehensive, fully developed, horizontal, Gantt-chart-type, Contractor's Construction Schedule within 30 days of date established for the Notice to Proceed.
- B. Preparation: Indicate each significant construction activity separately. Identify first workday of each week with a continuous vertical line.

#### 1.5 REPORTS

- A. Site Condition Reports: Immediately on discovery of a difference between site conditions and the Contract Documents, prepare and submit a detailed report. Submit with a Request for Information. Include a detailed description of the differing conditions, together with recommendations for changing the Contract Documents.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 013200

## SECTION 013300 - SUBMITTAL PROCEDURES

### PART 1 - GENERAL

#### 1.1 SUMMARY

A. Section Includes:

1. Submittal schedule requirements.
2. Administrative and procedural requirements for submittals.

#### 1.2 DEFINITIONS

- A. Action Submittals: Written and graphic information and physical samples that require Architect's responsive action. Action submittals are those submittals indicated in individual Specification Sections as "action submittals."

#### 1.3 SUBMITTAL SCHEDULE

- A. Submittal Schedule: **Submit, as an action submittal, a list of submittals**, arranged in chronological order by dates required by construction schedule. Include additional time required for making corrections or revisions to submittals noted by Architect and additional time for handling and reviewing submittals required by those corrections.

#### 1.4 SUBMITTAL FORMATS

A. Submittal Information: Include the following information in each submittal:

1. Project name.
2. Date.
3. Name of Architect.
4. Name of Contractor.
5. Names of subcontractor, manufacturer, and supplier.
6. Unique submittal number, including revision identifier. Include Specification Section number with sequential alphanumeric identifier; and alphanumeric suffix for resubmittals.
7. Number and title of Specification Section, with paragraph number and generic name for each of multiple items.
8. Signature of transmitter.

B. Options: Identify options requiring selection by Architect.

- C. Deviations and Additional Information: On each submittal, **clearly indicate deviations from requirements in the Contract Documents**, including minor variations and limitations; include

### SUBMITTAL PROCEDURES

013300 - 1

relevant additional information and revisions, other than those requested by Architect on previous submittals. Indicate by highlighting on each submittal or noting on attached separate sheet.

- D. PDF Submittals: Prepare submittals as PDF package, incorporating complete information into each PDF file. Name PDF file with submittal number.

## 1.5 SUBMITTAL PROCEDURES

- A. General: A request for substitution of a product shall not occur through the submittal process during construction. All substitution requests must follow requirements per Section 012500 "Substitution Procedures". Substitution requests made through the submittal process during construction will be rejected.
- B. Prepare and submit submittals required by individual Specification Sections. Types of submittals are indicated in individual Specification Sections.
  - 1. Email: Prepare submittals as PDF package, and transmit to Architect by sending via email. Include PDF transmittal form. Include information in email subject line as requested by Architect.
- C. Coordination: Coordinate preparation and processing of submittals with performance of construction activities.
  - 1. Coordinate each submittal with fabrication, purchasing, testing, delivery, other submittals, and related activities that require sequential activity.
  - 2. Submit all submittal items required for each Specification Section concurrently unless partial submittals for portions of the Work are indicated on approved submittal schedule.
- D. Processing Time: Allow time for submittal review, including time for resubmittals, as follows. Time for review shall commence on Architect's receipt of submittal. No extension of the Contract Time will be authorized because of failure to transmit submittals enough in advance of the Work to permit processing, including resubmittals.
  - 1. Initial Review: Allow 7 days for initial review of each submittal. Allow additional time if coordination with subsequent submittals is required. Architect will advise Contractor when a submittal being processed must be delayed for coordination.
  - 2. Resubmittal Review: Allow 7 days for review of each resubmittal.
- E. Resubmittals: Make resubmittals in same form and number of copies as initial submittal.
- F. Distribution: Furnish copies of final submittals to manufacturers, subcontractors, suppliers, fabricators, installers, authorities having jurisdiction, and others as necessary for performance of construction activities. Show distribution on transmittal forms.
- G. Use for Construction: Retain complete copies of submittals on Project site. Use only final action submittals that are marked with approval notation from Architect's action stamp.

## 1.6 SUBMITTAL REQUIREMENTS

- A. Product Data: Collect information into a single submittal for each element of construction and type of product or equipment.
1. If information must be specially prepared for submittal because standard published data are unsuitable for use, submit as Shop Drawings, not as Product Data.
  2. Mark each copy of each submittal to show which products and options are applicable.
  3. Include the following information, as applicable:
    - a. Manufacturer's catalog cuts.
    - b. Manufacturer's product specifications.
    - c. Color charts.
    - d. Statement of compliance with specified referenced standards.
    - e. Testing by recognized testing agency.
    - f. Application of testing agency labels and seals.
    - g. Notation of coordination requirements.
    - h. Availability and delivery time information.
- B. Samples: Submit Samples for review of kind, color, pattern, and texture for a check of these characteristics with other materials.
1. Transmit Samples that contain multiple, related components such as accessories together in one submittal package.
  2. Identification: Permanently attach label on unexposed side of Samples that includes the following:
    - a. Project name and submittal number.
    - b. Generic description of Sample.
    - c. Product name and name of manufacturer.
    - d. Sample source.
    - e. Number and title of applicable Specification Section.
    - f. Specification paragraph number and generic name of each item.
  3. Email Transmittal: Provide PDF transmittal. Include digital image file illustrating Sample characteristics, and identification information for record.
  4. Paper Transmittal: Include paper transmittal including complete submittal information indicated.
  5. Disposition: Maintain sets of approved Samples at Project site, available for quality-control comparisons throughout the course of construction activity. Sample sets may be used to determine final acceptance of construction associated with each set.
    - a. Samples that may be incorporated into the Work are indicated in individual Specification Sections. Such Samples must be in an undamaged condition at time of use.
    - b. Samples not incorporated into the Work, or otherwise designated as Owner's property, are the property of Contractor.

6. Samples for Initial Selection: Submit manufacturer's color charts consisting of units or sections of units showing the full range of colors, textures, and patterns available.
  - a. Number of Samples: Submit one full set(s) of available choices where color, pattern, texture, or similar characteristics are required to be selected from manufacturer's product line. Architect will return submittal with options selected.
- C. Qualification Data: Prepare written information that demonstrates capabilities and experience of firm or person. Include lists of completed projects with project names and addresses, contact information of architects and owners, and other information specified.
- D. Certificates:
  1. Certificates and Certifications Submittals: Submit a statement that includes signature of entity responsible for preparing certification. Certificates and certifications shall be signed by an officer or other individual authorized to sign documents on behalf of that entity. Provide a notarized signature where indicated.
  2. Installer Certificates: Submit written statements on manufacturer's letterhead certifying that Installer complies with requirements in the Contract Documents and, where required, is authorized by manufacturer for this specific Project.
  3. Manufacturer Certificates: Submit written statements on manufacturer's letterhead certifying that manufacturer complies with requirements in the Contract Documents. Include evidence of manufacturing experience where required.
  4. Material Certificates: Submit written statements on manufacturer's letterhead certifying that material complies with requirements in the Contract Documents.
  5. Product Certificates: Submit written statements on manufacturer's letterhead certifying that product complies with requirements in the Contract Documents.
- E. Test and Research Reports:
  1. Compatibility Test Reports: Submit reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of compatibility tests performed before installation of product. Include written recommendations for primers and substrate preparation needed for adhesion.
  2. Field Test Reports: Submit written reports indicating and interpreting results of field tests performed either during installation of product or after product is installed in its final location, for compliance with requirements in the Contract Documents.
  3. Material Test Reports: Submit reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting test results of material for compliance with requirements in the Contract Documents.
  4. Preconstruction Test Reports: Submit reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of tests performed before installation of product, for compliance with performance requirements in the Contract Documents.
  5. Product Test Reports: Submit written reports indicating that current product produced by manufacturer complies with requirements in the Contract Documents. Base reports on evaluation of tests performed by manufacturer and witnessed by a qualified testing agency, or on comprehensive tests performed by a qualified testing agency.

6. Research Reports: Submit written evidence, from a model code organization acceptable to authorities having jurisdiction, that product complies with building code in effect for Project. Include the following information:
  - a. Name of evaluation organization.
  - b. Date of evaluation.
  - c. Time period when report is in effect.
  - d. Product and manufacturers' names.
  - e. Description of product.
  - f. Test procedures and results.
  - g. Limitations of use.

#### 1.7 CONTRACTOR'S REVIEW

- A. Action Submittals: **Review each submittal and check for coordination with other Work of the Contract and for compliance with the Contract Documents. Note corrections and field dimensions. Mark with approval stamp before submitting to Architect.**
- B. Contractor's Approval: Indicate Contractor's approval for each submittal with a uniform approval stamp. Include name of reviewer, date of Contractor's approval, and statement certifying that submittal has been reviewed, checked, and approved for compliance with the Contract Documents.
  1. **Architect will not review submittals received from Contractor that do not have Contractor's review and approval.**

#### 1.8 ARCHITECT'S REVIEW

- A. Action Submittals: Architect will review each submittal, indicate corrections or revisions required, and return it.
- B. Partial submittals prepared for a portion of the Work will be reviewed when use of partial submittals has received prior approval from Architect.
- C. Incomplete submittals are unacceptable, will be considered nonresponsive, and will be returned for resubmittal without review.
- D. Architect will discard submittals received from sources other than Contractor.
- E. Submittals not required by the Contract Documents will be returned by Architect without action.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 013300

## SECTION 013333 – ELECTRONIC DRAWINGS

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. The Architect-Engineer, if requested, will provide the Contractor with one (1) electronic copy of the Contract Document Drawings for distribution to subcontractors and suppliers. The electronic copy will be provided in AutoCAD 2018.

#### 1.3 REFERENCES

- A. A copy of the DLR Group Electronic File Transfer Agreement is included at the end of the Section.

### PART 2 - PRODUCTS (Not Used)

### PART 3 - EXECUTION (Not Used)

END OF SECTION 013333



**AN AGREEMENT BETWEEN ARCHITECT OF RECORD (AR)  
AND  
OWNER, CONTRACTOR, OR THIRD PARTY (OCT)  
FOR TRANSFER OF COMPUTER AIDED DRAFTING (CAD) FILES ON ELECTRONIC MEDIA**

---

Architect of Record (AR):

Owner, Contractor, or Third Party (OCT):

**DLR Group, Inc.**

\_\_\_\_\_  
\_\_\_\_\_

DLR Project No.: **30-23107-04**

Date: \_\_\_\_\_

Project Name: **Flowing Wells Junior High Building K Restrooms**

Location: **Tucson, Arizona**

The AR will provide the following CAD files, dated **XXX (most current)**, for the convenience of the OCT in preparing shop fabrication drawings:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Drawings were prepared on the following:

Computer Software: **AutoCAD**

Version: **2018 or later**

**TERMS AND CONDITIONS:**

1. AR makes no representation as to the compatibility of the CAD files with any hardware or software.
2. Since the information set forth on the CAD files can be modified unintentionally or otherwise, the AR reserves the right to remove all indicia of its ownership and/or involvement from each electronic display. This medium should not be considered a certified document.
3. All information on the CAD files is considered instruments of service of the AR and shall not be used for other projects, for additions to this project, or completion of this project by others. CAD files shall remain the property of the AR, and in no case shall the transfer of these files be considered a sale.
4. AR makes no representation regarding the accuracy, completeness, or permanence of CAD files, nor for their merchantability or fitness for a particular purpose. Addenda information or revisions made after the date indicated on the CAD files may not have been incorporated. In the event of a conflict between the AR's sealed Contract Drawings and CAD files, the sealed Contract Drawings shall govern. It is the OCT's responsibility to determine if any conflicts exist. The CAD files shall not be considered to be Contract Documents as defined by the General Conditions of the Contract for Construction.
5. The use of CAD files prepared by the AR shall not in any way obviate the OCT's responsibility for the proper checking and coordination of dimensions, details, member sizes and gage, and quantities of materials as required to facilitate complete and accurate fabrication and erection.

6. The OCT shall, to the fullest extent permitted by law, indemnify, defend and hold harmless the AR, and its subconsultants from all claims, damages, losses, expenses, penalties and liabilities of any kind, including attorney's fees, arising out of or resulting from the use of the CAD files by the OCT, or by third party recipients of the CAD files from the OCT.
7. The AR believes that no licensing or copyright fees are due to others on account of the transfer of the CAD files, but to the extent any are, the OCT will pay the appropriate fees and hold the AR harmless from such claims.
8. This Agreement shall be governed by the laws of the principal place of business of the AR.

**AUTHORIZED ACCEPTANCE**

by: Architect of Record

by: Owner, Contractor, or Third Party of Record

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Print Name and Title

\_\_\_\_\_  
Print Name and Title

\_\_\_\_\_  
Date

\_\_\_\_\_  
Date

## SECTION 013516 - ALTERATION PROJECT PROCEDURES

### PART 1 - GENERAL

#### 1.1 SUMMARY

- A. Section includes special procedures for alteration work.

#### 1.2 DEFINITIONS

- A. Alteration Work: This term includes remodeling, renovation, repair, and maintenance work performed within existing spaces or on existing surfaces as part of the Project.
- B. Consolidate: To strengthen loose or deteriorated materials in place.
- C. Design Reference Sample: A sample that represents the Architect's prebid selection of work to be matched; it may be existing work or work specially produced for the Project.
- D. Dismantle: To remove by disassembling or detaching an item from a surface, using gentle methods and equipment to prevent damage to the item and surfaces; disposing of items unless indicated to be salvaged or reinstalled.
- E. Match: To blend with adjacent construction and manifest no apparent difference in material type, species, cut, form, detail, color, grain, texture, or finish; as approved by Architect.
- F. Refinish: To remove existing finishes to base material and apply new finish to match original, or as otherwise indicated.
- G. Repair: To correct damage and defects, retaining existing materials, features, and finishes. This includes patching, piecing-in, splicing, consolidating, or otherwise reinforcing or upgrading materials.
- H. Replace: To remove, duplicate, and reinstall entire item with new material. The original item is the pattern for creating duplicates unless otherwise indicated.
- I. Replicate: To reproduce in exact detail, materials, and finish unless otherwise indicated.
- J. Reproduce: To fabricate a new item, accurate in detail to the original, and from either the same or a similar material as the original, unless otherwise indicated.
- K. Retain: To keep an element or detail secure and intact.
- L. Strip: To remove existing finish down to base material unless otherwise indicated.

### 1.3 PROJECT MEETINGS FOR ALTERATION WORK

- A. Preliminary Conference for Alteration Work: Before starting alteration work, conduct conference at Project site.
1. Attendees: In addition to representatives of Owner, Architect, and Contractor, testing service representative, and chemical-cleaner manufacturer(s) shall be represented at the meeting.
  2. Agenda: Discuss items of significance that could affect progress of alteration work, including review of the following:
    - a. Fire-prevention plan.
    - b. Governing regulations.
    - c. Areas where existing construction is to remain and the required protection.
    - d. Hauling routes.
    - e. Sequence of alteration work operations.
    - f. Storage, protection, and accounting for salvaged and specially fabricated items.
    - g. Existing conditions, staging, and structural loading limitations of areas where materials are stored.
  3. Reporting: Architect will record conference results and distribute copies to everyone in attendance and to others affected by decisions or actions resulting from conference.

### 1.4 MATERIALS OWNERSHIP

- A. Historic items, relics, and similar objects including, but not limited to, cornerstones and their contents, commemorative plaques and tablets, antiques, and other items of interest or value to Owner that may be encountered or uncovered during the Work, regardless of whether they were previously documented, remain Owner's property.

### 1.5 INFORMATIONAL SUBMITTALS

- A. Alteration Work Program: Submit 30 days before work begins.
- B. Fire-Prevention Plan: Submit 30 days before work begins.

### 1.6 QUALITY ASSURANCE

- A. Title X Requirement: Each firm conducting activities that disturb painted surfaces shall be a "Lead-Safe Certified Firm" according to 40 CFR 745, Subpart E, and use only workers that are trained in lead-safe work practices.
- B. Alteration Work Program: Prepare a written plan for alteration work for whole Project, including each phase or process and protection of surrounding materials during operations. Show compliance with indicated methods and procedures specified in this and other Sections. Coordinate this whole-Project alteration work program with specific requirements of programs required in other alteration work Sections.

1. Dust and Noise Control: Include locations of proposed temporary dust- and noise-control partitions and means of egress from occupied areas coordinated with continuing on-site operations and other known work in progress.
  2. Debris Hauling: Include plans clearly marked to show debris hauling routes, turning radii, and locations and details of temporary protective barriers.
- C. Fire-Prevention Plan: Prepare a written plan for preventing fires during the Work, including placement of fire extinguishers, fire blankets, rag buckets, and other fire-control devices during each phase or process. Coordinate plan with Owner's fire-protection equipment and requirements. Include fire-watch personnel's training, duties, and authority to enforce fire safety.
- D. Safety and Health Standard: Comply with ANSI/ASSP A10.6.

## 1.7 STORAGE AND HANDLING OF SALVAGED MATERIALS

### A. Salvaged Materials:

1. Clean loose dirt and debris from salvaged items unless more extensive cleaning is indicated.
2. Pack or crate items after cleaning; cushion against damage during handling. Label contents of containers.
3. Store items in a secure area until delivery to Owner.
4. Transport items to Owner's storage area designated by Owner.
5. Protect items from damage during transport and storage.

### B. Salvaged Materials for Reinstallation:

1. Repair and clean items for reuse as indicated.
2. Pack or crate items after cleaning and repairing; cushion against damage during handling. Label contents of containers.
3. Protect items from damage during transport and storage.
4. Reinstall items in locations indicated. Comply with installation requirements for new materials and equipment unless otherwise indicated. Provide connections, supports, and miscellaneous materials to make items functional for use indicated.

### C. Existing Materials to Remain: Protect construction indicated to remain against damage and soiling from construction work. Where permitted by Architect, items may be dismantled and taken to a suitable, protected storage location during construction work and reinstalled in their original locations after alteration and other construction work in the vicinity is complete.

### D. Storage: Catalog and store items within a weathertight enclosure where they are protected from moisture, weather, condensation, and freezing temperatures.

1. Identify each item for reinstallation with a nonpermanent mark to document its original location. Indicate original locations on plans, elevations, sections, or photographs by annotating the identifying marks.
2. Secure stored materials to protect from theft.

3. Control humidity so that it does not exceed 85 percent. Maintain temperatures 5 deg F or more above the dew point.

## PART 2 - PRODUCTS - (Not Used)

## PART 3 - EXECUTION

### 3.1 PROTECTION

- A. Protect persons, motor vehicles, surrounding surfaces of building, building site, plants, and surrounding buildings from harm resulting from alteration work.
  1. Use only proven protection methods, appropriate to each area and surface being protected.
  2. Provide temporary barricades, barriers, and directional signage to exclude the public from areas where alteration work is being performed.
  3. Erect temporary barriers to form and maintain fire-egress routes.
  4. Erect temporary protective covers over walkways and at points of pedestrian and vehicular entrance and exit that must remain in service during alteration work.
  5. Contain dust and debris generated by alteration work, and prevent it from reaching the public or adjacent surfaces.
  6. Provide shoring, bracing, and supports as necessary. Do not overload structural elements.
  7. Protect floors and other surfaces along hauling routes from damage, wear, and staining.
  8. Provide supplemental sound-control treatment to isolate demolition work from other areas of the building.
- B. Temporary Protection of Materials to Remain:
  1. Protect existing materials with temporary protections and construction. Do not remove existing materials unless otherwise indicated.
  2. Do not attach temporary protection to existing surfaces except as indicated as part of the alteration work program.
- C. Comply with each product manufacturer's written instructions for protections and precautions. Protect against adverse effects of products and procedures on people and adjacent materials, components, and vegetation.
- D. Utility and Communications Services:
  1. Notify Owner, Architect, authorities having jurisdiction, and entities owning or controlling wires, conduits, pipes, and other services affected by alteration work before commencing operations.
  2. Disconnect and cap pipes and services as required by authorities having jurisdiction, as required for alteration work.
  3. Maintain existing services unless otherwise indicated; keep in service, and protect against damage during operations. Provide temporary services during interruptions to existing utilities.

- E. Existing Drains: Prior to the start of work in an area, test drainage system to ensure that it is functioning properly. Notify Architect immediately of inadequate drainage or blockage. Do not begin work in an area until the drainage system is functioning properly.
1. Prevent solids such as adhesive or mortar residue or other debris from entering the drainage system. Clean out drains and drain lines that become sluggish or blocked by sand or other materials resulting from alteration work.
  2. Protect drains from pollutants. Block drains or filter out sediments, allowing only clean water to pass.

### 3.2 PROTECTION FROM FIRE

- A. General: Follow fire-prevention plan and the following:
1. Comply with NFPA 241 requirements unless otherwise indicated.
  2. Remove and keep area free of combustibles, including rubbish, paper, waste, and chemicals, unless necessary for the immediate work.
    - a. If combustible material cannot be removed, provide fire blankets to cover such materials.
- B. Heat-Generating Equipment and Combustible Materials: Comply with the following procedures while performing work with heat-generating equipment or combustible materials, including welding, torch-cutting, soldering, brazing, removing paint with heat, or other operations where open flames or implements using high heat or combustible solvents and chemicals are anticipated:
1. Obtain Owner's approval for operations involving use of welding or other high-heat equipment. Use of open-flame equipment is not permitted. Notify Owner at least 72 hours before each occurrence, indicating location of such work.
  2. As far as practicable, restrict heat-generating equipment to shop areas or outside the building.
  3. Do not perform work with heat-generating equipment in or near rooms or in areas where flammable liquids or explosive vapors are present or thought to be present. Use a combustible gas indicator test to ensure that the area is safe.
  4. Use fireproof baffles to prevent flames, sparks, hot gases, or other high-temperature material from reaching surrounding combustible material.
  5. Prevent the spread of sparks and particles of hot metal through open windows, doors, holes, and cracks in floors, walls, ceilings, roofs, and other openings.
  6. Fire Watch: Before working with heat-generating equipment or combustible materials, station personnel to serve as a fire watch at each location where such work is performed. Fire-watch personnel shall have the authority to enforce fire safety. Station fire watch according to NFPA 51B, NFPA 241, and as follows:
    - a. Train each fire watch in the proper operation of fire-control equipment and alarms.
    - b. Prohibit fire-watch personnel from other work that would be a distraction from fire-watch duties.

- c. Cease work with heat-generating equipment whenever fire-watch personnel are not present.
  - d. Have fire-watch personnel perform final fire-safety inspection each day beginning no sooner than 30 minutes after conclusion of work in each area to detect hidden or smoldering fires and to ensure that proper fire prevention is maintained.
  - e. Maintain fire-watch personnel at each area of Project site until 60 minutes after conclusion of daily work.
- C. Fire-Control Devices: Provide and maintain fire extinguishers, fire blankets, and rag buckets for disposal of rags with combustible liquids. Maintain each as suitable for the type of fire risk in each work area. Ensure that nearby personnel and the fire-watch personnel are trained in fire-extinguisher and blanket use.
- D. Sprinklers: Where sprinkler protection exists and is functional, maintain it without interruption while operations are being performed. If operations are performed close to sprinklers, shield them temporarily with guards.
1. Remove temporary guards at the end of work shifts, whenever operations are paused, and when nearby work is complete.

### 3.3 GENERAL ALTERATION WORK

- A. Record existing work before each procedure (preconstruction), and record progress during the work. Use digital preconstruction documentation photographs or video recordings. Comply with requirements in Section 013233 "Photographic Documentation."
- B. Perform surveys of Project site as the Work progresses to detect hazards resulting from alterations.
- C. Notify Architect of visible changes in the integrity of material or components whether from environmental causes including biological attack, UV degradation, freezing, or thawing or from structural defects including cracks, movement, or distortion.
  1. Do not proceed with the work in question until directed by Architect.

END OF SECTION 013516



## SECTION 014000 - QUALITY REQUIREMENTS

### PART 1 - GENERAL

#### 1.1 SUMMARY

- A. Section includes administrative and procedural requirements for quality assurance and quality control.
- B. Testing and inspection services are required to verify compliance with requirements specified or indicated. These services do not relieve Contractor of responsibility for compliance with the Contract Document requirements.
  - 1. Specified tests, inspections, and related actions do not limit Contractor's other quality-assurance and quality-control procedures that facilitate compliance with the Contract Document requirements.
  - 2. Requirements for Contractor to provide quality-assurance and quality-control services required by Architect, Owner, or authorities having jurisdiction are not limited by provisions of this Section.

#### 1.2 DEFINITIONS

- A. Experienced: When used with an entity or individual, "experienced" unless otherwise further described means having successfully completed a minimum of five previous projects similar in nature, size, and extent to this Project; being familiar with special requirements indicated; and having complied with requirements of authorities having jurisdiction.
- B. Field Quality-Control Tests: Tests and inspections that are performed on-site for installation of the Work and for completed Work.
- C. Installer/Applicator/Erector: Contractor or another entity engaged by Contractor as an employee, Subcontractor, or Sub-subcontractor, to perform a particular construction operation, including installation, erection, application, assembly, and similar operations.
- D. Quality-Assurance Services: Activities, actions, and procedures performed before and during execution of the Work to guard against defects and deficiencies and substantiate that proposed construction will comply with requirements.
- E. Quality-Control Services: Tests, inspections, procedures, and related actions during and after execution of the Work to evaluate that actual products incorporated into the Work and completed construction comply with requirements. Contractor's quality-control services do not include contract administration activities performed by Architect.

### 1.3 CONFLICTING REQUIREMENTS

- A. **Conflicting Standards and Other Requirements:** If compliance with two or more standards or requirements are specified and the standards or requirements establish different or conflicting requirements for minimum quantities or quality levels, comply with the most stringent requirement. Refer conflicting requirements that are different, but apparently equal, to Architect for direction before proceeding.

### 1.4 REPORTS AND DOCUMENTS

- A. **Manufacturer's Technical Representative's Field Reports:** Prepare written information documenting manufacturer's technical representative's tests and inspections specified in other Sections. Include the following:
  - 1. Statement on condition of substrates and their acceptability for installation of product.
  - 2. Statement that products at Project site comply with requirements.
  - 3. Summary of installation procedures being followed, whether they comply with requirements and, if not, what corrective action was taken.
  - 4. Results of operational and other tests and a statement of whether observed performance complies with requirements.
  - 5. Other required items indicated in individual Specification Sections.

### 1.5 QUALITY ASSURANCE

- A. **General:** Qualifications paragraphs in this article establish the minimum qualification levels required; individual Specification Sections specify additional requirements.
- B. **Manufacturer Qualifications:** A firm experienced in manufacturing products or systems similar to those indicated for this Project and with a record of successful in-service performance, as well as sufficient production capacity to produce required units. As applicable, procure products from manufacturers able to meet qualification requirements, warranty requirements, and technical or factory-authorized service representative requirements.
- C. **Installer Qualifications:** A firm or individual experienced in installing, erecting, applying, or assembling work similar in material, design, and extent to that indicated for this Project, whose work has resulted in construction with a record of successful in-service performance.
- D. **Manufacturer's Technical Representative Qualifications:** An authorized representative of manufacturer who is trained and approved by manufacturer to observe and inspect installation of manufacturer's products that are similar in material, design, and extent to those indicated for this Project.

### 1.6 QUALITY CONTROL

- A. **Owner Responsibilities:** Where quality-control services are indicated as Owner's responsibility, Owner will engage a qualified testing agency to perform these services.

## QUALITY REQUIREMENTS

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- 1. Costs for retesting and reinspecting construction that replaces or is necessitated by work that failed to comply with the Contract Documents will be charged to Contractor.**
- B. Contractor Responsibilities: Tests and inspections not explicitly assigned to Owner are Contractor's responsibility. Perform additional quality-control activities, whether specified or not, to verify and document that the Work complies with requirements.
- C. Retesting/Reinspecting: Regardless of whether original tests or inspections were Contractor's responsibility, provide quality-control services, including retesting and reinspecting, for construction that replaced Work that failed to comply with the Contract Documents.
- D. Manufacturer's Technical Services: Where indicated, engage a manufacturer's technical representative to observe and inspect the Work. Manufacturer's technical representative's services include participation in preinstallation conferences, examination of substrates and conditions, verification of materials, observation of Installer activities, inspection of completed portions of the Work, and submittal of written reports.
- E. Coordination: Coordinate sequence of activities to accommodate required quality-assurance and quality-control services with a minimum of delay and to avoid necessity of removing and replacing construction to accommodate testing and inspection.
  1. Schedule times for tests, inspections, obtaining samples, and similar activities.

## PART 2 - PRODUCTS (Not Used)

## PART 3 - EXECUTION

### 3.1 TEST AND INSPECTION LOG

- A. Test and Inspection Log: Prepare a record of tests and inspections. Include the following:
  1. Date test or inspection was conducted.
  2. Description of the Work tested or inspected.
  3. Date test or inspection results were transmitted to Architect.
  4. Identification of testing agency or special inspector conducting test or inspection.

### 3.2 REPAIR AND PROTECTION

- A. General: On completion of testing, inspection, sample taking, and similar services, repair damaged construction and restore substrates and finishes.
  1. Provide materials and comply with installation requirements specified in other Specification Sections or matching existing substrates and finishes. Restore patched areas and extend restoration into adjoining areas with durable seams that are as invisible as

## QUALITY REQUIREMENTS

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possible. Comply with the Contract Document requirements for cutting and patching in Section 017300 "Execution."

- B. Protect construction exposed by or for quality-control service activities.
- C. Repair and protection are Contractor's responsibility, regardless of the assignment of responsibility for quality-control services.

END OF SECTION 014000

## SECTION 015000 - TEMPORARY FACILITIES AND CONTROLS

### PART 1 - GENERAL

#### 1.1 SUMMARY

- A. Section includes requirements for temporary utilities, support facilities, and security and protection facilities.

#### 1.2 USE CHARGES

- A. General: Installation and removal of and use charges for temporary facilities shall be included in the Contract Sum unless otherwise indicated. Allow other entities engaged in the Project to use temporary services and facilities without cost, including, but not limited to, Architect, testing agencies, and authorities having jurisdiction.
- B. Water Service from Existing System: Water from Owner's existing water system is available for use without metering and without payment of use charges. Provide connections and extensions of services as required for construction operations.
- C. Electric Power Service from Existing System: Electric power from Owner's existing system is available for use without metering and without payment of use charges. Provide connections and extensions of services as required for construction operations.

### PART 2 - PRODUCTS

#### 2.1 EQUIPMENT

- A. Fire Extinguishers: Portable, UL rated; with class and extinguishing agent as required by locations and classes of fire exposures.

### PART 3 - EXECUTION

#### 3.1 INSTALLATION, GENERAL

- A. Locate facilities where they will serve Project adequately and result in minimum interference with performance of the Work. Relocate and modify facilities as required by progress of the Work.
- B. Provide each facility ready for use when needed to avoid delay. Do not remove until facilities are no longer needed or are replaced by authorized use of completed permanent facilities.

### 3.2 TEMPORARY UTILITY INSTALLATION

- A. General: Install temporary service or connect to existing service.
  - 1. Arrange with utility company, Owner, and existing users for time when service can be interrupted, if necessary, to make connections for temporary services.
- B. Sanitary Facilities: Provide temporary toilets, wash facilities, and drinking water for use of construction personnel. Comply with requirements of authorities having jurisdiction for type, number, location, operation, and maintenance of fixtures and facilities.
- C. Isolation of Work Areas in Occupied Facilities: Prevent dust, fumes, and odors from entering occupied areas.

### 3.3 SUPPORT FACILITIES INSTALLATION

- A. Parking: Use designated areas of Owner's existing parking areas for construction personnel.
- B. Waste Disposal Facilities: Provide waste-collection containers in sizes adequate to handle waste from construction operations. Comply with requirements of authorities having jurisdiction. Comply with progress cleaning requirements in Section 017300 "Execution."

### 3.4 SECURITY AND PROTECTION FACILITIES INSTALLATION

- A. Protection of Existing Facilities: Protect existing vegetation, equipment, structures, utilities, and other improvements at Project site and on adjacent properties, except those indicated to be removed or altered. Repair damage to existing facilities.
- B. Security Enclosure and Lockup: Install temporary enclosure around partially completed areas of construction. Provide lockable entrances to prevent unauthorized entrance, vandalism, theft, and similar violations of security. Lock entrances at end of each workday.
- C. Barricades, Warning Signs, and Lights: Comply with requirements of authorities having jurisdiction for erecting structurally adequate barricades, including warning signs and lighting.
- D. Temporary Egress: Maintain temporary egress from existing occupied facilities as required by authorities having jurisdiction.
- E. Temporary Enclosures: Provide temporary enclosures for protection of construction, in progress and completed, from exposure, foul weather, other construction operations, and similar activities. Provide temporary weathertight enclosure for building exterior.

### 3.5 OPERATION, TERMINATION, AND REMOVAL

- A. Supervision: Enforce strict discipline in use of temporary facilities. To minimize waste and abuse, limit availability of temporary facilities to essential and intended uses.

- B. Maintenance: Maintain facilities in good operating condition until removal.
- C. Temporary Facility Changeover: Do not change over from using temporary security and protection facilities to permanent facilities until Substantial Completion.
- D. Termination and Removal: Remove each temporary facility when need for its service has ended, when it has been replaced by authorized use of a permanent facility, or no later than Substantial Completion. Complete or, if necessary, restore permanent construction that may have been delayed because of interference with temporary facility. Repair damaged Work, clean exposed surfaces, and replace construction that cannot be satisfactorily repaired.
  - 1. Materials and facilities that constitute temporary facilities are property of Contractor.
  - 2. At Substantial Completion, repair, renovate, and clean permanent facilities used during construction period. Comply with final cleaning requirements specified in Section 017700 "Closeout Procedures."

END OF SECTION 015000

## SECTION 016000 - PRODUCT REQUIREMENTS

### PART 1 - GENERAL

#### 1.1 SUMMARY

- A. Section includes administrative and procedural requirements for selection of products for use in Project; product delivery, storage, and handling; manufacturers' standard warranties on products; special warranties; and comparable products.

#### 1.2 DEFINITIONS

- A. Products: Items obtained for incorporating into the Work, whether purchased for Project or taken from previously purchased stock. The term "product" includes the terms "material," "equipment," "system," and terms of similar intent.
  - 1. **Named Products:** Items identified by manufacturer's product name, including make or model number or other designation shown or listed in manufacturer's published product literature that is current as of date of the Contract Documents.
  - 2. **New Products:** Items that have not previously been incorporated into another project or facility. Products salvaged or recycled from other projects are not considered new products.
  - 3. **Comparable Product: Product that is demonstrated and approved by Architect through submittal process to have the indicated qualities related to type, function, dimension, in-service performance, physical properties, appearance, and other characteristics that equal or exceed those of specified product.**
- B. Substitutions: Changes in products, materials, equipment, and methods of construction from those required by the Contract Documents and proposed by Contractor.
- C. Basis-of-Design Product Specification: A specification in which a single manufacturer's product is named and accompanied by the words "basis-of-design product," including make or model number or other designation. In addition to the basis-of-design product description, product attributes and characteristics may be listed to establish the significant qualities related to type, function, in-service performance and physical properties, weight, dimension, durability, visual characteristics, and other special features and requirements for purposes of evaluating comparable products of additional manufacturers named in the specification.

#### 1.3 ACTION SUBMITTALS

- A. **Comparable Product Request Submittal: Comply with requirements in "Product Substitutions" Article.** Submit request prior to bid for consideration of each comparable product. Identify basis-of-design product or fabrication or installation method to be replaced. Include Specification Section number and title and Drawing numbers and titles.

## PRODUCT REQUIREMENTS

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1. Include data to indicate compliance with the requirements specified in "Comparable Products" Article.
2. Architect's Action: As specified in "Product Substitutions" Article.
  - a. Form of Architect's Approval of Submittal: As specified in Section 013300 "Submittal Procedures."
  - b. Use product specified if Architect does not issue a decision on use of a comparable product request within time allocated.
- B. Basis-of-Design Product Specification Submittal: Comply with requirements in Section 013300 "Submittal Procedures." Show compliance with requirements.

#### 1.4 QUALITY ASSURANCE

- A. Compatibility of Options: If Contractor is given option of selecting between two or more products for use on Project, select product compatible with products previously selected, even if previously selected products were also options.

#### 1.5 PRODUCT DELIVERY, STORAGE, AND HANDLING

- A. Deliver, store, and handle products using means and methods that will prevent damage, deterioration, and loss, including theft and vandalism. Comply with manufacturer's written instructions.
- B. Delivery and Handling:
  1. Schedule delivery to minimize long-term storage at Project site and to prevent overcrowding of construction spaces.
  2. Coordinate delivery with installation time to ensure minimum holding time for items that are flammable, hazardous, easily damaged, or sensitive to deterioration, theft, and other losses.
  3. Deliver products to Project site in an undamaged condition in manufacturer's original sealed container or other packaging system, complete with labels and instructions for handling, storing, unpacking, protecting, and installing.
  4. Inspect products on delivery to determine compliance with the Contract Documents and to determine that products are undamaged and properly protected.
- C. Storage:
  1. Store products to allow for inspection and measurement of quantity or counting of units.
  2. Store materials in a manner that will not endanger Project structure.
  3. Store products that are subject to damage by the elements, under cover in a weathertight enclosure above ground, with ventilation adequate to prevent condensation.
  4. Protect foam plastic from exposure to sunlight, except to extent necessary for period of installation and concealment.
  5. Comply with product manufacturer's written instructions for temperature, humidity, ventilation, and weather-protection requirements for storage.

#### PRODUCT REQUIREMENTS

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6. Protect stored products from damage and liquids from freezing.

## 1.6 PRODUCT WARRANTIES

- A. Warranties specified in other Sections shall be in addition to, and run concurrent with, other warranties required by the Contract Documents. Manufacturer's disclaimers and limitations on product warranties do not relieve Contractor of obligations under requirements of the Contract Documents.
  1. **Manufacturer's Warranty:** Written warranty furnished by individual manufacturer for a particular product and specifically endorsed by manufacturer to Owner.
  2. **Special Warranty:** Written warranty required by the Contract Documents to provide specific rights for Owner.
- B. **Special Warranties:** Prepare a written document that contains appropriate terms and identification, ready for execution.
  1. **Manufacturer's Standard Form:** Modified to include Project-specific information and properly executed.
  2. **Specified Form:** When specified forms are included with the Specifications, prepare a written document using indicated form properly executed.
  3. See other Sections for specific content requirements and particular requirements for submitting special warranties.

## PART 2 - PRODUCTS

### 2.1 PRODUCT SELECTION PROCEDURES

- A. **General Product Requirements:** Provide products that comply with the Contract Documents, are undamaged and, unless otherwise indicated, are new at time of installation.
  1. Provide products complete with accessories, trim, finish, fasteners, and other items needed for a complete installation and indicated use and effect.
- B. **Product Selection Procedures:**
  1. **Sole Product:** Where Specifications name a single manufacturer and product, provide the named product that complies with requirements. Comparable products or substitutions for Contractor's convenience will not be considered.
    - a. Sole product may be indicated by the phrase: "Subject to compliance with requirements, provide the following: ..."
  2. **Sole Manufacturer/Source:** Where Specifications name a single manufacturer or source, provide a product by the named manufacturer or source that complies with requirements. Comparable products or substitutions for Contractor's convenience will not be considered.

## PRODUCT REQUIREMENTS

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- a. Sole manufacturer/source may be indicated by the phrase: "Subject to compliance with requirements, provide products by the following: ..."
  3. Limited List of Products: Where Specifications include a list of names of both manufacturers and products, provide one of the products listed that complies with requirements. Comparable products or substitutions for Contractor's convenience will not be considered.
    - a. Limited list of products may be indicated by the phrase: "Subject to compliance with requirements, provide one of the following: ..."
  4. Non-Limited List of Products: Where Specifications include a list of names of both available manufacturers and products, provide one of the products listed, or an unnamed product, which complies with requirements.
    - a. Non-limited list of products is indicated by the phrase: "Subject to compliance with requirements, available products that may be incorporated in the Work include, but are not limited to, the following: ..."
  5. Limited List of Manufacturers: Where Specifications include a list of manufacturers' names, provide a product by one of the manufacturers listed that complies with requirements. Comparable products or substitutions for Contractor's convenience will not be considered.
    - a. Limited list of manufacturers is indicated by the phrase: "Subject to compliance with requirements, provide products by one of the following: ..."
  6. Non-Limited List of Manufacturers: Where Specifications include a list of available manufacturers, provide a product by one of the manufacturers listed, or a product by an unnamed manufacturer, which complies with requirements.
    - a. Non-limited list of manufacturers is indicated by the phrase: "Subject to compliance with requirements, available manufacturers whose products may be incorporated in the Work include, but are not limited to, the following: ..."
  7. Basis-of-Design Product: Where Specifications name a product, or refer to a product indicated on Drawings, and include a list of manufacturers, provide the specified or indicated product or a comparable product by one of the other named manufacturers. Drawings and Specifications indicate sizes, profiles, dimensions, and other characteristics that are based on the product named. Comply with requirements in "Comparable Products" Article for consideration of an unnamed product by one of the other named manufacturers.
- C. Visual Matching Specification: Where Specifications require "match Architect's sample," provide a product that complies with requirements and matches Architect's sample. Architect's decision will be final on whether a proposed product matches.

1. If no product available within specified category matches and complies with other specified requirements, comply with requirements in Section 012500 "Substitution Procedures" for proposal of product.

- D. Visual Selection Specification: Where Specifications include the phrase "as selected by Architect from manufacturer's full range" or similar phrase, select a product that complies with requirements. Architect will select color, gloss, pattern, density, or texture from manufacturer's product line that includes both standard and premium items.

## 2.2 COMPARABLE PRODUCTS

- A. Conditions for Consideration of Comparable Products: Architect will consider Contractor's request for comparable product **prior to bid** when the following conditions are satisfied. If the following conditions are not satisfied, Architect may return requests without action, except to record noncompliance with these requirements:

1. Evidence that proposed product does not require revisions to the Contract Documents, is consistent with the Contract Documents, will produce the indicated results, and is compatible with other portions of the Work. Detailed comparison of significant qualities of proposed product with those named in the Specifications. Significant product qualities include attributes such as type, function, in-service performance and physical properties, weight, dimension, durability, visual characteristics, and other specific features and requirements.
2. Evidence that proposed product provides specified warranty.
3. List of similar installations for completed projects with project names and addresses and names and addresses of architects and owners, if requested.
4. Samples, if requested.

## 2.3 PRODUCT SUBSTITUTIONS

- A. The materials, products and systems described in the Contract Documents establish a standard of required function, dimension, appearance and quality to be met by any proposed substitution and shall not be construed as limiting competition.
- B. Requests for approval of alternative products shall be made by Bidders bidding as prime contractors. No approvals for substitutions will be granted directly to suppliers, distributors, or subcontractors.
- C. Each such request shall include a complete description of the proposed substitution, the name of the material or system for which it is to be substituted, drawings, product data, performance and test data and other data or information necessary for a complete evaluation. It is the sole responsibility of the Bidder to submit complete descriptive and technical information so that the Architect can make proper appraisal of the submittal. Lack of proper information will be sufficient cause for rejection. Reference to catalogs that may or may not be available to the Architect will not be acceptable. All requests shall be in writing, submitted directly to the Architect, and shall clearly indicate the substitution requested.

- D. Pursuant to A.R.S. § 34-104-C, the following procedures shall be used:
1. Bidders desiring to submit alternative product proposals for prior approval of the Architect shall submit such proposals at least eight days prior to the original deadline for receiving bids. The Architect shall consider and either approve or reject all proposals submitted.
  2. If, by the close of the fifth day prior to the deadline for receiving bids, the Architect has approved any alternative product proposals, the bidding documents shall be modified to include the alternative products. The Architect shall publish the modification in the same manner as the original bidding documents at least five days prior to the bidding deadline.
  3. If the Architect rejects an alternative product proposal, he shall give notice of the rejection to the Owner prior to the deadline for receiving bids. Notice shall include a description of the rejected product.
- E. Bidders shall not rely upon approval made in any other manner.
- F. Any additional costs to the project brought about by the approval of a substitution shall be the responsibility of the person or firm requesting the substitution.
- G. Timing: **Architect will only consider requests for substitutions prior to bid.**

PART 3 - EXECUTION (Not Used)

END OF SECTION 016000

## SECTION 017300 - EXECUTION

### PART 1 - GENERAL

#### 1.1 SUMMARY

- A. Section includes general administrative and procedural requirements governing execution of the Work including, but not limited to, the following:
1. Installation of the Work.
  2. Cutting and patching.
  3. Progress cleaning.
  4. Protection of installed construction.

#### 1.2 QUALITY ASSURANCE

- A. Cutting and Patching: Comply with requirements for and limitations on cutting and patching of construction elements.
1. Structural Elements: When cutting and patching structural elements, notify Architect of locations and details of cutting and await directions from Architect before proceeding. Shore, brace, and support structural elements during cutting and patching. Do not cut and patch structural elements in a manner that could change their load-carrying capacity or increase deflection.
  2. Operational Elements: Do not cut and patch operating elements and related components in a manner that results in reducing their capacity to perform as intended or that results in increased maintenance or decreased operational life or safety.
  3. Other Construction Elements: Do not cut and patch other construction elements or components in a manner that could change their load-carrying capacity, that results in reducing their capacity to perform as intended, or that results in increased maintenance or decreased operational life or safety.
  4. Visual Elements: Do not cut and patch construction in a manner that results in visual evidence of cutting and patching. Do not cut and patch exposed construction in a manner that would, in Architect's opinion, reduce the building's aesthetic qualities. Remove and replace construction that has been cut and patched in a visually unsatisfactory manner.
- B. Manufacturer's Installation Instructions: Obtain and maintain on-site manufacturer's written recommendations and instructions for installation of products and equipment.

### PART 2 - PRODUCTS

#### 2.1 MATERIALS

- A. General: Comply with requirements specified in other Sections.

#### EXECUTION

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- B. In-Place Materials: Use materials for patching identical to in-place materials. For exposed surfaces, use materials that visually match in-place adjacent surfaces to the fullest extent possible.
  - 1. If identical materials are unavailable or cannot be used, use materials that, when installed, will provide a match acceptable to Architect for the visual and functional performance of in-place materials.

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Existing Conditions: The existence and location of underground and other utilities and construction indicated as existing are not guaranteed. Before beginning sitework, investigate and verify the existence and location of underground utilities, mechanical and electrical systems, and other construction affecting the Work.
- B. Examination and Acceptance of Conditions: Before proceeding with each component of the Work, examine substrates, areas, and conditions, with Installer or Applicator present where indicated, for compliance with requirements for installation tolerances and other conditions affecting performance. Record observations.
  - 1. Examine walls, floors, and roofs for suitable conditions where products and systems are to be installed.
  - 2. Verify compatibility with and suitability of substrates, including compatibility with existing finishes or primers.
- C. Proceed with installation only after unsatisfactory conditions have been corrected. Proceeding with the Work indicates acceptance of surfaces and conditions.

### 3.2 PREPARATION

- A. Field Measurements: Take field measurements as required to fit the Work properly. Recheck measurements before installing each product. Where portions of the Work are indicated to fit to other construction, verify dimensions of other construction by field measurements before fabrication. Coordinate fabrication schedule with construction progress to avoid delaying the Work.
- B. Space Requirements: Verify space requirements and dimensions of items shown diagrammatically on Drawings.
- C. Review of Contract Documents and Field Conditions: Immediately on discovery of the need for clarification of the Contract Documents caused by differing field conditions outside the control of Contractor, submit a request for information to Architect according to requirements in Section 013100 "Project Management and Coordination."

### 3.3 INSTALLATION

- A. General: Locate the Work and components of the Work accurately, in correct alignment and elevation, as indicated.
  - 1. Make vertical work plumb and make horizontal work level.
  - 2. Where space is limited, install components to maximize space available for maintenance and ease of removal for replacement.
- B. Comply with manufacturer's written instructions and recommendations for installing products in applications indicated.
- C. Install products at the time and under conditions that will ensure the best possible results. Maintain conditions required for product performance until Substantial Completion.
- D. Conduct construction operations so no part of the Work is subjected to damaging operations or loading in excess of that expected during normal conditions of occupancy.
- E. Sequence the Work and allow adequate clearances to accommodate movement of construction items on site and placement in permanent locations.
- F. Attachment: Provide blocking and attachment plates and anchors and fasteners of adequate size and number to securely anchor each component in place, accurately located and aligned with other portions of the Work. Where size and type of attachments are not indicated, verify size and type required for load conditions.
  - 1. Mounting Heights: Where mounting heights are not indicated, mount components at heights directed by Architect.
  - 2. Allow for building movement, including thermal expansion and contraction.
  - 3. Coordinate installation of anchorages. Furnish setting drawings, templates, and directions for installing anchorages, including sleeves, concrete inserts, anchor bolts, and items with integral anchors, that are to be embedded in concrete or masonry. Deliver such items to Project site in time for installation.
- G. Joints: Make joints of uniform width. Where joint locations in exposed work are not indicated, arrange joints for the best visual effect. Fit exposed connections together to form hairline joints.
- H. Remove and replace damaged, defective, or non-conforming Work.

### 3.4 CUTTING AND PATCHING

- A. Cutting and Patching, General: Employ skilled workers to perform cutting and patching. Proceed with cutting and patching at the earliest feasible time, and complete without delay.
  - 1. Cut in-place construction to provide for installation of other components or performance of other construction, and subsequently patch as required to restore surfaces to their original condition.



- B. Existing Warranties: Remove, replace, patch, and repair materials and surfaces cut or damaged during installation or cutting and patching operations, by methods and with materials so as not to void existing warranties.
- C. Temporary Support: Provide temporary support of work to be cut.
- D. Protection: Protect in-place construction during cutting and patching to prevent damage. Provide protection from adverse weather conditions for portions of Project that might be exposed during cutting and patching operations.
- E. Adjacent Occupied Areas: Where interference with use of adjoining areas or interruption of free passage to adjoining areas is unavoidable, coordinate cutting and patching according to requirements in Section 011000 "Summary."
- F. Existing Utility Services and Mechanical/Electrical Systems: Where existing services/systems are required to be removed, relocated, or abandoned, bypass such services/systems before cutting to minimize interruption to occupied areas.
- G. Cutting: Cut in-place construction by sawing, drilling, breaking, chipping, grinding, and similar operations, including excavation, using methods least likely to damage elements retained or adjoining construction. If possible, review proposed procedures with original Installer; comply with original Installer's written recommendations.
  - 1. In general, use hand or small power tools designed for sawing and grinding, not hammering and chopping. Cut holes and slots neatly to minimum size required, and with minimum disturbance of adjacent surfaces. Temporarily cover openings when not in use.
  - 2. Finished Surfaces: Cut or drill from the exposed or finished side into concealed surfaces.
  - 3. Concrete and Masonry: Cut using a cutting machine, such as an abrasive saw or a diamond-core drill.
  - 4. Mechanical and Electrical Services: Cut off pipe or conduit in walls or partitions to be removed. Cap, valve, or plug and seal remaining portion of pipe or conduit to prevent entrance of moisture or other foreign matter after cutting.
  - 5. Proceed with patching after construction operations requiring cutting are complete.
- H. Patching: Patch construction by filling, repairing, refinishing, closing up, and similar operations following performance of other work. Patch with durable seams that are as invisible as practicable. Provide materials and comply with installation requirements specified in other Sections, where applicable.
  - 1. Inspection: Where feasible, test and inspect patched areas after completion to demonstrate physical integrity of installation.
  - 2. Exposed Finishes: Restore exposed finishes of patched areas and extend finish restoration into retained adjoining construction in a manner that will minimize evidence of patching and refinishing.
  - 3. Exterior Building Enclosure: Patch components in a manner that restores enclosure to a weathertight condition and ensures thermal and moisture integrity of building enclosure.
- I. Cleaning: Clean areas and spaces where cutting and patching are performed. Remove paint, mortar, oils, putty, and similar materials from adjacent finished surfaces.

### 3.5 PROGRESS CLEANING

- A. General: Clean Project site and work areas daily, including common areas. Enforce requirements strictly. Dispose of materials lawfully.
  - 1. Comply with requirements in NFPA 241 for removal of combustible waste materials and debris.
  - 2. Do not hold waste materials more than seven days during normal weather or three days if the temperature is expected to rise above 80 deg F.
  - 3. Containerize hazardous and unsanitary waste materials separately from other waste. Mark containers appropriately and dispose of legally, according to regulations.
    - a. Use containers intended for holding waste materials of type to be stored.
- B. Site: Maintain Project site free of waste materials and debris.
- C. Work Areas: Clean areas where work is in progress to the level of cleanliness necessary for proper execution of the Work.
  - 1. Remove liquid spills promptly.
  - 2. Where dust would impair proper execution of the Work, broom-clean or vacuum the entire work area, as appropriate.
- D. Installed Work: Keep installed work clean. Clean installed surfaces according to written instructions of manufacturer or fabricator of product installed, using only cleaning materials specifically recommended. If specific cleaning materials are not recommended, use cleaning materials that are not hazardous to health or property and that will not damage exposed surfaces.
- E. Concealed Spaces: Remove debris from concealed spaces before enclosing the space.
- F. Exposed Surfaces in Finished Areas: Clean exposed surfaces and protect as necessary to ensure freedom from damage and deterioration at time of Substantial Completion.
- G. Waste Disposal: Do not bury or burn waste materials on-site. Do not wash waste materials down sewers or into waterways.
- H. During handling and installation, clean and protect construction in progress and adjoining materials already in place. Apply protective covering where required to ensure protection from damage or deterioration at Substantial Completion.
- I. Clean and provide maintenance on completed construction as frequently as necessary through the remainder of the construction period. Adjust and lubricate operable components to ensure operability without damaging effects.
- J. Limiting Exposures: Supervise construction operations to ensure that no part of the construction, completed or in progress, is subject to harmful, dangerous, damaging, or otherwise deleterious exposure during the construction period.

3.6 PROTECTION OF INSTALLED CONSTRUCTION

- A. Provide final protection and maintain conditions that ensure installed Work is without damage or deterioration at time of Substantial Completion.
- B. Protection of Existing Items: Provide protection and ensure that existing items to remain undisturbed by construction are maintained in condition that existed at commencement of the Work.
- C. Comply with manufacturer's written instructions for temperature and relative humidity.

END OF SECTION 017300

## SECTION 017700 - CLOSEOUT PROCEDURES

### PART 1 - GENERAL

#### 1.1 SUMMARY

- A. Section includes administrative and procedural requirements for contract closeout, including, but not limited to, the following:
  - 1. Substantial Completion procedures.
  - 2. Final completion procedures.
  - 3. Warranties.
  - 4. Final cleaning.
  - 5. Repair of the Work.

#### 1.2 ACTION SUBMITTALS

- A. Contractor's List of Incomplete Items: Initial submittal at Substantial Completion.

#### 1.3 SUBSTANTIAL COMPLETION PROCEDURES

- A. Contractor's List of Incomplete Items: Prepare and submit a list of items to be completed and corrected (Contractor's punch list), indicating the value of each item on the list and reasons why the Work is incomplete.
- B. Submittals Prior to Substantial Completion: Complete the following a minimum of 10 days prior to requesting inspection for determining date of Substantial Completion. List items below that are incomplete at time of request.
  - 1. Certificates of Release: Obtain and submit releases from authorities having jurisdiction permitting Owner unrestricted use of the Work and access to services and utilities. Include occupancy permits, operating certificates, and similar releases.
  - 2. Submit closeout submittals specified in other Division 01 Sections, including project record documents, operation and maintenance manuals, damage or settlement surveys, property surveys, and similar final record information.
  - 3. Submit closeout submittals specified in individual Sections, including specific warranties, workmanship bonds, maintenance service agreements, final certifications, and similar documents.
- C. Procedures Prior to Substantial Completion: Complete the following a minimum of 10 days prior to requesting inspection for determining date of Substantial Completion. List items below that are incomplete at time of request.
  - 1. Perform preventive maintenance on equipment used prior to Substantial Completion.

2. Terminate and remove temporary facilities from Project site, along with mockups, construction tools, and similar elements.
3. Complete final cleaning requirements.
4. Touch up paint and otherwise repair and restore marred exposed finishes to eliminate visual defects.

- D. Inspection: Submit a written request for inspection to determine Substantial Completion a minimum of 5 days prior to date the Work will be completed and ready for final inspection and tests. On receipt of request, Architect will either proceed with inspection or notify Contractor of unfulfilled requirements. Architect will prepare the Certificate of Substantial Completion after inspection or will notify Contractor of items, either on Contractor's list or additional items identified by Architect, that must be completed or corrected before certificate will be issued.

#### 1.4 FINAL COMPLETION PROCEDURES

- A. Submittals Prior to Final Completion: Before requesting final inspection for determining final completion, complete the following:
1. Submit a final Application for Payment according to Section 012900 "Payment Procedures."
  2. List of Incomplete Items: Submit copy of Architect's Substantial Completion inspection list of items to be completed or corrected (punch list), endorsed and dated by Architect. Copy of the list shall state that each item has been completed or otherwise resolved for acceptance.
- B. Inspection: Submit a written request for final inspection to determine acceptance a minimum of 5 days prior to date the work will be completed and ready for final inspection and tests. On receipt of request, Architect will either proceed with inspection or notify Contractor of unfulfilled requirements. Architect will prepare a final Certificate for Payment after inspection or will notify Contractor of construction that must be completed or corrected before certificate will be issued.

#### 1.5 LIST OF INCOMPLETE ITEMS (PUNCH LIST)

- A. Organization of List: Include name and identification of each space and area affected by construction operations for incomplete items and items needing correction including, if necessary, areas disturbed by Contractor that are outside the limits of construction.
1. Organize list of spaces in sequential order.
  2. Organize items applying to each space by major element, including categories for ceiling, individual walls, floors, equipment, and building systems.

#### 1.6 SUBMITTAL OF PROJECT WARRANTIES

- A. Time of Submittal: Submit written warranties on request of Architect for designated portions of the Work where warranties are indicated to commence on dates other than date of Substantial

Completion, or when delay in submittal of warranties might limit Owner's rights under warranty.

- B. Organize warranty documents into an orderly sequence based on the table of contents of Project Manual.
- C. Warranty Electronic File: Provide warranties and bonds in PDF format. Assemble complete warranty and bond submittal package into a single electronic PDF file with bookmarks enabling navigation to each item. Provide bookmarked table of contents at beginning of document.
  - 1. Submit by email to Architect.
- D. Warranties in Paper Form:
  - 1. Bind warranties and bonds in heavy-duty, three-ring, vinyl-covered, loose-leaf binders, thickness as necessary to accommodate contents, and sized to receive 8-1/2-by-11-inch paper.
- E. Provide additional copies of each warranty to include in operation and maintenance manuals.

## PART 2 - PRODUCTS

### 2.1 MATERIALS

- A. Cleaning Agents: Use cleaning materials and agents recommended by manufacturer or fabricator of the surface to be cleaned. Do not use cleaning agents that are potentially hazardous to health or property or that might damage finished surfaces.

## PART 3 - EXECUTION

### 3.1 FINAL CLEANING

- A. General: Perform final cleaning. Conduct cleaning and waste-removal operations to comply with local laws and ordinances and Federal and local environmental and antipollution regulations.
- B. Cleaning: Employ experienced workers or professional cleaners for final cleaning. Clean each surface or unit to condition expected in an average commercial building cleaning and maintenance program. Comply with manufacturer's written instructions.
  - 1. Complete the following cleaning operations before requesting inspection for certification of Substantial Completion for entire Project or for a designated portion of Project:
    - a. Clean Project site, yard, and grounds, in areas disturbed by construction activities, including landscape development areas, of rubbish, waste material, litter, and other foreign substances.

## CLOSEOUT PROCEDURES

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- b. Clean exposed exterior hard-surfaced finishes to a dirt-free condition, free of stains, films, and similar foreign substances. Avoid disturbing natural weathering of exterior surfaces. Restore reflective surfaces to their original condition.
- c. Remove debris and surface dust from limited access spaces, including roofs, plenums, shafts, trenches, equipment vaults, manholes, attics, and similar spaces.
- d. Clean plumbing fixtures to a sanitary condition, free of stains, including stains resulting from water exposure.
- e. Leave Project clean and ready for occupancy.

### 3.2 REPAIR OF THE WORK

- A. Complete repair and restoration operations, before requesting inspection for determination of Substantial Completion.
- B. Repair, or remove and replace, defective construction. Repairing includes replacing defective parts, refinishing damaged surfaces, touching up with matching materials, and properly adjusting operating equipment. Where damaged or worn items cannot be repaired or restored, provide replacements. Remove and replace operating components that cannot be repaired. Restore damaged construction and permanent facilities used during construction to specified condition.

END OF SECTION 017700

## SECTION 017823 - OPERATION AND MAINTENANCE DATA

### PART 1 - GENERAL

#### 1.1 SUMMARY

- A. Section includes administrative and procedural requirements for preparing operation and maintenance manuals, including the following:
  - 1. Operation and maintenance documentation directory manuals.
  - 2. Product maintenance manuals.

#### 1.2 CLOSEOUT SUBMITTALS

- A. Submit operation and maintenance manuals indicated. Provide content for each manual as specified in individual Specification Sections, and as reviewed and approved at the time of Section submittals. Submit reviewed manual content formatted and organized as required by this Section.
  - 1. Architect will comment on whether content of operation and maintenance submittals is acceptable.
  - 2. Where applicable, clarify and update reviewed manual content to correspond to revisions and field conditions.
- B. Format: Submit operation and maintenance manuals in the following format:
  - 1. Submit on digital media acceptable to Architect. Enable reviewer comments on draft submittals.
- C. Comply with Section 017700 "Closeout Procedures" for schedule for submitting operation and maintenance documentation.

#### 1.3 FORMAT OF OPERATION AND MAINTENANCE MANUALS

- A. Manuals, Electronic Files: Submit manuals in the form of a multiple file composite electronic PDF file for each manual type required.
  - 1. Electronic Files: Use electronic files prepared by manufacturer where available. Where scanning of paper documents is required, configure scanned file for minimum readable file size.
  - 2. File Names and Bookmarks: Bookmark individual documents based on file names. Name document files to correspond to system, subsystem, and equipment names used in manual directory and table of contents. Group documents for each system and subsystem into individual composite bookmarked files, then create composite manual, so that resulting



bookmarks reflect the system, subsystem, and equipment names in a readily navigated file tree. Configure electronic manual to display bookmark panel on opening file.

#### 1.4 REQUIREMENTS FOR EMERGENCY, OPERATION, AND MAINTENANCE MANUALS

- A. Organization of Manuals: Unless otherwise indicated, organize each manual into a separate section for each system and subsystem, and a separate section for each piece of equipment not part of a system. Each manual shall contain the following materials, in the order listed:
  - 1. Title page.
  - 2. Table of contents.
  - 3. Manual contents.
- B. Title Page: Include the following information:
  - 1. Subject matter included in manual.
  - 2. Name and address of Project.
  - 3. Name and address of Owner.
  - 4. Date of submittal.
  - 5. Name and contact information for Contractor.
  - 6. Name and contact information for Architect.
  - 7. Names and contact information for major consultants to the Architect that designed the systems contained in the manuals.
  - 8. Cross-reference to related systems in other operation and maintenance manuals.
- C. Table of Contents: List each product included in manual, identified by product name, indexed to the content of the volume, and cross-referenced to Specification Section number in Project Manual.
- D. Manual Contents: Organize into sets of manageable size. Arrange contents alphabetically by system, subsystem, and equipment. If possible, assemble instructions for subsystems, equipment, and components of one system into a single binder.
- E. Identification: In the documentation directory and in each operation and maintenance manual, identify each system, subsystem, and piece of equipment with same designation used in the Contract Documents. If no designation exists, assign a designation according to ASHRAE Guideline 4, "Preparation of Operating and Maintenance Documentation for Building Systems."

#### 1.5 PRODUCT MAINTENANCE MANUALS

- A. Product Maintenance Manual: Assemble a complete set of maintenance data indicating care and maintenance of each product, material, and finish incorporated into the Work.
- B. Content: Organize manual into a separate section for each product, material, and finish. Include source information, product information, maintenance procedures, repair materials and sources, and warranties and bonds, as described below.

- C. Product Information: Include the following, as applicable:
1. Product name and model number.
  2. Manufacturer's name.
  3. Color, pattern, and texture.
  4. Material and chemical composition.
  5. Reordering information for specially manufactured products.
- D. Maintenance Procedures: Include manufacturer's written recommendations and the following:
1. Inspection procedures.
  2. Types of cleaning agents to be used and methods of cleaning.
  3. List of cleaning agents and methods of cleaning detrimental to product.
  4. Schedule for routine cleaning and maintenance.
  5. Repair instructions.
- E. Repair Materials and Sources: Include lists of materials and local sources of materials and related services.
- F. Warranties and Bonds: Include copies of warranties and bonds and lists of circumstances and conditions that would affect validity of warranties or bonds.
1. Include procedures to follow and required notifications for warranty claims.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 017823

## SECTION 017839 - PROJECT RECORD DOCUMENTS

### PART 1 - GENERAL

#### 1.1 SUMMARY

- A. Section includes administrative and procedural requirements for project record documents, including the following:
  - 1. Record Drawings.
  - 2. Record Specifications.
  - 3. Record Product Data.

#### 1.2 CLOSEOUT SUBMITTALS

- A. Record Drawings: Comply with the following:
  - 1. Number of Copies: Submit one set(s) of marked-up record prints and one PDF electronic file.
- B. Record Specifications: Submit annotated PDF electronic files of Project's Specifications, including addenda and contract modifications.
- C. Record Product Data: Submit annotated PDF electronic files and directories of each submittal.
  - 1. Where record Product Data are required as part of operation and maintenance manuals, submit duplicate marked-up Product Data as a component of manual.

#### 1.3 RECORD DRAWINGS

- A. Record Prints: Maintain one set of marked-up paper copies of the Contract Drawings and Shop Drawings, incorporating new and revised drawings as modifications are issued.
  - 1. Preparation: Mark record prints to show the actual installation where installation varies from that shown originally. Require individual or entity who obtained record data, whether individual or entity is Installer, subcontractor, or similar entity, to provide information for preparation of corresponding marked-up record prints.
    - a. Give particular attention to information on concealed elements that would be difficult to identify or measure and record later.
    - b. Accurately record information in an acceptable drawing technique.
    - c. Record data as soon as possible after obtaining it.
    - d. Record and check the markup before enclosing concealed installations.
    - e. Cross-reference record prints to corresponding photographic documentation.

2. Content: Types of items requiring marking include, but are not limited to, the following:

- a. Dimensional changes to Drawings.
- b. Revisions to details shown on Drawings.
- c. Revisions to routing of piping and conduits.
- d. Actual equipment locations.
- e. Changes made by Change Order or Construction Change Directive.
- f. Changes made following Architect's written orders.
- g. Details not on the original Contract Drawings.
- h. Field records for variable and concealed conditions.
- i. Record information on the Work that is shown only schematically.

3. Mark the Contract Drawings and Shop Drawings completely and accurately. Use personnel proficient at recording graphic information in production of marked-up record prints.

4. Mark record sets with erasable, red-colored pencil. Use other colors to distinguish between changes for different categories of the Work at same location.

5. Mark important additional information that was either shown schematically or omitted from original Drawings.

6. Note Construction Change Directive numbers, alternate numbers, Change Order numbers, and similar identification, where applicable.

B. Format: Identify and date each record Drawing; include the designation "PROJECT RECORD DRAWING" in a prominent location.

1. Record Prints: Organize record prints into manageable sets. Bind each set with durable paper cover sheets. Include identification on cover sheets.

2. Format: Annotated PDF electronic file.

3. Identification: As follows:

- a. Project name.
- b. Date.
- c. Designation "PROJECT RECORD DRAWINGS."
- d. Name of Architect.
- e. Name of Contractor.

#### 1.4 RECORD SPECIFICATIONS

A. Preparation: Mark Specifications to indicate the actual product installation where installation varies from that indicated in Specifications, addenda, and contract modifications.

B. Format: Submit record Specifications as annotated PDF electronic file or PDF electronic file(s) of marked-up paper copy of Specifications.

## 1.5 RECORD PRODUCT DATA

- A. Recording: Maintain one copy of each submittal during the construction period for project record document purposes. Post changes and revisions to project record documents as they occur; do not wait until end of Project.
- B. Preparation: Mark Product Data to indicate the actual product installation where installation varies substantially from that indicated in Product Data submittal.
- C. Format: Submit record Product Data as annotated PDF electronic file or scanned PDF electronic file(s) of marked-up paper copy of Product Data.
  - 1. Include record Product Data directory organized by Specification Section number and title, electronically linked to each item of record Product Data.

## 1.6 MAINTENANCE OF RECORD DOCUMENTS

- A. Maintenance of Record Documents: Store record documents in the field office apart from the Contract Documents used for construction. Do not use project record documents for construction purposes. Maintain record documents in good order and in a clean, dry, legible condition, protected from deterioration and loss. Provide access to project record documents for Architect's reference during normal working hours.

## PART 2 - PRODUCTS

## PART 3 - EXECUTION

END OF SECTION 017839

## SAMPLE AIA DOCUMENTS

### PART 1 - GENERAL

#### 1.1 SUMMARY

- A. The following sample American Institute of Architects (AIA) Documents are referenced throughout these Specifications. Sample documents are provided for reference purposes only. AIA Documents are owned by the AIA and require a license for official use. Contact the AIA to purchase a user license to have access to and use all AIA Documents.

1. G701 – Change Order
2. G702 – Pay Application
3. G703 – Continuation Sheet
4. G706 – Contractor’s Affidavit of Payment of Debts and Claims
5. G706A – Contractor’s Affidavit of Release of Liens
6. G710 – Architects Supplemental Instructions
7. G714 – Construction Change Directive

### PART 2 - PRODUCTS (Not Used)

### PART 3 - EXECUTION (Not Used)

## END OF SAMPLE AIA DOCUMENTS



# AIA<sup>®</sup> Document G701<sup>™</sup> – 2017

## Change Order

**PROJECT:** *(name and address)*

**CONTRACT INFORMATION:**

Contract For:  
Date:

**CHANGE ORDER INFORMATION:**

Change Order Number:  
Date:

**OWNER:** *(name and address)*

**ARCHITECT:** *(name and address)*

**CONTRACTOR:** *(name and address)*

**THE CONTRACT IS CHANGED AS FOLLOWS:**

*(Insert a detailed description of the change and, if applicable, attach or reference specific exhibits. Also include agreed upon adjustments attributable to executed Construction Change Directives.)*

The original (Contract Sum) (Guaranteed Maximum Price) was \$ \_\_\_\_\_

The net change by previously authorized Change Orders \$ \_\_\_\_\_

The (Contract Sum) (Guaranteed Maximum Price) prior to this Change Order was \$ \_\_\_\_\_

The (Contract Sum) (Guaranteed Maximum Price) will be (increased) (decreased) (unchanged) by this Change Order in the amount of \$ \_\_\_\_\_

The new (Contract Sum) (Guaranteed Maximum Price), including this Change Order, will be \$ \_\_\_\_\_

The Contract Time will be (increased) (decreased) (unchanged) by ( ) days.

The new date of Substantial Completion will be

*NOTE: This Change Order does not include adjustments to the Contract Sum or Guaranteed Maximum Price, or the Contract Time, that have been authorized by Construction Change Directive until the cost and time have been agreed upon by both the Owner and Contractor, in which case a Change Order is executed to supersede the Construction Change Directive.*

**NOT VALID UNTIL SIGNED BY THE ARCHITECT, CONTRACTOR AND OWNER.**

\_\_\_\_\_  
ARCHITECT *(Firm name)*

\_\_\_\_\_  
CONTRACTOR *(Firm name)*

\_\_\_\_\_  
OWNER *(Firm name)*

\_\_\_\_\_  
SIGNATURE

\_\_\_\_\_  
SIGNATURE

\_\_\_\_\_  
SIGNATURE

\_\_\_\_\_  
PRINTED NAME AND TITLE

\_\_\_\_\_  
PRINTED NAME AND TITLE

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DATE

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DATE

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DATE

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## Application and Certificate for Payment

TO OWNER: \_\_\_\_\_ PROJECT: \_\_\_\_\_ APPLICATION NO: \_\_\_\_\_ DISTRIBUTION TO:

PERIOD TO: \_\_\_\_\_ OWNER

CONTRACTOR FOR: \_\_\_\_\_ ARCHITECT

CONTRACT DATE: \_\_\_\_\_ CONTRACTOR

PROJECT NOS: \_\_\_\_\_ FIELD

OTHER

FROM CONTRACTOR: \_\_\_\_\_ VIA ARCHITECT: \_\_\_\_\_

### CONTRACTOR'S APPLICATION FOR PAYMENT

Application is made for payment, as shown below, in connection with the Contract. AIA Document G703®, Continuation Sheet, is attached.

1. ORIGINAL CONTRACT SUM ..... \$ \_\_\_\_\_
2. NET CHANGE BY CHANGE ORDERS ..... \$ \_\_\_\_\_
3. CONTRACT SUM TO DATE (Line 1 ± 2) ..... \$ \_\_\_\_\_
4. TOTAL COMPLETED & STORED TO DATE (Column G on G703) ..... \$ \_\_\_\_\_

5. RETAINAGE:

- a. \_\_\_\_\_ % of Completed Work  
(Column D + E on G703) \$ \_\_\_\_\_
- b. \_\_\_\_\_ % of Stored Material  
(Column F on G703) \$ \_\_\_\_\_

Total Retainage (Lines 5a + 5b, or Total in Column I of G703) ..... \$ \_\_\_\_\_

6. TOTAL EARNED LESS RETAINAGE ..... \$ \_\_\_\_\_  
(Line 4 minus Line 5 Total)

7. LESS PREVIOUS CERTIFICATES FOR PAYMENT ..... \$ \_\_\_\_\_  
(Line 6 from prior Certificate)

8. CURRENT PAYMENT DUE ..... \$ \_\_\_\_\_

9. BALANCE TO FINISH, INCLUDING RETAINAGE ..... \$ \_\_\_\_\_  
(Line 3 minus Line 6)

CHANGE ORDER SUMMARY	ADDITIONS	DEDUCTIONS
Total changes approved in previous months by Owner	\$ _____	\$ _____
Total approved this month	\$ _____	\$ _____
<b>TOTAL</b>	<b>\$ _____</b>	<b>\$ _____</b>
NET CHANGES by Change Order	\$ _____	\$ _____

The undersigned Contractor certifies that to the best of the Contractor's knowledge, information and belief the Work covered by this Application for Payment has been completed in accordance with the Contract Documents, that all amounts have been paid by the Contractor for Work for which previous Certificates for Payment were issued and payments received from the Owner, and that current payment shown herein is now due.

CONTRACTOR: \_\_\_\_\_ Date: \_\_\_\_\_

By: \_\_\_\_\_

State of: \_\_\_\_\_

County of: \_\_\_\_\_

Subscribed and sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_

Notary Public: \_\_\_\_\_

My commission expires: \_\_\_\_\_

### ARCHITECT'S CERTIFICATE FOR PAYMENT

In accordance with the Contract Documents, based on on-site observations and the data comprising this application, the Architect certifies to the Owner that to the best of the Architect's knowledge, information and belief the Work has progressed as indicated, the quality of the Work is in accordance with the Contract Documents, and the Contractor is entitled to payment of the AMOUNT CERTIFIED.

AMOUNT CERTIFIED ..... \$ \_\_\_\_\_  
(Attach explanation if amount certified differs from the amount applied. Initial all figures on this Application and on the Continuation Sheet that are changed to conform with the amount certified.)

ARCHITECT: \_\_\_\_\_ Date: \_\_\_\_\_

By: \_\_\_\_\_

This Certificate is not negotiable. The AMOUNT CERTIFIED is payable only to the Contractor named herein. Issuance, payment and acceptance of payment are without prejudice to any rights of the Owner or Contractor under this Contract.

# AIA<sup>®</sup> Document G703<sup>®</sup> – 1992

## Continuation Sheet

AIA Document G702<sup>®</sup>–1992, Application and Certificate for Payment, or G732<sup>™</sup>–2009, Application and Certificate for Payment, Construction Manager as Adviser Edition, containing Contractor’s signed certification is attached.  
 In tabulations below, amounts are in US dollars.  
 Use Column I on Contracts where variable retainage for line items may apply.

**APPLICATION NO:**  
**APPLICATION DATE:**  
**PERIOD TO:**  
**ARCHITECT’S PROJECT NO:**

A ITEM NO.	B DESCRIPTION OF WORK	C SCHEDULED VALUE	D WORK COMPLETED		E THIS PERIOD	F MATERIALS PRESENTLY STORED <i>(Not in D or E)</i>	G TOTAL COMPLETED AND STORED TO DATE <i>(D+E+F)</i>	H BALANCE TO FINISH <i>(C – G)</i>	I RETAINAGE <i>(If variable rate)</i>
			FROM PREVIOUS APPLICATION <i>(D + E)</i>	%					
<b>GRAND TOTAL</b>									

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# AIA<sup>®</sup> Document G706<sup>™</sup> – 1994

## Contractor's Affidavit of Payment of Debts and Claims

PROJECT: *(Name and address)*

ARCHITECT'S PROJECT NUMBER:

OWNER

CONTRACT FOR:

ARCHITECT

CONTRACTOR

TO OWNER: *(Name and address)*

CONTRACT DATED:

SURETY

OTHER

STATE OF:

COUNTY OF:

The undersigned hereby certifies that, except as listed below, payment has been made in full and all obligations have otherwise been satisfied for all materials and equipment furnished, for all work, labor, and services performed, and for all known indebtedness and claims against the Contractor for damages arising in any manner in connection with the performance of the Contract referenced above for which the Owner or Owner's property might in any way be held responsible or encumbered.

EXCEPTIONS:

SUPPORTING DOCUMENTS ATTACHED HERETO:

CONTRACTOR: *(Name and address)*

1. Consent of Surety to Final Payment. Whenever Surety is involved, Consent of Surety is required. AIA Document G707<sup>™</sup>, Consent of Surety to Final Payment, may be used for this purpose.

Indicate attachment:  Yes  No

BY:

The following supporting documents should be attached hereto if required by the Owner:

*(Signature of authorized representative)*

1. Contractor's Release or Waiver of Liens, conditional upon receipt of final payment
2. Separate Releases or Waivers of Liens from Subcontractors and material and equipment suppliers, to the extent required by the Owner, accompanied by a list thereof
3. Contractor's Affidavit of Release of Liens (AIA Document G706A<sup>™</sup>)

*(Printed name and title)*

Subscribed and sworn to before me on this date:

Notary Public:

My Commission Expires:

**CAUTION: You should sign an original AIA Contract Document, on which this text appears in RED. An original assures that changes will not be obscured.**

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**AIA**<sup>®</sup>

# Document G706A™ – 1994

## Contractor's Affidavit of Release of Liens

PROJECT: *(Name and address)*

ARCHITECT'S PROJECT NUMBER:

CONTRACT FOR:

OWNER

ARCHITECT

CONTRACTOR

SURETY

OTHER

TO OWNER: *(Name and address)*

CONTRACT DATED:

STATE OF:

COUNTY OF:

The undersigned hereby certifies that to the best of the undersigned's knowledge, information and belief, except as listed below, the Releases or Waivers of Lien attached hereto include the Contractor, all Subcontractors, all suppliers of materials and equipment, and all performers of Work, labor or services who have or may have liens or encumbrances or the right to assert liens or encumbrances against any property of the Owner arising in any manner out of the performance of the Contract referenced above.

EXCEPTIONS:

SUPPORTING DOCUMENTS ATTACHED HERETO:

1. Contractor's Release or Waiver of Liens, conditional upon receipt of final payment.
2. Separate Releases or Waivers of Liens from Subcontractors and material and equipment suppliers, to the extent required by the Owner, accompanied by a list thereof.

CONTRACTOR: *(Name and address)*

BY:

\_\_\_\_\_  
*(Signature of authorized representative)*

\_\_\_\_\_  
*(Printed name and title)*

Subscribed and sworn to before me on this date:

Notary Public:

My Commission Expires:

**CAUTION: You should sign an original AIA Contract Document, on which this text appears in RED. An original assures that changes will not be obscured.**

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 **AIA** Document G710™ – 2017**Architect's Supplemental Instructions**

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**PROJECT:** *(name and address)***CONTRACT INFORMATION:**

Contract For:

Date:

**ASI INFORMATION:**

ASI Number:

Date:

**OWNER:** *(name and address)***ARCHITECT:** *(name and address)***CONTRACTOR:** *(name and address)*

---

The Contractor shall carry out the Work in accordance with the following supplemental instructions without change in Contract Sum or Contract Time. Proceeding with the Work in accordance with these instructions indicates your acknowledgment that there will be no change in the Contract Sum or Contract Time.

*(Insert a detailed description of the Architect's supplemental instructions and, if applicable, attach or reference specific exhibits.)*

---

**ISSUED BY THE ARCHITECT:**

---

**ARCHITECT** *(Firm name)*

---

**SIGNATURE**

---

**PRINTED NAME AND TITLE**

---

**DATE**



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# AIA Document G714™ – 2017

## Construction Change Directive

**PROJECT:** *(name and address)*

**CONTRACT INFORMATION:**

Contract For:  
Date:

**CCD INFORMATION:**

Directive Number:  
Date:

**OWNER:** *(name and address)*

**ARCHITECT:** *(name and address)*

**CONTRACTOR:** *(name and address)*

The Contractor is hereby directed to make the following change(s) in this Contract:  
*(Insert a detailed description of the change and, if applicable, attach or reference specific exhibits.)*

### PROPOSED ADJUSTMENTS

1. The proposed basis of adjustment to the Contract Sum or Guaranteed Maximum Price:

- Lump Sum (increase) (decrease) of \$
- Unit Price of \$ \_\_\_\_\_ per \_\_\_\_\_
- Cost, as defined below, plus the following fee:  
*(Insert a definition of, or method for determining, cost)*
- As follows:

2. The Contract Time is proposed to (be adjusted) (remain unchanged). The proposed adjustment, if any, is (an increase of \_\_\_\_\_ days) (a decrease of \_\_\_\_\_ days).

*NOTE: The Owner, Architect and Contractor should execute a Change Order to supersede this Construction Change Directive to the extent they agree upon adjustments to the Contract Sum, Contract Time, or Guaranteed Maximum price for the change(s) described herein.*

When signed by the Owner and Architect and received by the Contractor, this document becomes effective IMMEDIATELY as a Construction Change Directive (CCD), and the Contractor shall proceed with the change(s) described above.

Contractor signature indicates agreement with the proposed adjustments in Contract Sum and Contract Time set forth in this CCD.

\_\_\_\_\_  
**ARCHITECT** *(Firm name)*

\_\_\_\_\_  
**OWNER** *(Firm name)*

\_\_\_\_\_  
**CONTRACTOR** *(Firm name)*

\_\_\_\_\_  
**SIGNATURE**

\_\_\_\_\_  
**SIGNATURE**

\_\_\_\_\_  
**SIGNATURE**

\_\_\_\_\_  
**PRINTED NAME AND TITLE**

\_\_\_\_\_  
**PRINTED NAME AND TITLE**

\_\_\_\_\_  
**PRINTED NAME AND TITLE**

\_\_\_\_\_  
**DATE**

\_\_\_\_\_  
**DATE**

\_\_\_\_\_  
**DATE**

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## SECTION 024119 - SELECTIVE DEMOLITION

### PART 1 - GENERAL

#### 1.1 SUMMARY

##### A. Section Includes:

1. Demolition and removal of selected portions of building or structure.
2. Salvage of existing items to be reused or recycled.

#### 1.2 MATERIALS OWNERSHIP

##### A. Unless otherwise indicated, demolition waste becomes property of Contractor.

##### B. Historic items, relics, antiques, and similar objects including, but not limited to, cornerstones and their contents, commemorative plaques and tablets, and other items of interest or value to Owner that may be uncovered during demolition remain the property of Owner.

1. Carefully salvage in a manner to prevent damage and promptly return to Owner.

#### 1.3 PREINSTALLATION MEETINGS

##### A. Predemolition Conference: Conduct conference at Project site.

1. Inspect and discuss condition of construction to be selectively demolished.
2. Review structural load limitations of existing structure.
3. Review and finalize selective demolition schedule and verify availability of materials, demolition personnel, equipment, and facilities needed to make progress and avoid delays.
4. Review requirements of work performed by other trades that rely on substrates exposed by selective demolition operations.
5. Review areas where existing construction is to remain and requires protection.

#### 1.4 INFORMATIONAL SUBMITTALS

##### A. Engineering Survey: Submit engineering survey of condition of building.

##### B. Proposed Protection Measures: Submit report, including Drawings, that indicates the measures proposed for protecting individuals and property, for dust control and for noise control. Indicate proposed locations and construction of barriers.

##### C. Schedule of selective demolition activities with starting and ending dates for each activity.

- D. Predemolition photographs or video.
- E. Statement of Refrigerant Recovery: Signed by refrigerant recovery technician.

#### 1.5 CLOSEOUT SUBMITTALS

- A. Inventory of items that have been removed and salvaged.

#### 1.6 QUALITY ASSURANCE

- A. Refrigerant Recovery Technician Qualifications: Certified by an EPA-approved certification program.

#### 1.7 FIELD CONDITIONS

- A. Owner will occupy portions of building immediately adjacent to selective demolition area. Conduct selective demolition so Owner's operations will not be disrupted.
- B. Conditions existing at time of inspection for bidding purpose will be maintained by Owner as far as practical.
  - 1. Before selective demolition, Owner will remove the following items:
    - a. **<Insert items to be removed by Owner>**.
- C. Notify Architect of discrepancies between existing conditions and Drawings before proceeding with selective demolition.
- D. Hazardous Materials: It is not expected that hazardous materials will be encountered in the Work.
  - 1. Hazardous materials will be removed by Owner before start of the Work.
  - 2. If suspected hazardous materials are encountered, do not disturb; immediately notify Architect and Owner. Hazardous materials will be removed by Owner under a separate contract.
- E. Storage or sale of removed items or materials on-site is not permitted.
- F. Utility Service: Maintain existing utilities indicated to remain in service and protect them against damage during selective demolition operations.
  - 1. Maintain fire-protection facilities in service during selective demolition operations.
- G. Arrange selective demolition schedule so as not to interfere with Owner's operations.

#### SELECTIVE DEMOLITION

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## 1.8 WARRANTY

- A. Existing Warranties: Remove, replace, patch, and repair materials and surfaces cut or damaged during selective demolition, by methods and with materials and using approved contractors so as not to void existing warranties.

## PART 2 - PRODUCTS

### 2.1 PERFORMANCE REQUIREMENTS

- A. Regulatory Requirements: Comply with governing EPA notification regulations before beginning selective demolition. Comply with hauling and disposal regulations of authorities having jurisdiction.
- B. Standards: Comply with ANSI/ASSP A10.6 and NFPA 241.

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Verify that utilities have been disconnected and capped before starting selective demolition operations.
- B. Perform an engineering survey of condition of building to determine whether removing any element might result in structural deficiency or unplanned collapse of any portion of structure or adjacent structures during selective building demolition operations.
- C. Inventory and record the condition of items to be removed and salvaged.

### 3.2 PREPARATION

- A. Refrigerant: Before starting demolition, remove refrigerant from mechanical equipment according to 40 CFR 82 and regulations of authorities having jurisdiction.

### 3.3 UTILITY SERVICES AND MECHANICAL/ELECTRICAL SYSTEMS

- A. Existing Services/Systems to Remain: Maintain services/systems indicated to remain and protect them against damage.
- B. Existing Services/Systems to Be Removed, Relocated, or Abandoned: Locate, identify, disconnect, and seal or cap off utility services and mechanical/electrical systems serving areas to be selectively demolished.
  - 1. Owner will arrange to shut off indicated services/systems when requested by Contractor.

## SELECTIVE DEMOLITION

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2. Arrange to shut off utilities with utility companies.
3. If services/systems are required to be removed, relocated, or abandoned, provide temporary services/systems that bypass area of selective demolition and that maintain continuity of services/systems to other parts of building.
4. Disconnect, demolish, and remove fire-suppression systems, plumbing, and HVAC systems, equipment, and components indicated on Drawings to be removed.
  - a. Piping to Be Removed: Remove portion of piping indicated to be removed and cap or plug remaining piping with same or compatible piping material.
  - b. Piping to Be Abandoned in Place: Drain piping and cap or plug piping with same or compatible piping material and leave in place.
  - c. Equipment to Be Removed: Disconnect and cap services and remove equipment.
  - d. Equipment to Be Removed and Reinstalled: Disconnect and cap services and remove, clean, and store equipment; when appropriate, reinstall, reconnect, and make equipment operational.
  - e. Equipment to Be Removed and Salvaged: Disconnect and cap services and remove equipment and deliver to Owner.
  - f. Ducts to Be Removed: Remove portion of ducts indicated to be removed and plug remaining ducts with same or compatible ductwork material.
  - g. Ducts to Be Abandoned in Place: Cap or plug ducts with same or compatible ductwork material and leave in place.

### 3.4 PROTECTION

- A. Temporary Protection: Provide temporary barricades and other protection required to prevent injury to people and damage to adjacent buildings and facilities to remain.
  1. Provide protection to ensure safe passage of people around selective demolition area and to and from occupied portions of building.
  2. Provide temporary weather protection, during interval between selective demolition of existing construction on exterior surfaces and new construction, to prevent water leakage and damage to structure and interior areas.
  3. Protect walls, ceilings, floors, and other existing finish work that are to remain or that are exposed during selective demolition operations.
  4. Cover and protect furniture, furnishings, and equipment that have not been removed.
  5. Comply with requirements for temporary enclosures, dust control, heating, and cooling specified in Section 015000 "Temporary Facilities and Controls."
- B. Temporary Shoring: Design, provide, and maintain shoring, bracing, and structural supports as required to preserve stability and prevent movement, settlement, or collapse of construction and finishes to remain, and to prevent unexpected or uncontrolled movement or collapse of construction being demolished.
  1. Strengthen or add new supports when required during progress of selective demolition.
- C. Remove temporary barricades and protections where hazards no longer exist.

### 3.5 SELECTIVE DEMOLITION

- A. General: Demolish and remove existing construction only to the extent required by new construction and as indicated. Use methods required to complete the Work within limitations of governing regulations and as follows:
1. Proceed with selective demolition systematically, from higher to lower level. Complete selective demolition operations above each floor or tier before disturbing supporting members on the next lower level.
  2. Neatly cut openings and holes plumb, square, and true to dimensions required. Use cutting methods least likely to damage construction to remain or adjoining construction. Use hand tools or small power tools designed for sawing or grinding, not hammering and chopping. Temporarily cover openings to remain.
  3. Cut or drill from the exposed or finished side into concealed surfaces to avoid marring existing finished surfaces.
  4. Do not use cutting torches until work area is cleared of flammable materials. At concealed spaces, such as duct and pipe interiors, verify condition and contents of hidden space before starting flame-cutting operations. Maintain portable fire-suppression devices during flame-cutting operations.
  5. Maintain adequate ventilation when using cutting torches.
  6. Remove decayed, vermin-infested, or otherwise dangerous or unsuitable materials and promptly dispose of off-site.
  7. Remove structural framing members and lower to ground by method suitable to avoid free fall and to prevent ground impact or dust generation.
  8. Locate selective demolition equipment and remove debris and materials so as not to impose excessive loads on supporting walls, floors, or framing.
  9. Dispose of demolished items and materials promptly.
- B. Site Access and Temporary Controls: Conduct selective demolition and debris-removal operations to ensure minimum interference with roads, streets, walks, walkways, and other adjacent occupied and used facilities.
- C. Removed and Salvaged Items:
1. Clean salvaged items.
  2. Pack or crate items after cleaning. Identify contents of containers.
  3. Store items in a secure area until delivery to Owner.
  4. Transport items to Owner's storage area designated by Owner.
  5. Protect items from damage during transport and storage.
- D. Removed and Reinstalled Items:
1. Clean and repair items to functional condition adequate for intended reuse.
  2. Pack or crate items after cleaning and repairing. Identify contents of containers.
  3. Protect items from damage during transport and storage.
  4. Reinstall items in locations indicated. Comply with installation requirements for new materials and equipment. Provide connections, supports, and miscellaneous materials necessary to make item functional for use indicated.



- E. Existing Items to Remain: Protect construction indicated to remain against damage and soiling during selective demolition. When permitted by Architect, items may be removed to a suitable, protected storage location during selective demolition and cleaned and reinstalled in their original locations after selective demolition operations are complete.

### 3.6 SELECTIVE DEMOLITION PROCEDURES FOR SPECIFIC MATERIALS

- A. Concrete: Demolish in sections. Cut concrete full depth at junctures with construction to remain and at regular intervals using power-driven saw, and then remove concrete between saw cuts.
- B. Masonry: Demolish in small sections. Cut masonry at junctures with construction to remain, using power-driven saw, and then remove masonry between saw cuts.
- C. Concrete Slabs-on-Grade: Saw-cut perimeter of area to be demolished, and then break up and remove.

### 3.7 CLEANING

- A. Remove demolition waste materials from Project site and dispose of them in an EPA-approved construction and demolition waste landfill acceptable to authorities having jurisdiction.
  - 1. Do not allow demolished materials to accumulate on-site.
  - 2. Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.
  - 3. Remove debris from elevated portions of building by chute, hoist, or other device that will convey debris to grade level in a controlled descent.
- B. Burning: Do not burn demolished materials.
- C. Clean adjacent structures and improvements of dust, dirt, and debris caused by selective demolition operations. Return adjacent areas to condition existing before selective demolition operations began.

END OF SECTION 024119

## SECTION 032000 - CONCRETE REINFORCING

### PART 1 - GENERAL

#### 1.1 SUMMARY

A. Section Includes:

1. Steel reinforcement bars.

#### 1.2 ACTION SUBMITTALS

A. Product Data: For the following:

1. Each type of steel reinforcement.
2. Bar supports.
3. Mechanical splice couplers.

B. Shop Drawings: Comply with ACI SP-066:

1. Include placing drawings that detail fabrication, bending, and placement.
2. Include bar sizes, lengths, materials, grades, bar schedules, stirrup spacing, bent bar diagrams, bar arrangement, location of splices, lengths of lap splices, details of mechanical splice couplers, details of welding splices, tie spacing, hoop spacing, and supports for concrete reinforcement.

C. Construction Joint Layout: Indicate proposed construction joints required to build the structure.

1. Location of construction joints is subject to approval of Architect.

#### 1.3 INFORMATIONAL SUBMITTALS

A. Welding certificates.

1. Reinforcement to Be Welded: Welding procedure specification in accordance with AWS D1.4/D1.4M.

B. Material Test Reports: For the following, from a qualified testing agency:

1. Steel Reinforcement:
  - a. For reinforcement to be welded, mill test analysis for chemical composition and carbon equivalent of the steel in accordance with ASTM A706/A706M.
2. Mechanical splice couplers.

- C. Field quality-control reports.

#### 1.4 QUALITY ASSURANCE

- A. Welding Qualifications: Qualify procedures and personnel in accordance with AWS D1.4/D 1.4M.

### PART 2 - PRODUCTS

#### 2.1 STEEL REINFORCEMENT

- A. Reinforcing Bars: ASTM A615/A615M, deformed.
- B. Low-Alloy Steel Reinforcing Bars: ASTM A706/A706M, deformed.
- C. Headed-Steel Reinforcing Bars: ASTM A970/A970M.
- D. Galvanized Reinforcing Bars:
  - 1. Steel Bars: ASTM A615/A615M, Grade 60, deformed bars.

#### 2.2 REINFORCEMENT ACCESSORIES

- A. Bar Supports: Bolsters, chairs, spacers, and other devices for spacing, supporting, and fastening reinforcing bars and welded-wire reinforcement in place.
  - 1. Manufacture bar supports from steel wire, plastic, or precast concrete in accordance with CRSI's "Manual of Standard Practice," of greater compressive strength than concrete and as follows:
    - a. For concrete surfaces exposed to view, where legs of wire bar supports contact forms, use CRSI Class 1 plastic-protected steel wire, all-plastic bar supports, or CRSI Class 2 stainless steel bar supports.

#### 2.3 FABRICATING REINFORCEMENT

- A. Fabricate steel reinforcement according to CRSI's "Manual of Standard Practice."

### PART 3 - EXECUTION

#### 3.1 PREPARATION

- A. Protection of In-Place Conditions:

#### CONCRETE REINFORCING

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1. Do not cut or puncture vapor retarder.
2. Repair damage and reseal vapor retarder before placing concrete.

B. Clean reinforcement of loose rust and mill scale, earth, ice, and other foreign materials that reduce bond to concrete.

### 3.2 INSTALLATION OF STEEL REINFORCEMENT

A. Comply with CRSI's "Manual of Standard Practice" for placing and supporting reinforcement.

B. Accurately position, support, and secure reinforcement against displacement.

1. Locate and support reinforcement with bar supports to maintain minimum concrete cover.
2. Do not tack weld crossing reinforcing bars.

C. Preserve clearance between bars of not less than 1 inch, not less than one bar diameter, or not less than 1-1/3 times size of large aggregate, whichever is greater.

D. Provide concrete coverage in accordance with ACI 318.

E. Set wire ties with ends directed into concrete, not toward exposed concrete surfaces.

F. Splices: Lap splices as indicated on Drawings.

1. Bars indicated to be continuous, and all vertical bars to be lapped not less than 36 bar diameters at splices, or 24 inches, whichever is greater.
2. Stagger splices in accordance with ACI 318.

### 3.3 JOINTS

A. Construction Joints: Install so strength and appearance of concrete are not impaired, at locations indicated or as approved by Architect.

1. Place joints perpendicular to main reinforcement.
2. Continue reinforcement across construction joints unless otherwise indicated.
3. Do not continue reinforcement through sides of strip placements of floors and slabs.

### 3.4 INSTALLATION TOLERANCES

A. Comply with ACI 117.

### 3.5 FIELD QUALITY CONTROL

A. Special Inspections: Owner will engage a special inspector and qualified testing and inspecting agency to perform field tests and inspections and prepare test reports.

- B. Testing Agency: Owner will engage a qualified testing and inspecting agency to perform tests and inspections and to submit reports.
  
- C. Inspections:
  - 1. Steel-reinforcement placement.
  - 2. Steel-reinforcement mechanical splice couplers.
  - 3. Steel-reinforcement welding.

END OF SECTION 032000

## SECTION 033000 - CAST-IN-PLACE CONCRETE

### PART 1 - GENERAL

#### 1.1 SUMMARY

##### A. Section Includes:

1. Cast-in-place concrete, including concrete materials, mixture design, placement procedures, and finishes.

#### 1.2 DEFINITIONS

- A. Cementitious Materials: Portland cement alone or in combination with one or more of the following: blended hydraulic cement, fly ash, slag cement, and other pozzolans materials subject to compliance with requirements.
- B. Water/Cement Ratio (w/cm): The ratio by weight of water to cementitious materials.

#### 1.3 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Design Mixtures: For each concrete mixture.
- C. Shop Drawings:
  1. Construction Joint Layout: Indicate proposed construction joints required to construct the structure.
    - a. Location of construction joints is subject to approval of the Architect.

#### 1.4 QUALITY ASSURANCE

- A. Ready-Mixed Concrete Manufacturer Qualifications: A firm experienced in manufacturing ready-mixed concrete products and that complies with ASTM C94/C94M requirements for production facilities and equipment.

#### 1.5 PRECONSTRUCTION TESTING

- A. Preconstruction Testing Service: Engage a qualified testing agency to perform preconstruction testing on each concrete mixture.

1. Include the following information in each test report:
  - a. Admixture dosage rates.
  - b. Slump.
  - c. Air content.
  - d. Seven-day compressive strength.
  - e. 28-day compressive strength.

#### 1.6 DELIVERY, STORAGE, AND HANDLING

- A. Comply with ASTM C94/C94M and ACI 301.

#### 1.7 FIELD CONDITIONS

- A. Cold-Weather Placement: Comply with ACI 301 and ACI 306.1.
- B. Hot-Weather Placement: Comply with ACI 301 and ACI 305.1.

### PART 2 - PRODUCTS

#### 2.1 CONCRETE, GENERAL

- A. ACI Publications: Comply with ACI 301 unless modified by requirements in the Contract Documents.

#### 2.2 CONCRETE MATERIALS

- A. Cementitious Materials:
  1. Portland Cement: ASTM C150/C150M, Type I/II, gray.
  2. Fly Ash: ASTM C618, Class C or F.
- B. Normal-Weight Aggregates: ASTM C33/C33M, Class 3M coarse aggregate or better, graded. Provide aggregates from a single source.
  1. Maximum Coarse-Aggregate Size: 3/4 inch nominal.
- C. Air-Entraining Admixture: ASTM C260/C260M.
- D. Chemical Admixtures: Certified by manufacturer to be compatible with other admixtures that do not contribute water-soluble chloride ions exceeding those permitted in hardened concrete. Do not use calcium chloride or admixtures containing calcium chloride in steel-reinforced concrete.
  1. Water-Reducing Admixture: ASTM C494/C494M, Type A.

#### CAST-IN-PLACE CONCRETE

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2. Retarding Admixture: ASTM C494/C494M, Type B.
3. Water-Reducing and -Retarding Admixture: ASTM C494/C494M, Type D.
4. High-Range, Water-Reducing Admixture: ASTM C494/C494M, Type F.
5. High-Range, Water-Reducing and -Retarding Admixture: ASTM C494/C494M, Type G.
6. Plasticizing and Retarding Admixture: ASTM C1017/C1017M, Type II.

- E. Water and Water Used to Make Ice: ASTM C94/C94M, potable.

## 2.3 VAPOR RETARDERS

- A. Sheet Vapor Retarder, Class A: ASTM E1745, Class A; not less than 15 mils thick. Include manufacturer's recommended adhesive or pressure-sensitive tape.

## 2.4 CURING MATERIALS

- A. Absorptive Cover: AASHTO M 182, Class 2, burlap cloth made from jute or kenaf, weighing approximately 9 oz./sq. yd. when dry.
- B. Moisture-Retaining Cover: ASTM C171, polyethylene film burlap-polyethylene sheet.
- C. Water: Potable or complying with ASTM C1602/C1602M.
- D. Clear, Waterborne, Membrane-Forming, Curing and Sealing Compound: ASTM C1315, Type 1, Class A.

## 2.5 RELATED MATERIALS

- A. Expansion- and Isolation-Joint-Filler Strips: ASTM D1751, asphalt-saturated cellulosic fiber or ASTM D1752, cork or self-expanding cork.

## 2.6 CONCRETE MIXTURES, GENERAL

- A. Prepare design mixtures for each type and strength of concrete, proportioned on the basis of laboratory trial mixture or field test data, or both, in accordance with ACI 301.
1. Use a qualified testing agency for preparing and reporting proposed mixture designs, based on laboratory trial mixtures.
- B. Cementitious Materials: Limit percentage, by weight, of cementitious materials other than portland cement in concrete as follows:
1. Fly Ash: 25 percent by mass.
- C. Admixtures: Use admixtures in accordance with manufacturer's written instructions.
1. Use water-reducing admixture in concrete, as required, for placement and workability.

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## 2.7 CONCRETE MIXTURES

- A. Normal-weight concrete used for interior slabs-on-ground.
  - 1. Minimum Compressive Strength: 3500 psi.
  - 2. Maximum w/cm: 0.45.
  - 3. Minimum Cementitious Materials Content: 540 lb/cu. yd.
  - 4. Slump Limit: 4 inches, plus or minus 1 inch.
  - 5. Air Content:
    - a. Do not use an air-entraining admixture or allow total air content to exceed 3 percent for concrete used in trowel-finished floors.

## 2.8 CONCRETE MIXING

- A. Ready-Mixed Concrete: Measure, batch, mix, and deliver concrete in accordance with ASTM C94/C94M, and furnish batch ticket information.

## PART 3 - EXECUTION

### 3.1 INSTALLATION OF EMBEDDED ITEMS

- A. Place and secure anchorage devices and other embedded items required for adjoining Work that is attached to or supported by cast-in-place concrete.
  - 1. Use setting drawings, templates, diagrams, instructions, and directions furnished with items to be embedded.
  - 2. Install anchor rods, accurately located, to elevations required and complying with tolerances in Section 7.5 of ANSI/AISC 303.

### 3.2 INSTALLATION OF VAPOR RETARDER

- A. Sheet Vapor Retarders: Place, protect, and repair sheet vapor retarder in accordance with ASTM E1643 and manufacturer's written instructions.
  - 1. Install vapor retarder with longest dimension parallel with direction of concrete pour.
  - 2. Face laps away from exposed direction of concrete pour.
  - 3. Lap vapor retarder over footings and grade beams not less than 6 inches, sealing vapor retarder to concrete.
  - 4. Lap joints 6 inches and seal with manufacturer's recommended tape.
  - 5. Terminate vapor retarder at the top of floor slabs, grade beams, and pile caps, sealing entire perimeter to floor slabs, grade beams, foundation walls, or pile caps.
  - 6. Seal penetrations in accordance with vapor retarder manufacturer's instructions.
  - 7. Protect vapor retarder during placement of reinforcement and concrete.
    - a. Repair damaged areas by patching with vapor retarder material, overlapping damages area by 6 inches on all sides, and sealing to vapor retarder.

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### 3.3 JOINTS

- A. Construct joints true to line, with faces perpendicular to surface plane of concrete.
- B. Construction Joints: Coordinate with floor slab pattern and concrete placement sequence.
  - 1. Install so strength and appearance of concrete are not impaired, at locations indicated on Drawings or as approved by Architect.
  - 2. Place joints perpendicular to main reinforcement.
    - a. Continue reinforcement across construction joints unless otherwise indicated.
    - b. Do not continue reinforcement through sides of strip placements of floors and slabs.
  - 3. Form keyed joints as indicated. Embed keys at least 1-1/2 inches into concrete.
  - 4. Locate joints for beams, slabs, joists, and girders at third points of spans. Offset joints in girders a minimum distance of twice the beam width from a beam-girder intersection.
  - 5. Locate horizontal joints in walls and columns at underside of floors, slabs, beams, and girders and at the top of footings or floor slabs.
- C. Control Joints in Slabs-on-Ground: Form weakened-plane control joints, sectioning concrete into areas as indicated. Construct control joints for a depth equal to at least one-fourth of concrete thickness as follows:
  - 1. Grooved Joints: Form control joints after initial floating by grooving and finishing each edge of joint to a radius of 1/8 inch. Repeat grooving of control joints after applying surface finishes. Eliminate groover tool marks on concrete surfaces.
  - 2. Sawed Joints: Form control joints with power saws equipped with shatterproof abrasive or diamond-rimmed blades. Cut 1/8-inch-wide joints into concrete when cutting action does not tear, abrade, or otherwise damage surface and before concrete develops random cracks.
- D. Isolation Joints in Slabs-on-Ground: After removing formwork, install joint-filler strips at slab junctions with vertical surfaces, such as column pedestals, foundation walls, grade beams, and other locations, as indicated.
  - 1. Extend joint-filler strips full width and depth of joint, terminating flush with finished concrete surface unless otherwise indicated on Drawings.
  - 2. Terminate full-width joint-filler strips not less than 1/2 inch or more than 1 inch below finished concrete surface, where joint sealants, specified in Section 079200 "Joint Sealants," are indicated.
  - 3. Install joint-filler strips in lengths as long as practicable. Where more than one length is required, lace or clip sections together.
- E. Doweled Joints:
  - 1. Install dowel bars and support assemblies at joints where indicated on Drawings.
  - 2. Lubricate or asphalt coat one-half of dowel bar length to prevent concrete bonding to one side of joint.

- F. Dowel Plates: Install dowel plates at joints where indicated on Drawings.

### 3.4 CONCRETE PLACEMENT

- A. Before placing concrete, verify that installation of formwork, reinforcement, embedded items, and vapor retarder is complete and that required inspections are completed.
1. Immediately prior to concrete placement, inspect vapor retarder for damage and deficient installation, and repair defective areas.
  2. Provide continuous inspection of vapor retarder during concrete placement and make necessary repairs to damaged areas as Work progresses.
- B. Notify Architect and testing and inspection agencies 24 hours prior to commencement of concrete placement.
- C. Do not add water to concrete during delivery, at Project site, or during placement unless approved by Architect in writing, but not to exceed the amount indicated on the concrete delivery ticket.
1. Do not add water to concrete after adding high-range water-reducing admixtures to mixture.
- D. Before test sampling and placing concrete, water may be added at Project site, subject to limitations of ACI 301, but not to exceed the amount indicated on the concrete delivery ticket.
1. Do not add water to concrete after adding high-range water-reducing admixtures to mixture.
- E. Deposit concrete continuously in one layer or in horizontal layers of such thickness that no new concrete is placed on concrete that has hardened enough to cause seams or planes of weakness.
1. If a section cannot be placed continuously, provide construction joints as indicated.
  2. Deposit concrete to avoid segregation.
  3. Deposit concrete in horizontal layers of depth not to exceed formwork design pressures and in a manner to avoid inclined construction joints.
  4. Consolidate placed concrete with mechanical vibrating equipment in accordance with ACI 301.
    - a. Do not use vibrators to transport concrete inside forms.
    - b. Insert and withdraw vibrators vertically at uniformly spaced locations to rapidly penetrate placed layer and at least 6 inches into preceding layer.
    - c. Do not insert vibrators into lower layers of concrete that have begun to lose plasticity.
    - d. At each insertion, limit duration of vibration to time necessary to consolidate concrete, and complete embedment of reinforcement and other embedded items without causing mixture constituents to segregate.
- F. Deposit and consolidate concrete for floors and slabs in a continuous operation, within limits of construction joints, until placement of a panel or section is complete.

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1. Do not place concrete floors and slabs in a checkerboard sequence.
2. Consolidate concrete during placement operations, so concrete is thoroughly worked around reinforcement and other embedded items and into corners.
3. Maintain reinforcement in position on chairs during concrete placement.
4. Screed slab surfaces with a straightedge and strike off to correct elevations.
5. Level concrete, cut high areas, and fill low areas.
6. Slope surfaces uniformly to drains where required.
7. Begin initial floating using bull floats or darbies to form a uniform and open-textured surface plane, before excess bleedwater appears on the surface.
8. Do not further disturb slab surfaces before starting finishing operations.

### 3.5 FINISHING FORMED SURFACES

#### A. As-Cast Surface Finishes:

1. ACI 301 Surface Finish SF-1.0: As-cast concrete texture imparted by form-facing material.
  - a. Patch voids larger than 1-1/2 inches wide or 1/2 inch deep.
  - b. Remove projections larger than 1 inch.
  - c. Tie holes do not require patching.
  - d. Surface Tolerance: ACI 117 Class D.
  - e. Apply to concrete surfaces not exposed to public view.

### 3.6 FINISHING FLOORS AND SLABS

#### A. Comply with ACI 302.1R recommendations for screeding, restraighening, and finishing operations for concrete surfaces. Do not wet concrete surfaces.

#### B. Trowel Finish:

1. After applying float finish, apply first troweling and consolidate concrete by hand or power-driven trowel.
2. Continue troweling passes and restraighen until surface is free of trowel marks and uniform in texture and appearance.
3. Grind smooth any surface defects that would telegraph through applied coatings or floor coverings.
4. Do not add water to concrete surface.
5. Do not apply hard-troweled finish to concrete, which has a total air content greater than 3 percent.
6. Apply a trowel finish to surfaces exposed to view or to be covered with resilient flooring, carpet, ceramic or quarry tile set over a cleavage membrane, paint, or another thin-film-finish coating system.
7. Finish and measure surface, so gap at any point between concrete surface and an unlevelled, freestanding, 10-ft.- long straightedge resting on two high spots and placed anywhere on the surface does not exceed 1/4 inch.

### 3.7 INSTALLATION OF MISCELLANEOUS CONCRETE ITEMS

#### A. Filling In:

1. Fill in holes and openings left in concrete structures after Work of other trades is in place unless otherwise indicated.
2. Mix, place, and cure concrete, as specified, to blend with in-place construction.
3. Provide other miscellaneous concrete filling indicated or required to complete the Work.

### 3.8 CONCRETE CURING

#### A. Protect freshly placed concrete from premature drying and excessive cold or hot temperatures.

1. Comply with ACI 301 and ACI 306.1 for cold weather protection during curing.
2. Comply with ACI 301 and ACI 305.1 for hot-weather protection during curing.
3. Maintain moisture loss no more than 0.2 lb/sq. ft. x h, calculated in accordance with ACI 305.1, before and during finishing operations.

#### B. Curing Formed Surfaces: Comply with ACI 308.1 as follows:

1. Cure formed concrete surfaces, including underside of beams, supported slabs, and other similar surfaces.
2. Cure concrete containing color pigments in accordance with color pigment manufacturer's instructions.
3. If forms remain during curing period, moist cure after loosening forms.
4. If removing forms before end of curing period, continue curing for remainder of curing period, as follows:
  - a. Continuous Fogging: Maintain standing water on concrete surface until final setting of concrete.
  - b. Continuous Sprinkling: Maintain concrete surface continuously wet.
  - c. Absorptive Cover: Pre-dampen absorptive material before application; apply additional water to absorptive material to maintain concrete surface continuously wet.
  - d. Water-Retention Sheeting Materials: Cover exposed concrete surfaces with sheeting material, taping, or lapping seams.
  - e. Membrane-Forming Curing Compound: Apply uniformly in continuous operation by power spray or roller in accordance with manufacturer's written instructions.
    - 1) Recoat areas subject to heavy rainfall within three hours after initial application.
    - 2) Maintain continuity of coating and repair damage during curing period.

#### C. Curing Unformed Surfaces: Comply with ACI 308.1 as follows:

1. Begin curing immediately after finishing concrete.
2. Interior Concrete Floors:

- a. Floors to Receive Floor Coverings Specified in Other Sections: Contractor has option of the following:
  - 1) Absorptive Cover: As soon as concrete has sufficient set to permit application without marring concrete surface, install prewetted absorptive cover over entire area of floor.
    - a) Lap edges and ends of absorptive cover not less than 12 inches.
    - b) Maintain absorptive cover water saturated, and in place, for duration of curing period, but not less than seven days.
  - 2) Moisture-Retaining-Cover Curing: Cover concrete surfaces with moisture-retaining cover for curing concrete, placed in widest practicable width, with sides and ends lapped at least 12 inches, and sealed by waterproof tape or adhesive.
    - a) Immediately repair any holes or tears during curing period, using cover material and waterproof tape.
    - b) Cure for not less than seven days.
  - 3) Ponding or Continuous Sprinkling of Water: Maintain concrete surfaces continuously wet for not less than seven days, utilizing one, or a combination of, the following:
    - a) Water.
    - b) Continuous water-fog spray.

### 3.9 TOLERANCES

- A. Conform to ACI 117.

### 3.10 FIELD QUALITY CONTROL

- A. Special Inspections: Owner will engage a special inspector to perform field tests and inspections and prepare testing and inspection reports.
- B. Testing Agency: Owner will engage a qualified testing and inspecting agency to perform tests and inspections and to submit reports.
  1. Testing agency to be responsible for providing curing container for composite samples on Site and verifying that field-cured composite samples are cured in accordance with ASTM C31/C31M.
  2. Testing agency to immediately report to Architect, Contractor, and concrete manufacturer any failure of Work to comply with Contract Documents.
  3. Testing agency shall report results of tests and inspections, in writing, to Owner, Architect, Contractor, and concrete manufacturer within 48 hours of inspections and tests.

- a. Test reports to include reporting requirements of ASTM C31/C31M, ASTM C39/C39M, and ACI 301, including the following as applicable to each test and inspection:
  - 1) Project name.
  - 2) Name of testing agency.
  - 3) Names and certification numbers of field and laboratory technicians performing inspections and testing.
  - 4) Name of concrete manufacturer.
  - 5) Date and time of inspection, sampling, and field testing.
  - 6) Date and time of concrete placement.
  - 7) Location in Work of concrete represented by samples.
  - 8) Date and time sample was obtained.
  - 9) Truck and batch ticket numbers.
  - 10) Design compressive strength at 28 days.
  - 11) Concrete mixture designation, proportions, and materials.
  - 12) Field test results.
  - 13) Information on storage and curing of samples before testing, including curing method and maximum and minimum temperatures during initial curing period.
  - 14) Type of fracture and compressive break strengths at seven days and 28 days.
  
- C. Batch Tickets: For each load delivered, submit three copies of batch delivery ticket to testing agency, indicating quantity, mix identification, admixtures, design strength, aggregate size, design air content, design slump at time of batching, and amount of water that can be added at Project site.
  
- D. Inspections:
  1. Headed bolts and studs.
  2. Verification of use of required design mixture.
  3. Concrete placement, including conveying and depositing.
  4. Curing procedures and maintenance of curing temperature.
  5. Verification of concrete strength before removal of shores and forms from beams and slabs.
  6. Batch Plant Inspections: On a random basis, as determined by Architect.
  
- E. Concrete Tests: Testing of composite samples of fresh concrete obtained in accordance with ASTM C 172/C 172M shall be performed in accordance with the following requirements:
  1. Testing Frequency: Obtain one composite sample for each day's pour of each concrete mixture exceeding 5 cu. yd., but less than 25 cu. yd., plus one set for each additional 50 cu. yd. or fraction thereof.
    - a. When frequency of testing provides fewer than five compressive-strength tests for each concrete mixture, testing to be conducted from at least five randomly selected batches or from each batch if fewer than five are used.
  2. Slump: ASTM C143/C143M:

- a. One test at point of placement for each composite sample, but not less than one test for each day's pour of each concrete mixture.
  - b. Perform additional tests when concrete consistency appears to change.
3. Compressive-Strength Tests: ASTM C39/C39M.
- a. Test one set of two laboratory-cured specimens at seven days and one set of two specimens at 28 days.
  - b. Test one set of two field-cured specimens at seven days and one set of two specimens at 28 days.
  - c. A compressive-strength test to be the average compressive strength from a set of two specimens obtained from same composite sample and tested at age indicated.
4. When strength of field-cured cylinders is less than 85 percent of companion laboratory-cured cylinders, Contractor to evaluate operations and provide corrective procedures for protecting and curing in-place concrete.
5. Strength of each concrete mixture will be satisfactory if every average of any three consecutive compressive-strength tests equals or exceeds specified compressive strength, and no compressive-strength test value falls below specified compressive strength by more than 500 psi if specified compressive strength is 5000 psi, or no compressive strength test value is less than 10 percent of specified compressive strength if specified compressive strength is greater than 5000 psi.
6. Nondestructive Testing: Impact hammer, sonoscope, or other nondestructive device may be permitted by Architect but will not be used as sole basis for approval or rejection of concrete.
7. Additional Tests:
- a. Testing and inspecting agency to make additional tests of concrete when test results indicate that slump, air entrainment, compressive strengths, or other requirements have not been met, as directed by Architect.
  - b. Testing and inspecting agency may conduct tests to determine adequacy of concrete by cored cylinders complying with ASTM C42/C42M or by other methods as directed by Architect.
    - 1) Acceptance criteria for concrete strength to be in accordance with ACI 301, Section 1.6.6.3.
8. Additional testing and inspecting, at Contractor's expense, will be performed to determine compliance of replaced or additional work with specified requirements.
9. Correct deficiencies in the Work that test reports and inspections indicate do not comply with the Contract Documents.
- F. Measure floor and slab flatness and levelness in accordance with ASTM E1155 within 48 hours of completion of floor finishing and promptly report test results to Architect.

### 3.11 PROTECTION

- A. Protect concrete surfaces as follows:

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1. Protect from petroleum stains.
2. Diaper hydraulic equipment used over concrete surfaces.
3. Prohibit vehicles from interior concrete slabs.
4. Prohibit use of pipe-cutting machinery over concrete surfaces.
5. Prohibit placement of steel items on concrete surfaces.
6. Prohibit use of acids or acidic detergents over concrete surfaces.
7. Protect liquid floor treatment from damage and wear during the remainder of construction period. Use protective methods and materials, including temporary covering, recommended in writing by liquid floor treatments installer.

END OF SECTION 033000

## SECTION 033543 - POLISHED CONCRETE FINISHING

### PART 1 - GENERAL

#### 1.1 SUMMARY

- A. Section Includes:
1. Liquid floor treatments.
  2. Polished concrete surface finish requirements.

#### 1.2 DEFINITIONS

- A. Aggregate Exposure Class: Visual observation of polished floor aggregate surface exposure area after grinding and polishing operations. Aggregate exposure class ranges are A, B, and C.
- B. Distinctness of Image (DOI): The distinctness (clarity) of images reflected by the glossy coating surface appearance of the polished concrete finish appearance levels. The transmission of this reflection is measured in accordance with ASTM D5767.
- C. Haze: The cloudiness or milky appearance of images from objects produced by reflection in a polished concrete surface. The measurement of this appearance is defined in accordance with ASTM D4039. The test method reading is put into a calculation resulting in a Haze Index value.
- D. Specular Gloss: A reflectance value determined by a single measurement of gloss from shining a known amount of light at a surface within a specific angle of illumination in accordance with ASTM D523.

#### 1.3 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Samples: Actual sample of finished products for each type of exposed color.

#### 1.4 QUALITY ASSURANCE

- A. Installer Qualifications:
1. An installer experienced in performing polished concrete finishing with a minimum of five previous projects similar in material, design, and extent to that indicated for this Project.
  2. Trained and certified by manufacturer of polished concrete system materials.
  3. Concrete Polishing Craftsman of the Concrete Polishing Council.

- B. Polished Concrete Standards: Comply with ACI 310.1.

## PART 2 - PRODUCTS

### 2.1 LIQUID FLOOR TREATMENTS

- A. Penetrating Liquid Floor Treatments for Polished Concrete Finish: Clear, waterborne solution of inorganic silicate or silicate materials and proprietary components; odorless; that penetrates, hardens, and is suitable for polished concrete surfaces.
  - 1. Basis-of-Design Product: Subject to compliance with requirements, provide Euclid Chemical Company (The); EUCODIAMOND HARD or comparable product by one of the following:
    - a. Bomat Products, Inc.
    - b. L&M Construction Chemicals, Inc.

### 2.2 POLISHED CONCRETE SURFACE FINISH REQUIREMENTS (PLC-01)

- A. Aggregate Exposure Class: Class B Fine Aggregate 85 to 95 percent fine aggregate; 5 to 15 percent blend of fines and coarse aggregate.
- B. Polish Concrete Appearance Levels: Level 4: Highly Polished (Very High Gloss) 800-grit and higher polish; DOI 70 to 100; Haze Reading less than 10; Reflective Sheen: High to highest.
- C. Slip Resistance: Minimum Dynamic Coefficient of Friction (DCOF) of 0.42. Provide required slip resistance based on final gloss level and determined by the Concrete Polishing Council.

### 2.3 ACCESSORIES

- A. Repair Materials: As recommended in writing by manufacturer to repair and fill cracks, and repair surfaces compatible with polishing materials.
- B. Water: Potable.
- C. Cleaning Agents: As recommended in writing by manufacturer.

### 2.4 POLISHING EQUIPMENT

- A. Equipment and Supplies: Provide equipment and supplies, not limited to, the concrete grinding and concrete polisher equipment, tooling and polishing diamonds for the polished concrete finishing Work.

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Verify that concrete substrates are acceptable for grinding, polishing and product installation as recommended by manufacturer.
- B. Do not begin Work until unsatisfactory conditions have been addressed and corrected.

### 3.2 PREPARATION

- A. Verify that concrete substrate preparation is in accordance with manufacturer's written instructions.
- B. Clean surfaces free of dust, dirt and other contaminants incompatible with liquids applied products and polishing.
- C. Clean and seal cracks as recommended by manufacturer.
- D. Prepare, clean and fill joints with joint filler as recommended in writing by manufacturer.
- E. Clean surface completely of any dust with cleaning solution as recommended in writing by manufacturer.

### 3.3 APPLICATION

- A. Machine grind floor surfaces progressively to receive aggregate and polish appearance levels indicated to match approved mockup.
- B. Scoring: Score decorative jointing in concrete surfaces 1/16 inch deep with diamond blades to match pattern indicated. Rinse until water is clear.
  - 1. Joint Width: 3/8 inch.
- C. Apply penetrating stain densifier treatment for polished concrete in polishing sequence and in accordance with manufacturer's written instructions, allowing recommended drying time between successive coats.
- D. Apply sealers to polished concrete in polishing sequence and in accordance with manufacturers' written instructions.
- E. Continue progressively polishing to aggregate and polish appearance levels to match approved mockup for final finish appearance.
- F. Visually inspect to remove defects and repolish areas that are defective. Repolish those areas that do not meet specified aggregate and polish levels per approved mockup.

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- G. Complete edges of floor finish that adjoins surrounding floor areas in a sharp and clean manner.
- H. Neutralize and clean polished floor surfaces.

#### 3.4 FIELD QUALITY CONTROL

- A. Measure polish specular gloss level, DOI, and haze as specified; repolish if required to achieve Project requirements.
- B. Verify aggregate exposure as specified. Machine surfaces if required to achieve Project requirements.
- C. Verify compliance of slip resistance to comply with specified slip-resistance rating.
- D. Prepare test and inspection reports.

#### 3.5 CLEANING AND PROTECTION

- A. Control and dispose of waste products produced by grinding and polishing operations.
- B. Protect installed polished concrete surfaces from damage during construction in accordance with manufacturer's written instructions.

END OF SECTION 033543

## SECTION 061000 - ROUGH CARPENTRY

### PART 1 - GENERAL

#### 1.1 SUMMARY

##### A. Section Includes:

1. Framing with dimension lumber.
2. Wood blocking and nailers.
3. Plywood backing panels.

#### 1.2 ACTION SUBMITTALS

##### A. Product Data:

1. For each type of process and factory-fabricated product.
2. For preservative-treated wood products.

#### 1.3 INFORMATIONAL SUBMITTALS

##### A. Material Certificates:

1. For dimension lumber specified to comply with minimum allowable unit stresses. Indicate species and grade selected for each use and design values approved by the ALSC Board of Review.
2. For preservative-treated wood products. Indicate type of preservative used and net amount of preservative retained.

##### B. Evaluation Reports: For the following, from ICC-ES:

1. Wood-preservative-treated wood.
2. Fire-retardant-treated wood.
3. Power-driven fasteners.
4. Metal framing anchors.

### PART 2 - PRODUCTS

#### 2.1 WOOD PRODUCTS, GENERAL

- ##### A. Lumber: Comply with DOC PS 20 and applicable rules of grading agencies indicated. If no grading agency is indicated, comply with the applicable rules of any rules-writing agency

certified by the ALSC Board of Review. Grade lumber by an agency certified by the ALSC Board of Review to inspect and grade lumber under the rules indicated.

1. Factory mark each piece of lumber with grade stamp of grading agency.
2. For exposed lumber indicated to receive a stained or natural finish, mark grade stamp on end or back of each piece or omit grade stamp and provide certificates of grade compliance issued by grading agency.
3. Dress lumber, S4S, unless otherwise indicated.

B. Maximum Moisture Content:

1. Boards: 19 percent.
2. Dimension Lumber: 19 percent unless otherwise indicated.
3. Timber: 19 percent.

## 2.2 PRESERVATIVE TREATMENT

A. Preservative Treatment by Pressure Process: AWWA U1; Use Category UC2 for interior construction not in contact with ground, Use Category UC3b for exterior construction not in contact with ground, and Use Category UC4a for items in contact with ground.

1. Preservative Chemicals: Acceptable to authorities having jurisdiction and containing no arsenic or chromium. Do not use inorganic boron (SBX) for sill plates.

B. Kiln-dry lumber after treatment to a maximum moisture content of 19 percent. Do not use material that is warped or that does not comply with requirements for untreated material.

C. Mark lumber with treatment quality mark of an inspection agency approved by the ALSC Board of Review.

D. Application: Treat items indicated on Drawings, and the following:

1. Wood cants, nailers, curbs, equipment support bases, blocking, stripping, and similar members in connection with roofing, flashing, vapor barriers, and waterproofing.
2. Wood sills, sleepers, blocking, and similar concealed members in contact with masonry or concrete.
3. Wood framing and furring attached directly to the interior of below-grade exterior masonry or concrete walls.
4. Wood floor plates that are installed over concrete slabs-on-grade.

## 2.3 FIRE-RETARDANT-TREATMENT

A. General: Where fire-retardant-treated materials are indicated, materials are to comply with requirements in this article, that are acceptable to authorities having jurisdiction, and with fire-test-response characteristics specified as determined by testing identical products per test method indicated by a qualified testing agency.

- B. Fire-Retardant-Treated Lumber and Plywood by Pressure Process: Products with a flame-spread index of 25 or less when tested according to ASTM E84, and with no evidence of significant progressive combustion when the test is extended an additional 20 minutes, and with the flame front not extending more than 10.5 feet beyond the centerline of the burners at any time during the test.
  - 1. Exterior Type: Treated materials are to comply with requirements specified above for fire-retardant-treated lumber and plywood by pressure process after being subjected to accelerated weathering according to ASTM D2898. Use for exterior locations and where indicated.
  - 2. Interior Type A: Treated materials are to have a moisture content of 28 percent or less when tested according to ASTM D3201/D3201M at 92 percent relative humidity. Use where exterior type is not indicated.
- C. Kiln-dry lumber after treatment to maximum moisture content of 19 percent.
- D. Identify fire-retardant-treated wood with appropriate classification marking of qualified testing agency.
- E. Application: Treat items indicated on Drawings, and the following:
  - 1. Concealed blocking.
  - 2. Plywood backing panels.

#### 2.4 DIMENSION LUMBER FRAMING

- A. Non-Load-Bearing Interior Partitions by Grade: Construction or No. 2 grade.
  - 1. Application: All interior partitions.
  - 2. Species:
    - a. Hem-fir (north); NLGA.
    - b. Southern pine or mixed southern pine; SPIB.
    - c. Northern species; NLGA.
    - d. Eastern softwoods; NeLMA.
    - e. Western woods; WCLIB or WWPA.
- B. Framing Other Than Non-Load-Bearing Partitions by Grade: No. 2 grade.
  - 1. Application: Framing other than interior partitions.
  - 2. Species:
    - a. Hem-fir (north); NLGA.
    - b. Southern pine; SPIB.
    - c. Douglas fir-larch; WCLIB or WWPA.
    - d. Southern pine or mixed southern pine; SPIB.
    - e. Spruce-pine-fir; NLGA.
    - f. Douglas fir-south; WWPA.
    - g. Hem-fir; WCLIB or WWPA.



- h. Douglas fir-larch (north); NLGA.
- i. Spruce-pine-fir (south); NeLMA, WCLIB, or WWPA.

## 2.5 MISCELLANEOUS LUMBER

- A. Provide miscellaneous lumber indicated and lumber for support or attachment of other construction, including the following:
  - 1. Blocking.
  - 2. Nailers.
- B. Dimension Lumber Items: Construction or No. 2 grade lumber of any species.

## 2.6 PLYWOOD BACKING PANELS

- A. Equipment Backing Panels: Plywood, DOC PS 1, Exterior, A-C, fire-retardant treated, in thickness indicated or, if not indicated, not less than 1/2-inch nominal thickness.

## 2.7 FASTENERS

- A. General: Fasteners are to be of size and type indicated and comply with requirements specified in this article for material and manufacture. Provide nails or screws, in sufficient length, to penetrate not less than 1-1/2 inches into wood substrate.
  - 1. Where rough carpentry is exposed to weather, in ground contact, pressure-preservative treated, or in area of high relative humidity, provide fasteners with hot-dip zinc coating complying with ASTM A153/A153M.
- B. Power-Driven Fasteners: Fastener systems with an evaluation report acceptable to authorities having jurisdiction, based on ICC-ES AC70.

## 2.8 METAL FRAMING ANCHORS

- A. Allowable design loads, as published by manufacturer, are to meet or exceed those of basis-of-design products. Manufacturer's published values are to be determined from empirical data or by rational engineering analysis and demonstrated by comprehensive testing performed by a qualified independent testing agency. Framing anchors are to be punched for fasteners adequate to withstand same loads as framing anchors.
- B. Galvanized-Steel Sheet: Hot-dip, zinc-coated steel sheet complying with ASTM A653/A653M, G60coating designation.
  - 1. Use for interior locations unless otherwise indicated.

- C. Hot-Dip, Heavy-Galvanized Steel Sheet: ASTM A653/A653M; structural steel (SS), high-strength low-alloy steel Type A (HSLAS Type A), or high-strength low-alloy steel Type B (HSLAS Type B); G185coating designation; and not less than 0.036 inchthick.
  - 1. Use for wood-preserved-treated lumber and where indicated.

## PART 3 - EXECUTION

### 3.1 INSTALLATION

- A. Framing Standard: Comply with AF&PA's WCD 1, "Details for Conventional Wood Frame Construction," unless otherwise indicated.
- B. Set work to required levels and lines, with members plumb, true to line, cut, and fitted. Fit rough carpentry accurately to other construction. Locate nailers, blocking, and similar supports to comply with requirements for attaching other construction.
- C. Install metal framing anchors to comply with manufacturer's written instructions. Install fasteners through each fastener hole.
- D. Do not splice structural members between supports unless otherwise indicated.
- E. Comply with AWP A M4 for applying field treatment to cut surfaces of preservative-treated lumber.
- F. Where wood-preserved-treated lumber is installed adjacent to metal decking, install continuous flexible flashing separator between wood and metal decking.
- G. Securely attach rough carpentry work to substrate by anchoring and fastening as indicated, complying with the following:
  - 1. Table 2304.9.1, "Fastening Schedule," in ICC's International Building Code (IBC).
  - 2. ICC-ES evaluation report for fastener.

### 3.2 PROTECTION

- A. Protect wood that has been treated with inorganic boron (SBX) from weather. If, despite protection, inorganic boron-treated wood becomes wet, apply EPA-registered borate treatment. Apply borate solution by spraying to comply with EPA-registered label.
- B. Protect rough carpentry from weather. If, despite protection, rough carpentry becomes wet enough that moisture content exceeds that specified, apply EPA-registered borate treatment. Apply borate solution by spraying to comply with EPA-registered label.

END OF SECTION 061000

ROUGH CARPENTRY

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## SECTION 066400 - PLASTIC PANELING

### PART 1 - GENERAL

#### 1.1 SUMMARY

- A. Section includes plastic sheet paneling.

#### 1.2 DEFINITIONS

- A. FRP: Fiberglass-reinforced plastic.
- B. PMMA: Polymethyl methacrylate; also known as "acrylic."

#### 1.3 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Samples: For plastic paneling.

#### 1.4 QUALITY ASSURANCE

- A. Testing Agency: Acceptable to authorities having jurisdiction.

### PART 2 - PRODUCTS

#### 2.1 SOURCE LIMITATIONS

- A. Obtain plastic paneling and trim accessories from single manufacturer.

#### 2.2 PLASTIC SHEET PANELING

- A. Glass-Fiber-Reinforced Plastic Paneling (**FRP-01**): Gelcoat-finished, glass-fiber-reinforced plastic panels complying with ASTM D5319.
  - 1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
    - a. Crane Composites, Inc.
    - b. Marlite, Inc.
    - c. Nudo.

### PLASTIC PANELING

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2. Surface-Burning Characteristics: As follows when tested by a qualified testing agency in accordance with ASTM E84. Identify products with appropriate markings of applicable testing agency.
  - a. Flame-Spread Index: 200 or less.
  - b. Smoke-Developed Index: 450 or less.
3. Nominal Thickness: Not less than 0.075 inch.
4. Surface Finish: Smooth.
5. Color: White.

## 2.3 COMMERCIAL SHOWERS

### A. Shower Surrounds (**SS-01**):

1. Shower Surrounds – FRP, PMMA, or Solid Surface:
  - a. Source Limitations: Obtain shower surrounds from single source from single manufacturer.
  - b. Description: FRP, PMMA, or Solid Surface shower surrounds with valve and receptor and appurtenances.
  - c. Type: Sectional.
  - d. Standard: CSA B45.5/IAPMO Z124.
  - e. Type: Accessible in accordance with ICC A117.1, Alternate Roll-In Type.
  - f. Shower Head and Shower Valve: As indicated on Drawings.
  - g. Shower Nominal Size and Shape: 60 by 36 inches rectangular.
  - h. Color: White.
  - i. Shower Rod and Curtain: As specified in Section 102800 "Toilet, Bath, and Laundry Accessories."
  - j. Grab Bar: ASTM F446, mounted on support area back wall.
  - k. Folding Shower Seat: As specified in Section 102800 "Toilet, Bath, and Laundry Accessories."

### B. Shower Basins:

1. Shower Basins – Cast-Polymer, FRP, PMMA, or Solid Surface:
  - a. Source Limitations: Obtain shower basins from single source from single manufacturer.
  - b. Description: Cast-Polymer, FRP, PMMA, or Solid Surface base for built-up-type shower fixture.
  - c. Standard: CSA B45.5/IAPMO Z124.
  - d. Type: Accessible in accordance with ICC A117.1, Alternate Roll-In Type.
  - e. Nominal Size and Shape: 60 by 36 inches rectangular.
  - f. Color: White.
  - g. Outlet: Drain with NPS 2 outlet.

## 2.4 ACCESSORIES

- A. Trim Accessories: Manufacturer's standard one-piece vinyl extrusions designed to retain and cover edges of panels. Provide division bars, inside corners, outside corners, and caps as needed to conceal edges.
  - 1. Color: White.
- B. Sealant: Mildew-resistant, single-component, neutral-curing or acid-curing silicone sealant recommended by plastic paneling manufacturer and complying with requirements in Section 079200 "Joint Sealants."

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Examine substrates and conditions, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of the Work.
- B. Examine walls and floors for suitable conditions where plumbing fixtures will be installed.
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

### 3.2 PREPARATION

- A. Prepare substrate by sanding high spots and filling low spots as needed to provide flat, even surface for panel installation.
- B. Clean substrates of substances that could impair adhesive bond, including oil, grease, dirt, and dust.
- C. Condition panels by unpacking and placing in installation space before installation according to manufacturer's written recommendations.
- D. Lay out paneling before installing. Locate panel joints to provide equal panels at ends of walls not less than half the width of full panels.

### 3.3 INSTALLATION OF PLASTIC PANELING

- A. Install plastic paneling according to manufacturer's written instructions.
- B. Install panels in a full spread of adhesive.
- C. Install trim accessories with adhesive or fasteners.

## PLASTIC PANELING

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- D. Fill grooves in trim accessories with sealant before installing panels, and bed inside corner trim in a bead of sealant.
- E. Maintain uniform space between panels and wall fixtures. Fill space with sealant.
- F. Remove excess sealant and smears as paneling is installed. Clean with solvent recommended by sealant manufacturer and then wipe with clean dry cloths until no residue remains.

### 3.4 INSTALLATION OF COMMERCIAL SHOWERS

- A. Assemble shower components in accordance with manufacturers' written instructions.
- B. Install showers level and plumb in accordance with roughing-in drawings.
- C. Install ball valves in water-supply piping to the shower if supply stops are specified with the shower valve. Comply with ball valve requirements specified on Drawings. Install valves in locations that are accessible for ease of operation.
- D. Install shower flow-control fittings with specified maximum flow rates in shower arms.
- E. Set shower basins in leveling bed of cement grout.
- F. Install wall flanges or escutcheons at piping wall penetrations in exposed, finished locations. Use deep-pattern escutcheons if required to conceal protruding fittings. Comply with escutcheon requirements specified on Drawings.
- G. Seal joints between showers, floors, and walls using sanitary-type, one-part, mildew-resistant silicone sealant. Match sealant color to fixture color. Comply with sealant requirements specified in Section 079200 "Joint Sealants."

END OF SECTION 066400

## SECTION 079200 - JOINT SEALANTS

### PART 1 - GENERAL

#### 1.1 SUMMARY

##### A. Section Includes:

1. Nonstaining silicone joint sealants.
2. Urethane joint sealants.
3. Mildew-resistant joint sealants.
4. Butyl joint sealants.
5. Latex joint sealants.
6. Floor joint fillers.

#### 1.2 ACTION SUBMITTALS

##### A. Product Data: For each joint-sealant product.

##### B. Samples: Manufacturer's standard color charts consisting of strips of cured sealants showing the full range of colors available for each product exposed to view.

##### C. Joint-Sealant Schedule: Include the following information:

1. Joint-sealant application, joint location, and designation.
2. Joint-sealant manufacturer and product name.
3. Joint-sealant formulation.
4. Joint-sealant color.

#### 1.3 INFORMATIONAL SUBMITTALS

##### A. Sample Warranties: For special warranties.

#### 1.4 CLOSEOUT SUBMITTALS

##### A. Warranty Documentation:

1. Manufacturers' special warranties.
2. Installer's special warranties.

## 1.5 QUALITY ASSURANCE

- A. Installer Qualifications: Authorized representative who is trained and approved by manufacturer.
- B. Testing Agency Qualifications: Qualified in accordance with ASTM C1021 to conduct the testing indicated.

## 1.6 WARRANTY

- A. Special Installer's Warranty: Installer agrees to repair or replace joint sealants that do not comply with performance and other requirements specified in this Section within specified warranty period.
  - 1. Warranty Period: Five years from date of Substantial Completion.
- B. Special Manufacturer's Warranty: Manufacturer agrees to furnish joint sealants to repair or replace those joint sealants that do not comply with performance and other requirements specified in this Section within specified warranty period.
  - 1. Warranty Period: Five years from date of Substantial Completion.
- C. Special warranties specified in this article exclude deterioration or failure of joint sealants from the following:
  - 1. Movement of the structure caused by stresses on the sealant exceeding sealant manufacturer's written specifications for sealant elongation and compression.
  - 2. Disintegration of joint substrates from causes exceeding design specifications.
  - 3. Mechanical damage caused by individuals, tools, or other outside agents.
  - 4. Changes in sealant appearance caused by accumulation of dirt or other atmospheric contaminants.

## PART 2 - PRODUCTS

### 2.1 JOINT SEALANTS, GENERAL

- A. Compatibility: Provide joint sealants, backings, and other related materials that are compatible with one another and with joint substrates under conditions of service and application, as demonstrated by joint-sealant manufacturer, based on testing and field experience.
- B. Colors of Exposed Joint Sealants: As selected by Architect from manufacturer's full range]

### 2.2 NONSTAINING SILICONE JOINT SEALANTS

- A. Nonstaining Joint Sealants: No staining of substrates when tested according to ASTM C 1248.

## JOINT SEALANTS

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- B. **Silicone Glazing Sealants (SGS):** Nonsag sealants applicable for associated substrate. Subject to compliance with requirements, available products that may be incorporated into the Work include, but are not limited to those indicated below.
  - 1. Silicone, Nonstaining, S or M, NS, 50, NT: Nonstaining, Single-component or Multicomponent, nonsag, plus 50 percent and minus 50 percent movement capability, nontraffic-use, neutral-curing silicone joint sealant; ASTM C 920, Type S or M, Grade NS, Class 50, Use NT.

### 2.3 URETHANE JOINT SEALANTS

- A. **Urethane Horizontal Joint Sealants (UHS):** Nonsag or pourable sealants applicable for slope of associated substrate. Subject to compliance with requirements, available products that may be incorporated into the Work include, but are not limited to those indicated below.
  - 1. Urethane, S or M, NS, minimum 25, T: Single-component, nonsag, minimum plus 25 percent and minus 25 percent movement capability, traffic-use, urethane joint sealant; ASTM C 920, Type S or M, Grade NS, minimum Class 25, Use T.
  - 2. Urethane, S or M, P, minimum 25, T: Single-component or Multicomponent, pourable, minimum plus 25 percent and minus 25 percent movement capability, traffic-use, urethane joint sealant; ASTM C 920, Type S or M, Grade P, minimum Class 25, Use T.
- B. **Urethane Joint Sealants (UJS):** Nonsag sealants applicable for associated substrate. Subject to compliance with requirements, available products that may be incorporated into the Work include, but are not limited to those indicated below.
  - 1. Urethane, S or M, NS, minimum 50, NT: Single-component or Multicomponent, nonsag, minimum plus 50 percent and minus 50 percent movement capability, nontraffic-use, urethane joint sealant; ASTM C 920, Type S or M, Grade NS, minimum Class 50, Use NT.

### 2.4 MILDEW-RESISTANT JOINT SEALANTS

- A. **Mildew-Resistant Joint Sealants:** Formulated for prolonged exposure to humidity with fungicide to prevent mold and mildew growth.
- B. **Mildew-Resistant Joint Sealants (MRJS):** Nonsag sealants applicable for associated substrate. Subject to compliance with requirements, available products that may be incorporated into the Work include, but are not limited to those indicated below.
  - 1. Silicone, Mildew Resistant, Acid Curing, S, NS, 25, NT: Mildew-resistant, single-component, nonsag, plus 25 percent and minus 25 percent movement capability, nontraffic-use, acid-curing silicone joint sealant; ASTM C 920, Type S, Grade NS, Class 25, Use NT.

2.5 BUTYL JOINT SEALANTS (**BJS**)

- A. Butyl-Rubber-Based Joint Sealants: ASTM C 1311.

2.6 LATEX JOINT SEALANTS (**LJS**)

- A. Acrylic Latex: Acrylic latex or siliconized acrylic latex, ASTM C 834, Type OP, Grade NF.

2.7 FLOOR JOINT FILLER

- A. Polyurea Joint Filler (**PJF**): Two-component, semirigid, 100 percent solids, polyurea resin with a Type A Shore durometer hardness of at least 80 according to ASTM D 2240.

2.8 JOINT-SEALANT BACKING

- A. Sealant Backing Material, General: Nonstaining; compatible with joint substrates, sealants, primers, and other joint fillers; and approved for applications indicated by sealant manufacturer based on field experience and laboratory testing.
- B. Cylindrical Sealant Backings: ASTM C 1330, Type C (closed-cell material with a surface skin) or Type B (bicellular material with a surface skin), and of size and density to control sealant depth and otherwise contribute to producing optimum sealant performance.
- C. Bond-Breaker Tape: Polyethylene tape or other plastic tape recommended by sealant manufacturer for preventing sealant from adhering to rigid, inflexible joint-filler materials or joint surfaces at back of joint. Provide self-adhesive tape where applicable.

2.9 MISCELLANEOUS MATERIALS

- A. Primer: Material recommended by joint-sealant manufacturer where required for adhesion of sealant to joint substrates indicated, as determined from preconstruction joint-sealant-substrate tests and field tests.
- B. Cleaners for Nonporous Surfaces: Chemical cleaners acceptable to manufacturers of sealants and sealant backing materials, free of oily residues or other substances capable of staining or harming joint substrates and adjacent nonporous surfaces in any way, and formulated to promote optimum adhesion of sealants to joint substrates.
- C. Masking Tape: Nonstaining, nonabsorbent material compatible with joint sealants and surfaces adjacent to joints.

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Examine joints indicated to receive joint sealants, with Installer present, for compliance with requirements for joint configuration, installation tolerances, and other conditions affecting performance of the Work.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

### 3.2 PREPARATION

- A. Surface Cleaning of Joints: Clean out joints immediately before installing joint sealants to comply with joint-sealant manufacturer's written instructions and the following requirements:
  - 1. Remove all foreign material from joint substrates that could interfere with adhesion of joint sealant, including dust, paints (except for permanent, protective coatings tested and approved for sealant adhesion and compatibility by sealant manufacturer), old joint sealants, oil, grease, waterproofing, water repellents, water, surface dirt, and frost.
  - 2. Clean porous joint substrate surfaces by brushing, grinding, mechanical abrading, or a combination of these methods to produce a clean, sound substrate capable of developing optimum bond with joint sealants. Remove loose particles remaining after cleaning operations above by vacuuming or blowing out joints with oil-free compressed air. Porous joint substrates include the following:
    - a. Concrete.
    - b. Masonry.
    - c. Unglazed surfaces of ceramic tile.
  - 3. Remove laitance and form-release agents from concrete.
  - 4. Clean nonporous joint substrate surfaces with chemical cleaners or other means that do not stain, harm substrates, or leave residues capable of interfering with adhesion of joint sealants. Nonporous joint substrates include the following:
    - a. Metal.
    - b. Glass.
    - c. Porcelain enamel.
    - d. Glazed surfaces of ceramic tile.
- B. Joint Priming: Prime joint substrates where recommended by joint-sealant manufacturer or as indicated by preconstruction joint-sealant-substrate tests or prior experience. Apply primer to comply with joint-sealant manufacturer's written instructions. Confine primers to areas of joint-sealant bond; do not allow spillage or migration onto adjoining surfaces.
- C. Masking Tape: Use masking tape where required to prevent contact of sealant or primer with adjoining surfaces that otherwise would be permanently stained or damaged by such contact or by cleaning methods required to remove sealant smears. Remove tape immediately after tooling without disturbing joint seal.

## JOINT SEALANTS

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### 3.3 INSTALLATION OF JOINT SEALANTS

- A. General: Comply with joint-sealant manufacturer's written installation instructions for products and applications indicated, unless more stringent requirements apply.
- B. Sealant Installation Standard: Comply with recommendations in ASTM C1193 for use of joint sealants as applicable to materials, applications, and conditions indicated.
- C. Install sealant backings of type indicated to support sealants during application and at position required to produce cross-sectional shapes and depths of installed sealants relative to joint widths that allow optimum sealant movement capability.
  - 1. Do not leave gaps between ends of sealant backings.
  - 2. Do not stretch, twist, puncture, or tear sealant backings.
  - 3. Remove absorbent sealant backings that have become wet before sealant application, and replace them with dry materials.
- D. Install bond-breaker tape behind sealants where sealant backings are not used between sealants and backs of joints.
- E. Install sealants using proven techniques that comply with the following and at the same time backings are installed:
  - 1. Place sealants so they directly contact and fully wet joint substrates.
  - 2. Completely fill recesses in each joint configuration.
  - 3. Produce uniform, cross-sectional shapes and depths relative to joint widths that allow optimum sealant movement capability.
- F. Tooling of Nonsag Sealants: Immediately after sealant application and before skinning or curing begins, tool sealants in accordance with requirements specified in subparagraphs below to form smooth, uniform beads of configuration indicated; to eliminate air pockets; and to ensure contact and adhesion of sealant with sides of joint.
  - 1. Remove excess sealant from surfaces adjacent to joints.
  - 2. Use tooling agents that are approved in writing by sealant manufacturer and that do not discolor sealants or adjacent surfaces.
  - 3. Provide concave joint profile in accordance with Figure 8A in ASTM C1193 unless otherwise indicated.
- G. Clean off excess sealant or sealant smears adjacent to joints as the Work progresses by methods and with cleaning materials approved in writing by manufacturers of joint sealants and of products in which joints occur.
- H. Protect joint sealants during and after curing period from contact with contaminating substances and from damage resulting from construction operations or other causes so sealants are without deterioration or damage at time of Substantial Completion. If, despite such protection, damage or deterioration occurs, cut out, remove, and repair damaged or deteriorated joint sealants immediately so installations with repaired areas are indistinguishable from original work.

3.4 INTERIOR JOINT SEALANT SCHEDULE

A. Interior joints in horizontal traffic surfaces.

1. Joint Sealant: Urethane Horizontal Joint Sealant (**UHS**).
2. Joint Sealant Color: As selected by Architect from manufacturer's full range of available colors.

Location	Basis-of-Design Sealant	Basis-of-Design Color
Isolation, expansion and contraction joints in cast-in-place concrete slabs.	<a href="#">Sika Corporation; Joint Sealants</a> ; Sikaflex 2c NS EZ Mix.	As selected to match concrete color.
Isolation, expansion and contraction joints in ceramic tile flooring.	<a href="#">Sika Corporation; Joint Sealants</a> ; Sikaflex 2c SL.	As selected to match tile grout color.

B. Interior joints in vertical surfaces and horizontal nontraffic surfaces.

1. Joint Sealant: Urethane Joint Sealant (**UJS**).
2. Joint-Sealant Color: As selected by Architect from manufacturer's full range of available colors with intent of matching color of substrate material finished color.

<b>Locations where Sealants will be painted over after installation of sealant</b>		
Location	Basis-of-Design Sealant	Basis-of-Design Color
Joints on exposed interior surfaces of exterior walls.	<a href="#">Pecora Corporation</a> ; Dynatrol I-XL or Dynatrol II.	As selected to match unpainted substrate material color, typically a gray color to match concrete or CMU.
Vertical joints on exposed surfaces of unit masonry, concrete walls and partitions.	<a href="#">Tremco Incorporated</a> ; Dymonic or Dymeric 240.	As selected to match unpainted substrate material color, typically a gray color to match concrete or CMU.
Perimeter joints between unit masonry or concrete surfaces and frames of doors, windows and louvers.	<a href="#">Tremco Incorporated</a> ; Dymonic or Dymeric 240.	As selected to match unpainted substrate material color, typically a gray color to match concrete or CMU.
Other joints as indicated on Drawings.	<a href="#">Tremco Incorporated</a> ; Dymonic or Dymeric 240.	As selected to match unpainted substrate material color, typically a gray color to match concrete or CMU.

Note: Where sealants are not available in colors matching surface finish paint color, install sealant prior to finish painting and apply finish painting over sealant joints.

C. Interior joints in vertical surfaces and horizontal nontraffic surfaces of gypsum board and similar substrates.

1. Joint Sealant: Acrylic Latex.
2. Joint-Sealant Color: As selected by Architect from manufacturer's full range of available colors with intent of matching color of substrate material finished color.

<b>Locations where Sealants will be painted over after installation of sealant</b>		
Location	Basis-of-Design Sealant	Basis-of-Design Color
Control and casting bead joints in gypsum board or cement board wall and ceiling assemblies.	<a href="#">Pecora Corporation</a> ; AC-20.	As selected to match unpainted substrate material color, or a color close to matching finish paint color.
Perimeter joints between gypsum board or cement board wall or ceiling surfaces and frames of doors, windows and louvers.	<a href="#">Pecora Corporation</a> ; AC-20.	As selected to match unpainted substrate material color, or a color close to matching finish paint color.

<b>Locations where Sealants will be unpainted after installation of sealant</b>		
Location	Basis-of-Design Sealant	Basis-of-Design Color
Control and casting bead joints in gypsum board or cement board wall and ceiling assemblies.	<a href="#">Tremco Incorporated</a> ; Tremflex 834.	As selected to match surface finish paint color. Coordinate with Interior Finish and Materials schedule on Drawings.
Perimeter joints between gypsum board or cement board wall or ceiling surfaces and frames of doors, windows and louvers.	<a href="#">Tremco Incorporated</a> ; Tremflex 834.	As selected to match surface finish paint color. Coordinate with Interior Finish and Materials schedule on Drawings.

D. Interior mildew-resistant joints in vertical surfaces and horizontal nontraffic surfaces.

1. Joint Sealant: Mildew-Resistant Joint Sealants (**MRJS**).
2. Joint-Sealant Color: As selected by Architect from manufacturer’s full range of available colors.

Location	Basis-of-Design Sealant	Basis-of-Design Color
Joints between white porcelain plumbing fixtures and adjoining walls, floors and counters.	<a href="#">Pecora Corporation</a> ; Pecora 860.	Manufacturer’s standard white color.
Joints between stainless steel plumbing fixtures and adjoining walls, floors and counters.	<a href="#">Pecora Corporation</a> ; Pecora 860.	Manufacturer’s standard clear or translucent color.

E. Joint-Sealant Application: Concealed mastics.

1. Joint Locations:
  - a. Aluminum thresholds.
  - b. Sill plates.
  - c. Other joints as indicated on Drawings.
2. Joint Sealant: Butyl-rubber based.

3. Joint-Sealant Color: As selected by Architect from manufacturer's full range of colors.

END OF SECTION 079200

## SECTION 081213 - HOLLOW METAL FRAMES

### PART 1 - GENERAL

#### 1.1 SUMMARY

##### A. Section Includes:

1. Interior standard steel frames.

#### 1.2 DEFINITIONS

- ##### A. Minimum Thickness: Minimum thickness of base metal without coatings according to NAAMM-HMMA 803 or SDI A250.8.

#### 1.3 ACTION SUBMITTALS

- ##### A. Product Data: For each type of product.
- ##### B. Shop Drawings: Include elevations, frame profiles, metal thicknesses, and wall opening conditions.
- ##### C. Schedule: Prepared by or under the supervision of supplier, using same reference numbers for details and openings as those on Drawings.

#### 1.4 INFORMATIONAL SUBMITTALS

- ##### A. Product test reports.

### PART 2 - PRODUCTS

#### 2.1 STANDARD STEEL FRAMES

- ##### A. Construct hollow-metal frames to comply with standards indicated for materials, fabrication, hardware locations, hardware reinforcement, tolerances, and clearances, and as specified.
- ##### B. Interior Frames: SDI A250.8.
1. Materials: Uncoated steel sheet, minimum thickness of 0.067 inch.
  2. Construction: Full profile welded.
  3. Exposed Finish: Primed for field painting.



## 2.2 FRAME ANCHORS

- A. Jamb Anchors:
  - 1. Type: Anchors of minimum size and type required by applicable door and frame standard, and suitable for performance level indicated.
  - 2. Quantity: Minimum of three anchors per jamb, with one additional anchor for frames with no floor anchor. Provide one additional anchor for each 24 inches of frame height above 7 feet.
  - 3. Postinstalled Expansion Anchor: Minimum 3/8-inch-diameter bolts with expansion shields or inserts, with manufacturer's standard pipe spacer.
- B. Floor Anchors: Provide floor anchors for each jamb and mullion that extends to floor.
- C. Floor Anchors for Concrete Slabs with Underlayment: Adjustable-type anchors with extension clips, allowing not less than 2-inch height adjustment. Terminate bottom of frames at top of underlayment.
- D. Material: ASTM A879/A879M, Commercial Steel (CS), 04Z coating designation; mill phosphatized.

## 2.3 MATERIALS

- A. Cold-Rolled Steel Sheet: ASTM A1008/A1008M, Commercial Steel (CS), Type B; suitable for exposed applications.
- B. Hot-Rolled Steel Sheet: ASTM A1011/A1011M, Commercial Steel (CS), Type B; free of scale, pitting, or surface defects; pickled and oiled.
- C. Metallic-Coated Steel Sheet: ASTM A653/A653M, Commercial Steel (CS), Type B.
- D. Inserts, Bolts, and Fasteners: Hot-dip galvanized according to ASTM A153/A153M.
- E. Power-Actuated Fasteners in Concrete: Fabricated from corrosion-resistant materials.

## 2.4 FABRICATION

- A. Hollow-Metal Frames: Fabricate in one piece except where handling and shipping limitations require multiple sections. Where frames are fabricated in sections, provide alignment plates or angles at each joint, fabricated of metal of same or greater thickness as frames.
  - 1. Provide countersunk, flat- or oval-head exposed screws and bolts for exposed fasteners unless otherwise indicated.
  - 2. Door Silencers: Except on weather-stripped frames, drill stops to receive door silencers as follows. Keep holes clear during construction.
    - a. Single-Door Frames: Drill stop in strike jamb to receive three door silencers.

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B. Hardware Preparation: Factory prepare hollow-metal frames to receive templated mortised hardware, and electrical wiring; include cutouts, reinforcement, mortising, drilling, and tapping according to SDI A250.6, the Door Hardware Schedule on Drawings, and templates.

1. Reinforce frames to receive nontemplated, mortised, and surface-mounted door hardware.
2. Comply with BHMA A156.115 for preparing hollow-metal frames for hardware.

## 2.5 STEEL FINISHES

A. Prime Finish: Clean, pretreat, and apply manufacturer's standard primer.

1. Shop Primer: SDI A250.10.

## PART 3 - EXECUTION

### 3.1 INSTALLATION

A. General: Install hollow-metal frames plumb, rigid, properly aligned, and securely fastened in place. Comply with approved Shop Drawings and with manufacturer's written instructions. Comply with SDI A250.11.

B. Set frames accurately in position; plumbed, aligned, and braced securely until permanent anchors are set. After wall construction is complete, remove temporary braces without damage to completed Work.

1. Where frames are fabricated in sections, field splice at approved locations by welding face joint continuously; grind, fill, dress, and make splice smooth, flush, and invisible on exposed faces. Touch-up finishes.
2. Install frames with removable stops located on secure side of opening.

C. Floor Anchors: Secure with postinstalled expansion anchors.

1. Floor anchors may be set with power-actuated fasteners instead of postinstalled expansion anchors if so indicated and approved on Shop Drawings.

D. Solidly pack mineral-fiber insulation inside frames.

E. Installation Tolerances: Adjust hollow-metal frames to the following tolerances:

1. Squareness: Plus or minus 1/16 inch, measured at door rabbet on a line 90 degrees from jamb perpendicular to frame head.
2. Alignment: Plus or minus 1/16 inch, measured at jambs on a horizontal line parallel to plane of wall.
3. Twist: Plus or minus 1/16 inch, measured at opposite face corners of jambs on parallel lines, and perpendicular to plane of wall.
4. Plumbness: Plus or minus 1/16 inch, measured at jambs at floor.

### 3.2 CLEANING AND TOUCHUP

- A. Prime-Coat Touchup: Immediately after erection, sand smooth rusted or damaged areas of prime coat and apply touchup of compatible air-drying, rust-inhibitive primer.
- B. Touchup Painting: Cleaning and touchup painting of abraded areas of paint are specified in painting Sections.

END OF SECTION 081213

## SECTION 081416 - FLUSH WOOD DOORS

### PART 1 - GENERAL

#### 1.1 SUMMARY

##### A. Section Includes:

1. Solid-core five-ply flush wood veneer-faced doors for transparent finish.

#### 1.2 ACTION SUBMITTALS

##### A. Product Data:

1. Solid-core five-ply flush wood veneer-faced doors and transom panels for transparent finish.

##### B. Product Data Submittals: For each product, including the following:

1. Door core materials and construction.
2. Door edge construction
3. Door face type and characteristics.
4. Door trim for openings.
5. Factory-machining criteria.
6. Factory-finishing specifications.

##### C. Shop Drawings: Indicate location, size, and hand of each door; elevation of each type of door; construction details not covered in Product Data; and the following:

1. Door schedule indicating door location, type, size, fire protection rating, and swing.
2. Door elevations, dimension and locations of hardware, lite and louver cutouts, and glazing thicknesses.
3. Details of frame for each frame type, including dimensions and profile.
4. Dimensions and locations of blocking for hardware attachment.
5. Dimensions and locations of mortises and holes for hardware.
6. Clearances and undercuts.
7. Doors to be factory finished and application requirements.
8. Apply AWI Quality Certification Program label to Shop Drawings.

##### D. Samples: For factory-finished doors.

#### 1.3 INFORMATIONAL SUBMITTALS

##### A. Sample Warranty: For special warranty.

## FLUSH WOOD DOORS

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#### 1.4 CLOSEOUT SUBMITTALS

- A. Special warranties.
- B. Quality Standard Compliance Certificates: AWI Quality Certification Program certificates.

#### 1.5 QUALITY ASSURANCE

- A. Manufacturer's Certification: Licensed participant in AWI's Quality Certification Program.

#### 1.6 DELIVERY, STORAGE, AND HANDLING

- A. Comply with requirements of referenced standard and manufacturer's written instructions.
- B. Package doors individually in plastic bags or cardboard cartons.
- C. Mark each door on bottom rail with opening number used on Shop Drawings.

#### 1.7 WARRANTY

- A. Special Warranty: Manufacturer agrees to repair or replace doors that fail in materials or workmanship within specified warranty period.
  - 1. Failures include, but are not limited to, the following:
    - a. Delamination of veneer.
    - b. Warping (bow, cup, or twist) more than 1/4 inch in a 42-by-84-inch section.
    - c. Telegraphing of core construction in face veneers exceeding 0.01 inch in a 3-inch span.
  - 2. Warranty Period for Solid-Core Interior Doors: Life of installation.

### PART 2 - PRODUCTS

#### 2.1 FLUSH WOOD DOORS AND FRAMES, GENERAL

- A. Quality Standard: In addition to requirements specified, comply with AWI/AWMAC/WI's "Architectural Woodwork Standards" and ANSI/WDMA I.S. 1A.
  - 1. Provide labels from AWI certification program indicating that doors comply with requirements of grades specified.

## 2.2 SOLID-CORE FIVE-PLY FLUSH WOOD VENEER-FACED DOORS FOR TRANSPARENT FINISH

### A. Interior Doors, Solid-Core Five-Ply Veneer-Faced.

1. Performance Grade: ANSI/WDMA I.S. 1A Extra Heavy Duty.
2. Architectural Woodwork Standards Quality Grade: Premium.
3. Faces: Single-ply wood veneer not less than 1/50 inch thick.
  - a. Species: Select white birch.
  - b. Cut: Rotary cut.
  - c. Match between Veneer Leaves: Book match.
  - d. Assembly of Veneer Leaves on Door Faces: Center-balance match.
  - e. Pair and Set Match: Provide for doors hung in same opening or separated only by mullions.
4. Core for Non-Fire-Rated Doors:
  - a. ANSI A208.1, Grade LD-2 particleboard.
5. Construction: Five plies, hot-pressed bonded (vertical and horizontal edging is bonded to core), with entire unit abrasive planed before veneering.

## 2.3 FABRICATION

### A. Factory fit doors to suit frame-opening sizes indicated.

1. Comply with clearance requirements of referenced quality standard for fitting unless otherwise indicated.

### B. Factory machine doors for hardware that is not surface applied.

1. Locate hardware to comply with DHI-WDHS-3.
2. Comply with final hardware schedules, door frame Shop Drawings, ANSI/BHMA-156.115-W, and hardware templates.
3. Coordinate with hardware mortises in metal frames, to verify dimensions and alignment before factory machining.

## 2.4 FACTORY FINISHING

### A. Comply with referenced quality standard for factory finishing.

1. Complete fabrication, including fitting doors for openings and machining for hardware that is not surface applied, before finishing.
2. Finish faces, all four edges, edges of cutouts, and mortises.
3. Stains and fillers may be omitted on bottom edges, edges of cutouts, and mortises.

### B. Factory finish doors.

## FLUSH WOOD DOORS

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- C. Transparent Finish:
  - 1. Architectural Woodwork Standards Grade: Premium.
    - a. System-9, UV Curable, Acrylated Epoxy, Polyester or Urethane.
  - 2. Staining: Match existing.
  - 3. Sheen: Satin.

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Examine doors and installed door frames, with Installer present, before hanging doors.
  - 1. Verify that installed frames comply with indicated requirements for type, size, location, and swing characteristics and have been installed with level heads and plumb jambs.
  - 2. Reject doors with defects.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

### 3.2 INSTALLATION

- A. Hardware: For installation, see Section 087100 "Door Hardware."
- B. Install doors to comply with manufacturer's written instructions and referenced quality standard, and as indicated.
- C. Job-Fitted Doors:
  - 1. Align and fit doors in frames with uniform clearances and bevels as indicated below.
    - a. Do not trim stiles and rails in excess of limits set by manufacturer or permitted for fire-rated doors.
    - 2. Machine doors for hardware.
    - 3. Seal edges of doors, edges of cutouts, and mortises after fitting and machining.
    - 4. Clearances:
      - a. Provide 1/8 inch at heads, jambs, and between pairs of doors.
      - b. Provide 1/8 inch from bottom of door to top of decorative floor finish or covering unless otherwise indicated on Drawings.
      - c. Where threshold is shown or scheduled, provide 1/4 inch from bottom of door to top of threshold unless otherwise indicated.
  - 5. Bevel non-fire-rated doors 1/8 inch in 2 inches at lock and hinge edges.

## FLUSH WOOD DOORS

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- D. Factory-Finished Doors: Restore finish before installation if fitting or machining is required at Project site.

### 3.3 ADJUSTING

- A. Operation: Rehang or replace doors that do not swing or operate freely.
- B. Finished Doors: Replace doors that are damaged or that do not comply with requirements. Doors may be repaired or refinished if Work complies with requirements and shows no evidence of repair or refinishing.

END OF SECTION 081416



## SECTION 087100 - DOOR HARDWARE

### PART 1 - GENERAL

#### 1.1 SUMMARY

##### A. Section Includes:

1. Finish hardware for doors.
2. Electronic hardware.
3. Thresholds & weatherstripping
4. Keying System
5. Templates
6. Hardware schedule

#### 1.2 REFERENCES

##### A. Publications of agencies and organizations listed below form a part of this specification section to the extent referenced.

1. DHI - Recommended Locations for Builders' Hardware.
2. NFPA 80 - Standards for Fire Doors and Windows.
3. NFPA 101 - Code for Safety to Life from Fire in Buildings and Structures.
4. UL - Building Material Directory.
5. DHI - Door and Hardware Institute
6. WHI - Warnock Hersey
7. BHMA - Builders Hardware Manufacturers Association
8. ANSI – American National Standards Institute
9. IBC - International Building Code Edition as adopted and amended by local building code authorities

#### 1.3 SUBMITTALS

##### A. Schedules: Submit detailed finish hardware schedule and product data in accordance with Section 013300.

1. Furnish a typewritten schedule in DHI vertical format complete with catalog cuts. Schedule shall be complete, including, size, type, manufacturers name and number, and finish of each item required. Include complete schedule of keying system.

##### B. Samples: If requested, submit sample of each type of finish hardware proposed for the project. If approved, samples may be used on project.

- C. Templates: Furnish templates required for fabrication of hollow metal doors and frames, aluminum and glass doors, or other items related to hardware

#### 1.4 QUALITY ASSURANCE

- A. Hardware supplier shall have a minimum of three years experience in supplying hardware for projects of this size and scope and shall have in his employ a certified Architectural Hardware Consultant (AHC) to prepare submittals and coordinate proper preparation for and installation of hardware. The hardware supplier needs to be an authorized factory stocking dealer of the specified products that are being supplied for the project and in good standing with the factory.
- B. Manufacturers and model numbers listed are owners standards to establish a standard of quality.
- C. Regulatory requirements: Conform to code requirements applicable to fire rated doors and frames and to accessibility for the physically handicapped.

#### 1.5 DELIVERY, STORAGE AND HANDLING

- A. Package each item of hardware in original containers and mark each to correspond with heading numbers on the hardware schedule.
- B. Include necessary instructions, templates, drawings and fasteners for proper installation.
- C. Store off the floor in a clean dry area out of the way of work in progress.

#### 1.6 WARRANTY

- A. Provide warranty of hardware items for one year.
  - 1. Provide a Thirty-year warranty for door Closers.
  - 2. Provide a Ten-year warranty for door Lever locks.
  - 3. Provide a Three-year warranty for door Exit devices.
  - 4. Provide a One-year warranty for electronic hardware.

### PART 2 - PRODUCTS

#### 1.1 MANUFACTURERS

- A. Catalog numbers of manufacturers listed have been used to establish Owners standards. Other manufactures not permitted.

Hinges	Ives
Locks	Schlage
Closers	LCN
Flat goods	Ives

#### DOOR HARDWARE

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Exit Device	Von Duprin
OH Stops	Glynn Johnson
Cores	Schlage

## 2.1 MATERIALS

A. Screws and Fasteners: Furnish all exposed fasteners to match item being secured. Make all fasteners of the same material as item being fastened except provide stainless steel or brass for securing aluminum items.

B. Hinges:

1. Full mortise template hinges, ball bearing type.
2. Non-removable pin and heavy weight.
3. Furnish quantity of hinges as follows:
  - a. Doors 84" high: 3 hinges.
  - b. Doors over 84" 4 hinges.
4. Furnish hinge sizes as follows:
  - a. For 1 3/4" doors to 3'0" wide: 4.5" x 4.5".
  - b. For 1 3/4" doors over 3'0" wide: 5 x 4.5".
  - c. Width of hinges adjusted to clear adjacent trim.

C. Locksets and Latchsets:

1. Bored type locksets complying with ANSI 156.2 Series 4000 & 1000 Grade 1.
2. Provide 2 3/4" backsets unless job conditions dictate otherwise.
3. Provide strikes with extended lip where required to protect trim from damage by latchbolt.
4. Schlage ND Series (RHO) levers specified as the standard of quality.
5. Schlage L9000 Series (06A) levers specified as the standard of quality.

D. Exit Devices:

1. All to be U.L. approved for casualty. Fire doors equipped with rated exit dev, meeting fire label requirements.
2. Provide all exit devices from one manufacturer.
3. Von Duprin 99 series specified as Owners standard of quality.
4. Provide cylinders as required by exit device for proper operation.

E. Door Closers:

1. Bodies close grained malleable iron with three separate control valves, including backcheck, ANSI Grade 1.
2. Closers to match adjacent hardware.
3. Provide all closers with thru bolts.

## DOOR HARDWARE

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4. All closers to comply with Americans with Disabilities Act requirements.
5. LCN 4040XP Series specified as Owners standard of quality.

F. Kick Plates:

1. Provide .050 x 10" high x 2" less than door width for single doors and 1" less than door width for pairs.
2. Ives 8400 series specified as the standard of quality.

G. Push Plates:

1. Provide .050 x 6" x 16" push plates unless conditions dictate otherwise.
2. Ives 8200 series specified as the standard of quality.

H. Pull Plates:

1. Provide .050 x 4" x 16" plate with 10" c/c pull.
2. Ives 8303 series specified as the standard of quality.

I. Flush Bolts:

1. Flush bolts equal to Ives FB.
2. Provide extension rods where conditions dictate.

J. Door Stops:

1. Wall stops shall be used whenever possible. Use floor stops or OH stops where wall stops cannot be used.
2. Ives WS406/407 specified as the standard of quality.

K. Silencers:

1. Provide 3 for each single door and 2 for each pair of doors. Not required on door having seals.

L. Thresholds and Weather stripping as listed in hardware sets.

## 2.2 FINISHES

- A. Provide matching finishes for hardware items at each door opening to the greatest extent possible, except as otherwise indicated.
- B. Provide finishes which comply with those established by BHMA listed in "Materials and Finishes Standard 1301".

C. Finishes for this project are as follows:

1.	Hinges	652
2.	Locksets	626
3.	Exit Devices	626
4.	Flat Goods	630
5.	Stops	630
6.	Closers	689

2.3 KEYING

- A. Key all locks into Existing master key system in accordance with owner's instructions.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine doors, frames and related items for conditions that would prevent proper application of finish hardware. Do not proceed until defects have been corrected.

3.2 INSTALLATION

- A. Install each item in accordance with manufacturer's instructions and recommendations. Set units level, plumb and true to line and location. Do not install surface mounted items until finishes have been completed on substrate.

3.3 ADJUST AND CLEAN

- A. At final completion hardware shall be left clean and free from disfigurement. Make a final adjustment to closers and other items of hardware. Where hardware is found defective repair, or replace or otherwise correct as required.

3.4 HARDWARE SETS

- A. While the following hardware sets are intended to cover all doors, and establish a type and standard of quality, it is the responsibility of the hardware supplier to examine the plans and specifications and furnish proper hardware for all openings. The hardware supplier shall review the entire specification versus the door schedule and notify the architect of any errors, inconsistencies, or omissions during the bid period.

### 3.5 ELECTRICAL DRAWINGS

- A. Elevation riser diagrams included in this section are based on the electrified products listed in the hardware sets. Any deviation from specified hardware products shall make the elevation riser diagrams null and void. If non-specified products are submitted on, material supplier to provide new elevation riser diagrams as part of their submittal package.

### 3.6 PROJECT HARDWARE INFO

- A. Number OPT0364814, Date 03.08.2024, Version V1






✂ = Hardware Item Requiring Electrical Coordination

**HARDWARE GROUP NO. 01**

For use on Door #(s):

A101

Provide each SGL door(s) with the following:













QT		DESCRIPTION	CATALOG NUMBER		FINIS	MFR
Y					H	
3	EA	HINGE	5BB1HW 4.5 X 4.5 NRP		652	IVE
1	EA	PRIV W/INDICATOR	L9044 17A L583-363 OS-OCC		626	SCH
1	EA	SURFACE CLOSER	4040XP SCUSH		689	LCN
1	EA	KICKPLATE	8400 10" X 2" LDW B-CS		630	IVE
1	EA	DOOR SEAL	188S		BK	ZER

**HARDWARE GROUP NO. 02**

For use on Door #(s):

A102

Provide each SGL door(s) with the following:

QT		DESCRIPTION	CATALOG NUMBER		FINIS	MFR
Y					H	
2	EA	HINGE	5BB1HW 4.5 X 4.5		652	IVE
1	EA	ELECTRIC HINGE	5BB1HW 4.5 X 4.5 CON TW8		652	IVE
1	EA	ELEC INDCTR LOCK	L9456P6 06A L583-363 OS-OCC		626	SCH
			DM			
1	EA	ELECTRIC STRIKE	6400 FSE		630	VON
1	EA	AUTO OPERATOR	4631 WMS		689	LCN
2	EA	ACTUATOR	8310-853T		630	LCN
2	EA	MOUNT BOX	8310-867F		689	LCN
1	EA	KICKPLATE	8400 10" X 2" LDW B-CS		630	IVE
1	EA	WALL STOP	WS406/407CVX		630	IVE
1	EA	DOOR SEAL	188S		BK	ZER
1	EA	POWER SUPPLY	PS902 900-4R		600	VON
1	EA	WIRING DIAGRAMS	ELEVATION 2057		00	VON

AUTO OPERATOR & ACTUATORS TO INTERFACE WITH ELECTRIC LOCK & STRIKE DEADBOLT MONITOR SWITCH WILL MONITOR WHEN DEADBOLT IS THROWN, SWITCH WILL DISABLE WALL ACTUATORS AND ACTIVATE THE INDICATOR.

OPERATION: DOOR NORMALLY CLOSED AND UN-LOCKED. OUTSIDE ACTUATOR ENERGIZES ELECTRIC STRIKE AND RELEASE LATCH. DOOR CAN BE OPENED WITH SAME HAND FOR ONE HAND OPERATION. TURNING INSIDE DEADBOLT TO THE LOCKED POSITION LOCKS OUTSIDE LEVER, CHANGES INDICATOR TO "OCCUPIED" AND TURNS OFF ACTUATORS FOR PRIVACY WHILE RESTROOM IS OCCUPIED. TURNING INSIDE DEADBOLT TO THE UNLOCKED POSITION OR DEPRESSING INSIDE LEVER UNLOCKS OUTSIDE LEVER, CHANGES INDICATOR TO "VACANT" AND TURNS ON ACTUATORS.

FLOWING WELLS UNIFIED SCHOOL DISTRICT  
FLOWING WELLS JUNIOR HIGH BUILDING K RESTROOMS  
TUCSON, ARIZONA

30-23107-04  
MARCH 12, 2024  
100% CONSTRUCTION DOCUMENTS

END OF SECTION 087100

DOOR HARDWARE

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## SECTION 092900 - GYPSUM BOARD

### PART 1 - GENERAL

#### 1.1 SUMMARY

A. Section Includes:

1. Interior gypsum board.
2. Tile backing panels.
3. Texture finishes.

#### 1.2 ACTION SUBMITTALS

A. Product data: For the following:

1. Mold-resistant gypsum board.
2. Cementitious backer units.
3. Sound-attenuation blankets.

B. Samples: For the following products:

1. Textured Finishes: Manufacturer's standard size for each textured finish indicated and on same backing indicated for Work.

#### 1.3 DELIVERY, STORAGE AND HANDLING

- A. Store materials inside under cover and keep them dry and protected against weather, condensation, direct sunlight, construction traffic, and other potential causes of damage. Stack panels flat and supported on risers on a flat platform to prevent sagging.

#### 1.4 FIELD CONDITIONS

- A. Environmental Limitations: Comply with ASTM C840 requirements or gypsum board manufacturer's written instructions, whichever are more stringent.
- B. Do not install paper-faced gypsum panels until installation areas are enclosed and conditioned.
- C. Do not install panels that are wet, moisture damaged, and mold damaged.
1. Indications that panels are wet or moisture damaged include, but are not limited to, discoloration, sagging, or irregular shape.
  2. Indications that panels are mold damaged include, but are not limited to, fuzzy or splotchy surface contamination and discoloration.

## PART 2 - PRODUCTS

### 2.1 SOURCE LIMITATIONS

- A. Obtain each type of gypsum panel and joint finishing material from single source with resources to provide products of consistent quality in appearance and physical properties.

### 2.2 GYPSUM BOARD, GENERAL

- A. Size: Provide maximum lengths and widths available that will minimize joints in each area and that correspond with support system indicated.

### 2.3 INTERIOR GYPSUM BOARD

- A. Mold-Resistant Gypsum Board: ASTM C1396/C1396M. With moisture- and mold-resistant core and paper surfaces.
  - 1. Core: 5/8 inch, Type X.
  - 2. Long Edges: Tapered.
  - 3. Mold Resistance: ASTM D3273, score of 10 as rated in accordance with ASTM D3274.

### 2.4 TILE BACKING PANELS

- A. Cementitious Backer Units: ANSI A118.9 and ASTM C1288 or ASTM C1325, with manufacturer's standard edges.
  - 1. Thickness: 5/8 inch.
  - 2. Mold Resistance: ASTM D3273, score of 10 as rated in accordance with ASTM D3274.

### 2.5 TRIM ACCESSORIES

- A. Interior Trim: ASTM C1047.
  - 1. Material: Galvanized or aluminum-coated steel sheet or rolled zinc.
  - 2. Shapes:
    - a. Cornerbead.
    - b. LC-Bead: J-shaped; exposed long flange receives joint compound.
    - c. L-Bead: L-shaped; exposed long flange receives joint compound.
    - d. U-Bead: J-shaped; exposed short flange does not receive joint compound.
    - e. Expansion (control) joint.

## 2.6 JOINT TREATMENT MATERIALS

- A. General: Comply with ASTM C475/C475M.
- B. Joint Tape:
  - 1. Interior Gypsum Board: Paper.
  - 2. Tile Backing Panels: As recommended by panel manufacturer.
- C. Joint Compound for Interior Gypsum Board: For each coat, use formulation that is compatible with other compounds applied on previous or for successive coats.
  - 1. Prefilling: At open joints, rounded or beveled panel edges, and damaged surface areas, use setting-type taping compound.
  - 2. Embedding and First Coat: For embedding tape and first coat on joints, fasteners, and trim flanges, use setting-type taping compound.
    - a. Use setting-type compound for installing paper-faced metal trim accessories.
  - 3. Fill Coat: For second coat, use setting-type, sandable topping compound.
  - 4. Finish Coat: For third coat, use drying-type, all-purpose compound.
  - 5. Skim Coat: For final coat of Level 5 finish, use drying-type, all-purpose compound.
- D. Joint Compound for Tile Backing Panels:
  - 1. Cementitious Backer Units: As recommended by backer unit manufacturer.

## 2.7 AUXILIARY MATERIALS

- A. Provide auxiliary materials that comply with referenced installation standards and manufacturer's written instructions.
- B. Laminating Adhesive: Adhesive or joint compound recommended for directly adhering gypsum panels to continuous substrate.
- C. Steel Drill Screws: ASTM C1002 unless otherwise indicated.
  - 1. For fastening cementitious backer units, use screws of type and size recommended by panel manufacturer.
- D. Sound-Attenuation Blankets: ASTM C665, Type I (blankets without membrane facing) produced by combining thermosetting resins with mineral fibers manufactured from glass, slag wool, or rock wool.

## 2.8 TEXTURE FINISHES

- A. Primer: As recommended by textured finish manufacturer.

- B. Aggregate Finish: Water-based, job-mixed, aggregated, drying-type texture finish for spray application.
  - 1. Texture: Match existing.

### PART 3 - EXECUTION

#### 3.1 EXAMINATION

- A. Examine areas and substrates including welded hollow-metal frames and support framing, with Installer present, for compliance with requirements and other conditions affecting performance of the Work.
- B. Examine panels before installation. Reject panels that are wet, moisture damaged, and mold damaged.
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

#### 3.2 INSTALLATION AND FINISHING OF PANELS, GENERAL

- A. Comply with ASTM C840.
- B. Install ceiling panels across framing to minimize the number of abutting end joints and to avoid abutting end joints in central area of each ceiling. Stagger abutting end joints of adjacent panels not less than one framing member.
- C. Install panels with face side out. Butt panels together for a light contact at edges and ends with not more than 1/16 inch of open space between panels. Do not force into place.
- D. Locate edge and end joints over supports, except in ceiling applications where intermediate supports or gypsum board back-blocking is provided behind end joints. Do not place tapered edges against cut edges or ends. Stagger vertical joints on opposite sides of partitions. Do not make joints other than control joints at corners of framed openings.
- E. Form control and expansion joints with space between edges of adjoining gypsum panels.
- F. Cover both faces of support framing with gypsum panels in concealed spaces (above ceilings, etc.), except in chases braced internally.
  - 1. Unless concealed application is indicated or required for sound, fire, air, or smoke ratings, coverage may be accomplished with scraps of not less than 8 sq. ft. in area.
  - 2. Fit gypsum panels around ducts, pipes, and conduits.
  - 3. Where partitions intersect structural members projecting below underside of floor/roof slabs and decks, cut gypsum panels to fit profile formed by structural members; allow 1/4- to 3/8-inch-wide joints to install sealant.

### GYPSUM BOARD

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- G. Isolate perimeter of gypsum board applied to non-load-bearing partitions at structural abutments. Provide 1/4- to 1/2-inch-wide spaces at these locations and trim edges with edge trim where edges of panels are exposed. Seal joints between edges and abutting structural surfaces with acoustical sealant.
- H. Attachment to Steel Framing: Attach panels so leading edge or end of each panel is attached to open (unsupported) edges of stud flanges first.
- I. Wood Framing: Install gypsum panels over wood framing, with floating internal corner construction. Do not attach gypsum panels across the flat grain of wide-dimension lumber, including floor joists and headers. Float gypsum panels over these members or provide control joints to counteract wood shrinkage.
- J. Install sound attenuation blankets before installing gypsum panels unless blankets are readily installed after panels have been installed on one side.

### 3.3 INSTALLATION OF INTERIOR GYPSUM BOARD

- A. Install interior gypsum board in the following locations:
  - 1. Mold-Resistant Type: Vertical surfaces unless otherwise indicated and ceiling surfaces.
- B. Single-Layer Application:
  - 1. On ceilings, apply gypsum panels before wall/partition board application to greatest extent possible and at right angles to framing unless otherwise indicated.
  - 2. On partitions/walls, apply gypsum panels vertically (parallel to framing) unless otherwise indicated or required by fire-resistance-rated assembly, and minimize end joints.
    - a. Stagger abutting end joints not less than one framing member in alternate courses of panels.
    - b. At stairwells and other high walls, install panels horizontally unless otherwise indicated or required by fire-resistance-rated assembly.
  - 3. Fastening Methods: Apply gypsum panels to supports with steel drill screws.

### 3.4 INSTALLATION OF TILE BACKING PANELS

- A. Cementitious Backer Units: ANSI A108.11, at showers, tubs, and where indicated on Drawings.
- B. Where tile backing panels abut other types of panels in same plane, shim surfaces to produce a uniform plane across panel surfaces.

### 3.5 INSTALLATION OF TRIM ACCESSORIES

- A. General: For trim with back flanges intended for fasteners, attach to framing with same fasteners used for panels. Otherwise, attach trim according to manufacturer's written instructions.
- B. Control Joints: Install control joints in accordance with ASTM C840 and in specific locations approved by Architect for visual effect.
- C. Interior Trim: Install in the following locations:
  - 1. Cornerbead: Use at outside corners unless otherwise indicated.
  - 2. LC-Bead: Use at exposed panel edges.
  - 3. L-Bead: Use where indicated on Drawings.
  - 4. U-Bead: Use where indicated on Drawings.

### 3.6 FINISHING OF GYPSUM BOARD

- A. General: Treat gypsum board joints, interior angles, edge trim, control joints, penetrations, fastener heads, surface defects, and elsewhere as required to prepare gypsum board surfaces for decoration. Promptly remove residual joint compound from adjacent surfaces.
- B. Prefill open joints and damaged surface areas.
- C. Apply joint tape over gypsum board joints, except for trim products specifically indicated as not intended to receive tape.
- D. Gypsum Board Finish Levels: Finish panels to levels indicated below and in accordance with ASTM C840:
  - 1. Level 1: Ceiling plenum areas, concealed areas, and where indicated.
  - 2. Level 2: Panels that are substrate for tile.
  - 3. Level 3: Where indicated on Drawings.
  - 4. Level 4: At panel surfaces that will be exposed to view unless otherwise indicated.
    - a. Primer and its application to surfaces are specified in Section 099123 "Interior Painting."
  - 5. Level 5: Where indicated on Drawings.
    - a. Primer and its application to surfaces are specified in Section 099123 "Interior Painting."
- E. Cementitious Backer Units: Finish according to manufacturer's written instructions.

### 3.7 APPLICATION OF TEXTURE FINISHES

- A. Surface Preparation and Primer: Prepare and apply primer to gypsum panels and other surfaces receiving texture finishes. Apply primer to surfaces that are clean, dry, and smooth.
- B. Texture Finish Application: Mix and apply finish using powered spray equipment, to produce a uniform texture free of starved spots or other evidence of thin application or of application patterns.
- C. Prevent texture finishes from coming into contact with surfaces not indicated to receive texture finish by covering them with masking agents, polyethylene film, or other means. If, despite these precautions, texture finishes contact these surfaces, immediately remove droppings and overspray to prevent damage according to texture-finish manufacturer's written instructions.

### 3.8 PROTECTION

- A. Protect adjacent surfaces from drywall compound and promptly remove from floors and other non-drywall surfaces. Repair surfaces stained, marred, or otherwise damaged during drywall application.
- B. Protect installed products from damage from weather, condensation, direct sunlight, construction, and other causes during remainder of the construction period.
- C. Remove and replace panels that are wet, moisture damaged, and mold damaged.
  - 1. Indications that panels are wet or moisture damaged include, but are not limited to, discoloration, sagging, or irregular shape.
  - 2. Indications that panels are mold damaged include, but are not limited to, fuzzy or splotchy surface contamination and discoloration.

END OF SECTION 092900

## SECTION 096513 - RESILIENT BASE AND ACCESSORIES

### PART 1 - GENERAL

#### 1.1 SUMMARY

- A. Section Includes:
  - 1. Thermoplastic-rubber base.

#### 1.2 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Samples: For each exposed product and for each color and texture specified.

### PART 2 - PRODUCTS

#### 2.1 THERMOPLASTIC-RUBBER BASE (**B-01**)

- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
  - 1. Armstrong Flooring, Inc.
  - 2. Johnsonite; a Tarkett company.
  - 3. Roppe Corporation; Roppe Holding Company.
- B. Product Standard: ASTM F1861, Type TP (rubber, thermoplastic).
  - 1. Group: I (solid, homogeneous).
  - 2. Style and Location:
    - a. Style B, Cove: Provide in areas with hard surfaces.
- C. Thickness: 0.125 inch.
- D. Height: 4 inches.
- E. Lengths: Coils in manufacturer's standard length.
- F. Outside Corners: Job formed.
- G. Inside Corners: Job formed.



- H. Colors: As indicated on Drawings or as selected by Architect.

## 2.2 INSTALLATION MATERIALS

- A. Trowelable Leveling and Patching Compounds: Latex-modified, portland-cement-based or blended hydraulic-cement-based formulation provided or approved by resilient-product manufacturer for applications indicated.
- B. Adhesives: Water-resistant type recommended by resilient-product manufacturer for resilient products and substrate conditions indicated.

## PART 3 - EXECUTION

### 3.1 PREPARATION

- A. Prepare substrates according to manufacturer's written instructions to ensure adhesion of resilient products.
- B. Fill cracks, holes, and depressions in substrates with trowelable leveling and patching compound; remove bumps and ridges to produce a uniform and smooth substrate.
- C. Do not install resilient products until materials are the same temperature as space where they are to be installed.
- D. Immediately before installation, sweep and vacuum clean substrates to be covered by resilient products.

### 3.2 RESILIENT BASE INSTALLATION

- A. Comply with manufacturer's written instructions for installing resilient base.
- B. Apply resilient base to walls, columns, pilasters, casework and cabinets in toe spaces, and other permanent fixtures in rooms and areas where base is required.
- C. Install resilient base in lengths as long as practical without gaps at seams and with tops of adjacent pieces aligned.
- D. Tightly adhere resilient base to substrate throughout length of each piece, with base in continuous contact with horizontal and vertical substrates.
- E. Do not stretch resilient base during installation.
- F. On masonry surfaces or other similar irregular substrates, fill voids along top edge of resilient base with manufacturer's recommended adhesive filler material.
- G. Job-Formed Corners:

## RESILIENT BASE AND ACCESSORIES

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1. Outside Corners: Use straight pieces of maximum lengths possible and form with returns not less than 4 inches in length.
  - a. Form without producing discoloration (whitening) at bends.
2. Inside Corners: Use straight pieces of maximum lengths possible and form with returns not less than 4 inches in length.
  - a. Miter or cope corners to minimize open joints.

### 3.3 CLEANING AND PROTECTION

- A. Comply with manufacturer's written instructions for cleaning and protecting resilient products.
- B. Cover resilient products subject to wear and foot traffic until Substantial Completion.

END OF SECTION 096513

## SECTION 099124 - INTERIOR PAINTING (MPI STANDARDS)

### PART 1 - GENERAL

#### 1.1 SUMMARY

- A. Section includes surface preparation and the application of paint systems on interior substrates.

#### 1.2 ACTION SUBMITTALS

- A. Product Data: For each type of product. Include preparation requirements and application instructions.
  - 1. Include printout of current "MPI Approved Products List" for each product category specified, with the proposed product highlighted.
- B. Samples: For each type of topcoat product.
- C. Product List: Use same designations indicated on Drawings and in the Interior Painting Schedule to cross-reference paint systems specified in this Section. Include color designations.

#### 1.3 MAINTENANCE MATERIAL SUBMITTALS

- A. Furnish extra materials that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
  - 1. Paint: 5 percent, but not less than 1 gal. of each material and color applied.

#### 1.4 DELIVERY, STORAGE, AND HANDLING

- A. Store materials not in use in tightly covered containers in well-ventilated areas with ambient temperatures continuously maintained at not less than 45 deg F.
  - 1. Maintain containers in clean condition, free of foreign materials and residue.
  - 2. Remove rags and waste from storage areas daily.

#### 1.5 FIELD CONDITIONS

- A. Apply paints only when temperature of surfaces to be painted and ambient air temperatures are between 50 and 95 deg F.
- B. Do not apply paints when relative humidity exceeds 85 percent; at temperatures of less than 5 deg F above the dew point; or to damp or wet surfaces.

## PART 2 - PRODUCTS

### 2.1 MANUFACTURERS

- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
  - 1. Dunn-Edwards Corporation (a Nippon Paint Holdings Co. Ltd. company).
  - 2. Sherwin-Williams Company (The).
- B. Products: Subject to compliance with requirements, provide one of the products listed in the Interior Painting Schedule for the paint category indicated.

### 2.2 PAINT, GENERAL

- A. MPI Standards: Products shall comply with MPI standards indicated and shall be listed in its "MPI Approved Products List."
- B. Material Compatibility:
  - 1. Materials for use within each paint system shall be compatible with one another and substrates indicated, under conditions of service and application as demonstrated by manufacturer, based on testing and field experience.
  - 2. For each coat in a paint system, products shall be recommended in writing by topcoat manufacturers for use in paint system and on substrate indicated.
- C. Colors: As indicated on Drawings.

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Examine substrates and conditions, with Applicator present, for compliance with requirements for maximum moisture content and other conditions affecting performance of the Work.
- B. Maximum Moisture Content of Substrates: When measured with an electronic moisture meter as follows:
  - 1. Concrete: 12 percent.
  - 2. Fiber-Cement Board: 12 percent.
  - 3. Masonry (Clay and CMUs): 12 percent.
  - 4. Wood: 15 percent.
  - 5. Gypsum Board: 12 percent.
  - 6. Plaster: 12 percent.
- C. Gypsum Board Substrates: Verify that finishing compound is sanded smooth.

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- D. Verify suitability of substrates, including surface conditions and compatibility, with existing finishes and primers.
- E. Proceed with coating application only after unsatisfactory conditions have been corrected.
  - 1. Application of coating indicates acceptance of surfaces and conditions.

### 3.2 PREPARATION

- A. Comply with manufacturer's written instructions and recommendations in "MPI Architectural Painting Manual" applicable to substrates and paint systems indicated.
- B. Remove hardware, covers, plates, and similar items already in place that are removable and are not to be painted. If removal is impractical or impossible because of size or weight of item, provide surface-applied protection before surface preparation and painting.
  - 1. After completing painting operations, use workers skilled in the trades involved to reinstall items that were removed. Remove surface-applied protection if any.
- C. Clean substrates of substances that could impair bond of paints, including dust, dirt, oil, grease, and incompatible paints and encapsulants.
  - 1. Remove incompatible primers and reprime substrate with compatible primers or apply tie coat as required to produce paint systems indicated.
- D. Steel Substrates: Remove rust, loose mill scale, and shop primer if any. Clean using methods recommended in writing by paint manufacturer, but not less than the following:
  - 1. SSPC-SP 2.
- E. Shop-Primed Steel Substrates: Clean field welds, bolted connections, and areas where shop paint is abraded. Paint exposed areas with the same material as used for shop priming to comply with SSPC-PA 1 for touching up shop-primed surfaces.
- F. Galvanized-Metal Substrates: Remove grease and oil residue from galvanized sheet metal by mechanical methods to produce clean, lightly etched surfaces that promote adhesion of subsequently applied paints.

### 3.3 INSTALLATION

- A. Apply paints according to manufacturer's written instructions and to recommendations in "MPI Manual."
  - 1. Use applicators and techniques suited for paint and substrate indicated.
  - 2. Paint surfaces behind movable equipment and furniture same as similar exposed surfaces. Before final installation, paint surfaces behind permanently fixed equipment or furniture with prime coat only.

3. Paint front and backsides of access panels, removable or hinged covers, and similar hinged items to match exposed surfaces.
  4. Do not paint over labels of independent testing agencies or equipment name, identification, performance rating, or nomenclature plates.
  5. Primers specified in painting schedules may be omitted on items that are factory primed or factory finished if acceptable to topcoat manufacturers.
- B. If undercoats or other conditions show through topcoat, apply additional coats until cured film has a uniform paint finish, color, and appearance.
- C. Apply paints to produce surface films without cloudiness, spotting, holidays, laps, brush marks, roller tracking, runs, sags, ropiness, or other surface imperfections. Cut in sharp lines and color breaks.
- D. Painting Fire-Suppression, Plumbing, HVAC, Electrical, Communication, and Electronic Safety and Security Work:
1. Paint the following work where exposed in equipment rooms:
    - a. Equipment, including panelboards.
    - b. Uninsulated metal piping.
    - c. Uninsulated plastic piping.
    - d. Pipe hangers and supports.
    - e. Metal conduit.
    - f. Plastic conduit.
    - g. Tanks that do not have factory-applied final finishes.
    - h. Duct, equipment, and pipe insulation having cotton or canvas insulation covering or other paintable jacket material.
  2. Paint the following work where exposed in occupied spaces:
    - a. Equipment, including panelboards.
    - b. Uninsulated metal piping.
    - c. Uninsulated plastic piping.
    - d. Pipe hangers and supports.
    - e. Metal conduit.
    - f. Plastic conduit.
    - g. Duct, equipment, and pipe insulation having cotton or canvas insulation covering or other paintable jacket material.
    - h. Other items as directed by Architect.
  3. Paint portions of internal surfaces of metal ducts, without liner, behind air inlets and outlets that are visible from occupied spaces.

### 3.4 FIELD QUALITY CONTROL

- A. Dry-Film Thickness Testing: Owner may engage the services of a qualified testing and inspecting agency to inspect and test paint for dry-film thickness.

1. Contractor shall touch up and restore painted surfaces damaged by testing.
2. If test results show that dry-film thickness of applied paint does not comply with paint manufacturer's written recommendations, Contractor shall pay for testing and apply additional coats as needed to provide dry-film thickness that complies with paint manufacturer's written recommendations.

### 3.5 CLEANING AND PROTECTION

- A. At end of each workday, remove rubbish, empty cans, rags, and other discarded materials from Project site.
- B. After completing paint application, clean spattered surfaces. Remove spattered paints by washing, scraping, or other methods. Do not scratch or damage adjacent finished surfaces.
- C. Protect work of other trades against damage from paint application. Correct damage to work of other trades by cleaning, repairing, replacing, and refinishing, as approved by Architect, and leave in an undamaged condition.
- D. At completion of construction activities of other trades, touch up and restore damaged or defaced painted surfaces.

### 3.6 INTERIOR PAINTING SCHEDULE

#### A. Steel Substrates:

1. Water-Based Light-Industrial Coating System, MPI INT 5.1B:
  - a. Prime Coat: Primer, rust inhibitive, water based MPI #107.
    - 1) Dunn-Edwards Corporation; BLOC-RUST Premium, BRPR-00.
    - 2) The Sherwin-Williams Company; Pro Industrial Pro-Cryl, B66-1300 Series.
  - b. Intermediate Coat: Light-industrial coating, interior, water based, matching topcoat.
  - c. Topcoat: Light-industrial coating, interior, water based (MPI Gloss Level 5), MPI #153.
    - 1) Dunn-Edwards Corporation; EVERSIELD Exterior/Interior Semi-Gloss Paint, EVSH50 or SPARTASHIELD Exterior Semi-Gloss Paint, SSSL50.
    - 2) The Sherwin-Williams Company; Pro Industrial Acrylic Semi-Gloss, B66-650 Series.

#### B. Gypsum Board Substrates:

1. Latex over Latex Sealer System, MPI INT 9.2A:
  - a. Prime Coat: Primer sealer, latex, interior, MPI #50.

- 1) Dunn-Edwards Corporation; VINYLASTIC Premium, VNPR00.
  - 2) The Sherwin-Williams Company; ProMar 200 Zero VOC Interior Latex Primer, B28W02600.
- b. Intermediate Coat: Latex, interior, institutional low odor/VOC, matching topcoat.
  - c. Topcoat: Latex, interior, flat (MPI Gloss Level 1), MPI #53.
- 1) Dunn-Edwards Corporation; SUPREMA Interior Flat Paint, SPMA10.
  - 2) The Sherwin-Williams Company; ProMar 200 Zero VOC Interior Latex Flat, B30-2600 Series.
2. Epoxy-Modified Latex System, MPI INT 9.2F:
    - a. Prime Coat: Primer sealer, latex, interior, MPI #50.
      - 1) Dunn-Edwards Corporation; VINYLASTIC Premium, VNPR00.
      - 2) The Sherwin-Williams Company; ProMar 200 Zero VOC Interior Latex Primer, B28W02600.
    - a. Intermediate Coat: Epoxy-modified latex, matching topcoat.
    - b. Topcoat: Epoxy-modified latex (MPI Gloss Level 3).
      - 1) Dunn-Edwards Corporation; ENDURACAT Interior Semi-Gloss Pre-Catalyzed Waterbased Epoxy, ENPX50.
      - 2) The Sherwin-Williams Company; Pro Industrial Water Based Catalyzed Epoxy Eg-Shel, B73-360 Series.

END OF SECTION 099124



## SECTION 102800 - TOILET, BATH, AND LAUNDRY ACCESSORIES

### PART 1 - GENERAL

#### 1.1 SUMMARY

##### A. Section Includes:

1. Public-use shower room accessories.
2. Public-use shower room accessories.

#### 1.2 ACTION SUBMITTALS

##### A. Product data.

##### B. Delegated Design Submittals: For grab bars and shower seats.

1. Include structural design calculations indicating compliance with specified structural-performance requirements.

#### 1.3 INFORMATIONAL SUBMITTALS

##### A. Sample warranties.

#### 1.4 CLOSEOUT SUBMITTALS

##### A. Maintenance data.

#### 1.5 WARRANTY

##### A. Manufacturer's Special Warranty for Mirrors: Manufacturer agrees to repair or replace mirrors that fail in materials or workmanship within specified warranty period.

1. Warranty Period: 10 years from date of Substantial Completion.

### PART 2 - PRODUCTS

#### 2.1 PERFORMANCE REQUIREMENTS

##### A. Structural Performance: Design accessories and fasteners to comply with the following requirements:

## TOILET, BATH, AND LAUNDRY ACCESSORIES

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1. Grab Bars: Installed units are able to resist 250 lbf concentrated load applied in any direction and at any point.
2. Shower Seats: Installed units are able to resist 250 lbf concentrated load applied in any direction and at any point.

## 2.2 PUBLIC-USE SHOWER ROOM ACCESSORIES

- A. Toilet Tissue (Roll) Dispenser (**TTD**): Owner-furnished, owner-installed.
- B. Paper Towel (Roll) Dispenser (**PTD**): Owner-furnished, owner-installed.
- C. Soap Dispenser (**SD**): Owner-furnished, owner-installed.
- D. Grab Bar (**GB-1, GB-2, GB-3**):
  1. Basis-of-Design Product: Subject to compliance with requirements, provide Bobrick Washroom Equipment, Inc; B-68616 or a comparable product by one of the following:
    - a. Bradley Corporation.
  2. Mounting: Flanges with concealed fasteners.
  3. Material: Stainless steel, 0.05 inch thick.
    - a. Finish: Smooth, ASTM A480/A480M No. 4 finish (satin).
  4. OD: 1-1/2 inches.
  5. Configuration and Length: As indicated on Drawings.
- E. Sanitary-Napkin Disposal Unit (**SND**): Owner-furnished, owner-installed.
- F. Mirror Unit (**MR**):
  1. Basis-of-Design Product: Subject to compliance with requirements, provide Bobrick Washroom Equipment, Inc; B-290 Series or a comparable product by one of the following:
    - a. Bradley Corporation.
  2. Frame: Stainless steel angle, 0.05 inch thick.
    - a. Corners: Welded and ground smooth.
  3. Size: 24 inches by 36 inches.
  4. Hangers: Manufacturer's standard rigid, tamper and theft resistant.

## 2.3 PUBLIC-USE SHOWER ROOM ACCESSORIES

- A. Shower Curtain Rod (**SCR**):

## TOILET, BATH, AND LAUNDRY ACCESSORIES

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1. Description: 1-inch-OD, straight rod.
2. Configuration: As indicated on Drawings.
3. Mounting Flanges: Concealed fasteners; in material and finish matching rod.
4. Rod Material and Finish: Stainless steel, ASTM A480/A480M No. 4 finish (satin).

B. Shower Curtain (**SC**):

1. Size: Minimum 12 inches wider than opening by 72 inches high.
2. Material: Nylon-reinforced vinyl, minimum 9 oz. or 0.008-inch- thick vinyl, with integral antibacterial and flame-retardant agents.
3. Color: White.
4. Grommets: Corrosion resistant at minimum 6 inches o.c. through top hem.
5. Shower Curtain Hooks: Chrome-plated or stainless steel, spring wire curtain hooks with snap fasteners, sized to accommodate specified curtain rod. Provide one hook per curtain grommet.

C. Folding Shower Seat (**FSS-1**):

1. Basis-of-Design Product: Subject to compliance with requirements, provide Bobrick Washroom Equipment, Inc; B-5181 or a comparable product by one of the following:
  - a. Bradley Corporation.
  - b. Brey-Krause Manufacturing Co.
2. Configuration: L-shaped seat, designed for wheelchair access.
3. Seat: Phenolic or polymeric composite of slat-type or one-piece construction in color as selected by Architect.
4. Mounting Mechanism: Stainless steel, ASTM A480/A480M No. 4 finish (satin).
5. Dimensions: 33 inches wide by 22 5/16 inches deep.

D. Robe Hook (**RH-1**):

1. Basis-of-Design Product: Subject to compliance with requirements, provide Bobrick Washroom Equipment, Inc; B-6707 or a comparable product by one of the following:
  - a. Bradley Corporation.
2. Description: Single-prong unit.
3. Material and Finish: Stainless steel, ASTM A480/A480M No. 4 finish (satin).

## 2.4 FABRICATION

- A. General: Fabricate units with tight seams and joints, and exposed edges rolled. Hang doors and access panels with full-length, continuous hinges. Equip units for concealed anchorage and with corrosion-resistant backing plates.

### PART 3 - EXECUTION

#### 3.1 INSTALLATION

- A. Install accessories in accordance with manufacturers' written instructions, using fasteners appropriate to substrate indicated and recommended by unit manufacturer. Install units level, plumb, and firmly anchored in locations and at heights indicated.
  - 1. Remove temporary labels and protective coatings.
- B. Grab Bars: Install to comply with specified structural-performance requirements.
- C. Shower Seats: Install to comply with specified structural-performance requirements.

#### 3.2 ADJUSTING AND CLEANING

- A. Adjust accessories for unencumbered, smooth operation. Replace damaged or defective items.
- B. Clean and polish exposed surfaces in accordance with manufacturer's written instructions.

END OF SECTION 102800