CHAMPAIGN PARK DISTRICT

NOTICE FOR BIDS

Public notice is hereby given that the Champaign Park District (District) will receive sealed bids for all labor and materials to install interior glass aluminum wall, doors, and infrastructure at Leonhard Recreation Center located at 2307 Sangamon Dr, Champaign, IL, 61821, until 11:00 am Central Standard Time on November 3rd, 2026 at the District offices, located at 706 Kenwood Road, Champaign, IL 61821, (217) 819-3812 at which time such bids will be opened and publicly read aloud.

Bid packets will be available at the District's website bid tab (https://champaign-parks.org/bids-rfps) beginning October 19th, 2026 or by emailing Alexandra.kolar@champaignparks.org.

Bids are required to be submitted under a condition of irrevocability for a period of thirty (30) days after submission. The District reserves the right to reject any or all bids, waive any or all informalities in the bids, and determine the lowest responsible bidder.
The District encourages minority business firms to submit bids for the project. Bidders shall provide the services and materials in a good and workmanlike, professional and courteous manner. All bidders shall comply with provisions of the District Affirmative Action Ordinance and ensure that any subcontractor shall also comply therewith. Furthermore, all bidders shall comply with all federal, state, and local requirements pertaining to the Illinois Prevailing Wage Act, the Illinois Human Rights Act, equal opportunity regulations, and any other state or federal regulations applicable to the project and contract. All bidders are notified that the District will affirmatively assure that the contract will be awarded without discrimination on the grounds of race, color, religion, national origin, and any other protected class or characteristics, and no person shall be excluded from participation in, denied the benefits of, or otherwise subjected to discrimination under any program, service, or activity in violation of any applicable federal or state laws prohibiting such discrimination.

CHAMPAIGN
PARK DISTRICT

October 19th, 2026

Dear Potential Bidder:

The Champaign Park District is requesting bids for all labor, materials, and equipment to install interior glass aluminum wall, doors, and infrastructure at Leonhard Recreation Center located at 2307 Sangamon Dr in Champaign, IL. Enclosed is a copy of the bid information.

Sealed bids shall be delivered or mailed to Ally Kolar, Champaign Park District, 706 Kenwood Road, Champaign, Illinois 61821 by **11:00 am prevailing time on Tuesday, November 3rd, 2026.** Sealed bid packets shall be clearly marked with the words: "**Bid Document: LRC OFFICE CONVERSION**", along with the bidder's name and address, on the outside of the envelope.

When submitting your sealed bid, please make sure to enclose the following:

1. Bid Forms (page 8-9)
2. Commitment to Engage in Affirmative Action Practices (page 10)
3. Affirmative Action Contractor's Compliance Report (page 11-12)

If you have any questions regarding the areas, or any of the enclosed information please contact me at 217-819-3812, 7:30 a.m. to 4:00 p.m., weekdays, or alexandra.kolar@champaignparks.com

Sincerely,

Alexandra F Kolar

Ally Kolar
Construction Project Manager

Champaign Park District
706 Kenwood Road
Champaign, Illinois 61821-4112
217.398.2550 Phone
217.355.8421 Fax
www.champaignparks.org

Park Commissioners
Craig W. Hays
Barbara J. Kuhl
Tyler R. Rouse
Jane L. Solon
Michael R. Somers

Officers
Marguerite Bailey, *Secretary*
Guy C. Hall, *Attorney*
Donna K. Lawson, *Treasurer*
Sarah Sandquist, *Executive Director*

Our mission is to enhance our community's quality of life through positive experiences in parks, recreation, and cultural arts.

SECTION I. INSTRUCTIONS TO BIDDERS

1.01 Invitation to Bid: The Champaign Park District is requesting bids from contractor(s) to furnish all labor, material, supplies and equipment to install interior glass aluminum wall, doors, and infrastructure at Leonhard Recreation Center located at 2307 Sangamon Dr, Champaign, IL, 61821.

1.02 Due Date: Sealed bids shall be delivered or mailed to **Ally Kolar, Champaign Park District, 706 Kenwood Road, Champaign, Illinois 61821, by 11:00 a.m.** prevailing time on **Tuesday, November 3rd, 2026,** at which time bids will be opened and publicly read. Facsimile copies and late bids will not be accepted.

1.03 **Pre-Bidders Conference: A non-mandatory pre-bidders conference will be held on Thursday, October 22nd, 2026 at 9 am at Leonhard Recreation Center at 2307 Sangamon Dr, Champaign, Illinois 61821.** The purpose of the pre-bid conference is to provide a structured and formal opportunity for the District to accept questions from potential bidders on the bid documents as well as clarify the contents of the Bid. Any major revisions to the Bid as a result of the pre-bid conference, or answers to deferred questions, shall be made in the form of a written addendum to the original Bid.

1.04 Bid Understanding: By submitting a bid, the bidder agrees and assures that the specifications are adequate, and the bidder accepts the terms and conditions, specifications and requirements of work to be completed. Failure to do so will be at the bidder's risk and they cannot secure relief on the plea of error.

1.05 Submission of Bid: All bids shall be submitted on the **Bid Forms (Pages 8-9)** and accompanied by requested information including the **Champaign Park District Commitment to Engage in Affirmative Action Practices forms (Pages 10-12**). All blank spaces shall be properly filled in, in ink or typewritten, in both words and figures, and with no other conditions, changes, erasures or interlineations. Bids shall be signed and executed by a principal duly authorized to make contracts.

Bids shall be enclosed in an envelope sealed and clearly marked with the words: "**BID DOCUMENT: LRC Office Conversion**." The bidder shall put their name and address on the outside of the envelope.

The Champaign Park District shall not be responsible for the premature opening of bid envelopes, which are not properly filled out in accordance with the instructions.

1.06 Site Visits: It shall be the sole responsibility of the bidder to inspect the location(s) prior to submitting a bid. No variation in price or conditions shall be permitted based upon a claim of ignorance. Submission of a bid shall be considered evidence that the bidder has familiarized himself/herself with the nature and extent of the work, and the equipment, materials and labor required.

1.07 Awards Criteria: Award will be to the lowest priced, responsible bidder if all other requirements are satisfactorily met**.** Bidder must include three (3) commercial references of comparable nature to location bid on. The Champaign Park District reserves the right to reject any and all bids, waive technicalities and irregularities and/or to award the contract only to a bidder who is equipped, competent and experienced in the class of work and whose bid is deemed to be advantageous to the interests of the Champaign Park District.

1.08 Rejection of Bids: The Park District reserves the right to reject any, all, or any part of a bid, and waive any or all irregularities and select the bid that is in its best interest. The Park District

reserves the right to reject the bid of any bidder who previously failed to perform adequately for the Park District or any other governmental agency or company.

1.09 Withdrawal: Bidder may make a written request to modify or withdraw the offer at any time prior to the opening. Bids may not be modified after submittal or withdrawn or modified after bid opening. Withdrawal of bids will be allowed if award of contract has been delayed more than 60 days, after date of actual bid opening.

1.10 Inquiries: Questions and comments regarding this solicitation should be directed to the **Ally Kolar, Construction Project Manager** at Bresnan Meeting Center, 706 Kenwood Road, Champaign, Illinois 61821 or by emailing Alexandra.kolar@champaignparks.org or by calling **217-819-3812**. Written answers to questions of a general nature or which would affect the solicitation will be provided to all eligible bidders. Only written answers to the questions shall be binding. Inquiries must be received by **3 pm on Wednesday, October 28th, 2026.** Written responses to questions or bid addenda will be posted to the Champaign Park District "Bids & RFPs" web page by **4 pm prevailing time on Friday, October 30th, 2026.** It is the bidders' responsibility to check for bid addenda and written responses to questions.

SECTION II. TERMS AND CONDITIONS

2.01 Definitions: *Owner* shall mean the Champaign Park District. *Contractor* shall mean party of the second part to this contract, acting directly or through his or its legal representative(s) or agent(s). *Subcontractor* shall mean persons, firms or corporations having a direct contract with the contractor, and those who contract to furnish labor or labor and materials at the site of the project.

2.02 Contract Documents: The contract entered into by the parties shall consist of the Instructions to Bidder, Terms and Conditions, Specifications, and Fence Repair Bid Forms including all modifications thereof, and a purchase order, if applicable, requiring signatures of the Champaign Park District and the Contractor, all of which shall be referred to collectively as the Contract Documents.

2.03 Payments: Contractor shall submit invoice to the District by the 1st Friday of the month. Invoice must include the Purchase Order number. Payment will be monthly after Board approval of the bills, which is the 2nd Wednesday of each month.

2.04 Taxes: The District is exempt from any taxes imposed by State and/or Federal Government. Exemption certificates will be provided upon request.

2.05 Cancellation/Termination: The Park District may cancel this contract for convenience by providing thirty (30) calendar days advance notice to the contractor.

The Park District may cancel this contract for cause (i.e., fails to meet deadlines, fails to provide agreed upon service, etc.) at any time by giving one week's written notice to the contractor. The termination of the contract will be issued only after the District deems that the contractor has failed to remedy the problem after being forewarned.

The Contractor may cancel this contract for convenience or cause by providing thirty (30) calendar days advance notice to the District.

2.06 Compliance or Deviation to Specifications: Bidder hereby agrees that the equipment or services offered will meet all the requirements of the specifications in this solicitation unless deviations from them are clearly indicated in the Bidder's response. Bidder may submit an attachment entitled "Exceptions for Specification", which must be signed by Bidder's authorized representative. An explanation must be made for each item to which an exception is taken, giving

in detail the extent of the exception and the reason for which it is taken. Bids failing to comply with this requirement will be considered non-responsive.

2.07 Compliance with Ordinances and Statutes and Notice of Special Conditions: Every bidder shall comply with the requirements of the Affirmative Action Regulations of the Champaign Park District, Illinois Fair Employment Act, Equal Opportunity regulations and other Federal and State of Illinois regulations and guidelines applicable to the contract.

2.08 Assignment and Subcontracts: The Contractor shall not assign this contract or any part thereof without written consent of the Park District, nor shall the Contractor award any work under this contract to any subcontractor without prior written approval from the Director of Operations or the Executive Director. Nothing contained in the contract documents shall create a contractual relation between any subcontractor and the Owner. Any subcontractor assigned must meet the same requirements as the Contractor awarded the bid.

2.09 Independent Contractor: The contractor acknowledges and agrees that the Contractor is not an employee of the Park District, is not entitled to any benefits or protections afforded employees of the Park District, nor bound by any obligations of employees of the Park District. Nevertheless, the Contractor will not act contrary to the policies of the Park District. The Contractor understands and fully agrees that the Contractor will not be insured under provisions of the unemployment compensation insurance of the Park District or the workers' compensation insurance of the Park District, and that any injury or property damage in connection with the work performed will be the Contractor's sole responsibility and not that of the Park District. It is also understood that the Contractor is not protected as an employee or as a person acting as an agent or employee under the provisions of the general liability insurance of the Park District and, therefore, the Contractor will be solely responsible for the Contractor's own acts or omissions, and those of the Contractor's employees and agents, if any. The Park District will not in any manner whatsoever be obligated to defend, indemnify or hold harmless the Contractor, or the Contractor's employees and agents, if any, in matters of liability.

2.10 Indemnification: Contractor shall indemnify and hold harmless District and its officers, officials, employees, volunteers and agents from and against all claims, damages, losses and expenses, including but not limited to legal fees (attorneys' and paralegals' fees and court costs) arising out of or resulting from the performance of Contractor's work, provided that any such claim, damage, loss or expense (i) is attributable to bodily injury, sickness, disease or death, or injury to or destruction of tangible property, including the loss of use therefrom, and (ii) is caused in whole or in part by any wrongful or negligent act or omission of Contractor, any Subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, except to the extent it is caused in part by a party indemnified hereunder. Such obligation shall not be construed to negate, abridge, or otherwise reduce any other right or obligation of indemnification which would otherwise exist as to any party or person described in this Paragraph. Contractor shall similarly protect, indemnify and hold and save harmless District, its officers, officials, employees, volunteers and agents against and from any and all claims, costs, causes, actions and expenses including but not limited to legal fees, incurred by reason of Contractor's breach of any of its obligations under, or Contractor's default of, any provision of the Agreement.

2.11 Insurance: The Contractor shall purchase and maintain such insurance as will protect him/her from claims under worker's compensation acts and from claims or damages because of bodily injury, including death, and all property damage, including without limitation, which might arise during operations under this contract, whether such operations be by himself/herself or by any subcontractor or anyone directly or indirectly employed by either of them**.** After award of bids by the Park Board of Commissioners at their Regular Board Meeting, **Contractor shall provide a Certificate of Insurance.** Each sequential year of this contract the insurance requirements must be turned in for same time period corresponding to the dates above. Failure to do so will result in

loss of the contract, which will be awarded to the next lowest responsible bidder. Contractor shall maintain minimum limits of insurance no less than:

(a) Workman's Compensation as required by statute and Employers Liability Insurance: Employers Liability limits shall not be less than $1,000,000 each accident for bodily injury by accident or $1,000,000 each employee for bodily injury by disease.
(b) General Liability: a limit of not less than $2,000,000 each occurrence
(c) Automobile Liability: limit of not less than $2,000,0000 each accident

Failure to maintain the required insurance may result in termination of this Contract.

2.12 Bid Rigging or Bid Rotating: The bidder by affixing his or her signature to the bid, certifies that he/she has not been barred from being awarded a contract with a unit of State or local government as a result of a violation of Section 33E-3 or 33E-4 of the Criminal Code of 1961.

2.13 Sexual Harassment Policy: Contractor certifies that it has a written sexual harassment policy that includes the following information:

a. The illegality of sexual harassment.
b. The definition of sexual harassment under State Law.
c. A description of sexual harassment utilizing examples.
d. The Contractors internal complaint process including penalties.
e. The legal recourse, investigative and complaint process available through the Illinois Department of Human Rights and Equal Employment Opportunity Commission.
f. Protection against retaliation against a person because he or she has opposed that which he or she reasonably and in good faith believes to be sexual harassment or because he or she has made a charge, filed a complaint, testified, assisted, or participated in an investigation, proceedings or hearing under the Illinois Human Rights Act or any other civil rights statute.

A copy of the policies shall be provided to the District upon request.

2.14 Protest: If bidder objects to any provision of the bid, believes the District improperly rejected your offer, or believes the selected offer is not in the Champaign Park District's best interests, bidder may submit a written protest to the Executive Director within five (5) days after the opening. Owner will consider only written protests that are properly and timely filed with the District. Owner will issue a written decision and that decision is final.

2.15 Bid Security: Each bid must be accompanied by a certified cashier's check, certified check, or a bid bond duly executed by the bidder as principal and having as surety thereon a surety company approved by the Owner, in the amount of 10% of the total bid. Such cash, checks, or bid bonds will be returned to all except the three lowest bidders within three (3) days after the opening of bids, and the remaining cash, checks, or bid bonds will be returned promptly after the Owner and the accepted bidder have executes the contract, or, if no award has been made within thirty (30) days after the date for the opening of bids, upon demand of the bidder at any time thereafter, so long as he has not been notified of the acceptance of his/her bid.

SECTION III. GENERAL INFORMATION

3.1 Contractor shall provide all labor, materials, equipment and supervision to perform work installation of interior glass aluminum wall, doors, and infrastructure at Leonhard Recreation Center

3.2 Scope is dictated in attached Exhibit A.

3.3 Contractor shall provide typical warranty of materials and workmanship from date of substantial completion.

3.4 Contractor shall provide one lump sum cost value for work performed.

3.5 Provide qualifications portfolio. Contractor shall provide list of at least (3) references for projects of comparable scope with contact information.

3.6 Final payment will be made after completion and acceptance of the project by the Construction Project Manager.

SECTION IV: SPECIFICATIONS

4.01 It is the responsibility of each bidder to view each site. Bid prices in response to this solicitation shall be firm for the full term of the contract. Contract bid areas are as defined on the attached Exhibit A included in the bid package

4.02 Contractor shall coordinate project timeline with CPD Construction Project Manager and accommodate CPD potential programming limitations by CPD request. Intent is for project to start as soon as contract award is made and work to be substantially complete by 3/5/2027. Contract award will be made following CPD Board Approval 11/11/2026.

4.03 See Exhibit A project scope. Location is tagged as “Office 112”. The entrance to the office shall be converted such as to match the entrance of the indoor play entrance tagged as room “Indoor Play 103”. This entails replacing the existing drywall and door, frame, hardware with interior aluminum glass wall and new door. The office also has an interior partition wall and door that were building additions that are unmarked in the provided plans as it was a later addition to the space. This door shall be replaced to also match the indoor play entrance. The drywall is to remain in place as existing at this partition. Both new doors shall have security card readers to control door access. The backroom of the office is to receive two (2) data lines in the middle of each sidewall for a total of four (4) and (2) data lines total to support the installation of two (2) security cameras in the backroom. The front room is to receive one (1) data line to support the installation of one (1) security camera.

4.04 Security cameras will be owner furnished, contractor installed. Security cameras are dome style to be installed at the corners of the rooms as dictated by Exhibit A.

4.05 CPD will be responsible for any painting work required following completion of project scope. Contractor to leave walls in a state ready for paint without further prep work required by CPD (i.e., contractor to install bead as necessary and mud edges and trim out appropriately to be ready for CPD paint). Site will be left in an otherwise turnkey condition by contractor requiring no further work on the part of CPD besides painting.

4.06 Ice machine should be salvaged for CPD to relocate for reuse. Contractor to remove and cap the existing supporting infrastructure.

4.07 There is existing electrical infrastructure in the entrance wall of Office 112. Light switch to be relocated to masonry wall with exposed conduit run. Contractor shall appropriately remove and cap remaining electrical infrastructure in drywall that is to be demolished that is no longer needed, including runs to two existing outlets in drywall to be demolished. Perform any necessary rerouting.

4.08 The new Office 112 entrance door and partition wall door swing to operate as left hand swing.

4.09 Each new door to be fitted with a security card reader. Basis of Design is S2 Security, HID, pivCLASS. This is to match the existing card reader at the indoor playspace. Door hardware to be compatible accordingly for usage.

4.10 Data drop lines to be low voltage CAT-6.

4.01 Drawings and Specifications

4.01.1 See attached details and specifications from as-builts from indoor play space door opening for two new openings to match as specified.
4.01.2 See attached MEP and layout drawings from as-builts, for reference.

BID FORMS

TOTAL BID COST: _____

Insurance Statement: By signing the bid documents, bidder hereby certifies that the bidder has reviewed and understands the insurance coverage requirements specified in the Bid specifications.

I hereby certify that I am duly authorized to sign as a representative for the contractor submitting the attached bid to the Champaign Park District, and that they have read, fully understand, and accept the items detailed in this bid.

Signed this _____ day of _____, 20___.

SUBMITTED BY:

_____
Company

_____
Address

_____
Phone Fax

_____
Cell

_____
Email

_____
Authorized Agent (print or type)

_____
Signature of Authorized Agent

FIN or SS # _____

References: Please provide a list of three (3) references including contact person, company name, address, phone number and a brief scope of work below:

Name: _____ Phone #: _____
Company_____
Address _____
Scope of Work: _____
_____

Name: _____ Phone #: _____
Company_____
Address _____
Scope of Work: _____
_____

Name: _____ Phone #: _____
Company_____
Address _____
Scope of Work: _____
_____

SECTION V: COMMITMENT TO ENGAGE IN AFFIRMATIVE ACTION PRACTICES

A. The undersigned bidder/contractor/supplier/vendor understands and agrees:

It is the policy of _____ *(name of company)* that all applicants for employment and all employees be recruited, hired and assigned on the basis of merit without discrimination because of race, creed, color, national origin, sex, age or disability. The employment practices of this company have been and will continue to be such as to insure that all employees are treated equally and that no distinctions are made in rates of pay, benefits or opportunities for advancement.

Therefore employment of individuals, their assignment to jobs, their transfers and their promotions shall be determined by matching the requirements of an open position with the candidate's skills and qualifications without regard to race, creed, color, national origin, sex, age or disability.

All management and supervisory personnel shall continue to take positive action to insure that all principles and objectives of the affirmative action program are complied with to carry out the provisions of the laws governing non-discrimination in employment.

B. The undersigned bidder/contractor/supplier/vendor understands and agrees: to submit to the park district upon request written evidence of the effectiveness of the above-required practices, policies and goals.

C. The undersigned bidder/contractor/supplier/vendor understands and agrees: to submit to the park district upon request statistical data concerning employee composition or membership composition by race, color, sex, age, disability and job description.

D. The undersigned bidder/contractor/supplier/vendor understands and agrees: to distribute copies of the above commitment (A) to all persons who participate in recruitment, screening, referral and selection of job applicants and prospective job applicants or members.

E. The undersigned bidder/contractor/supplier/vendor understands and agrees: to require any subcontractor to submit to the District a written commitment with who he/she contracts with in the amount of $5,000.00/Sub-Contract or $1,000.00/Supplier/Vendor (per purchase or in accumulated amount in any fiscal year of the District) or more to engage in Affirmative Action practices.

I certify that I have answered all the foregoing questions and provided all the foregoing information correctly and truthfully to the best of my knowledge and ability.

_____	_____
Signature of Authorized Agent	Date
_____	_____
Title	Telephone Number

All information provided the Champaign Park District will be held in strictest confidence.

SECTION VI: AFFIRMATIVE ACTION CONTRACTOR'S COMPLIANCE REPORT

Part I: Identification

1. Company's main office address: _____

   _____

   Telephone: _____ Fax: _____

   Federal employer's identification number: _____

2. In what capacity would the company do business with the Park District?
   ☐ Contractor ☐ Sub-contractor ☐ Vendor ☐ Supplier ☐ Other _____

3. Major activity of company (principle product or service). _____

   _____

   _____

4. Is the company presently pre-qualified to do business with the Park District or other local and/or state government?
   ☐ Yes ☐ No *If yes with what agency(ies)?* _____

   During the last 12 months has the company performed business with any governmental agency federal, state, county, municipal, school districts, etc.)?
   ☐ Yes ☐ No *If yes with what agency(ies)?* _____

Part II: Policies and Practices

A. Is the company's policy to recruit, hire, train, upgrade, promote and discipline persons without regard to race, color, religion, sex, national origin or ancestry, age or disability? ☐ Yes ☐ No

B. Has the company developed a written affirmative action policy?
   ☐ Yes ☐ No *If yes, a copy of the policy shall be provided to the District upon request.*

C. Does the company have an affirmative action officer or person responsible for affirmative action?
   ☐ Yes *If yes please complete.* ☐ No

   Name: _____

   Title: _____

   Telephone: _____

C. Does the company have bargaining agreements with employee organizations?
   ☐ Yes ☐ No

   If yes, have such organizations been notified of the company's responsibility to comply with the Champaign Park District's affirmative action program? ☐ Yes ☐ No

Comments: _____

_____

_____

SECTION VI: AFFIRMATIVE ACTION CONTRACTOR'S COMPLIANCE REPORT *(CONTINUED)*

E. Has the company notified all of its sub-contractors of their obligations to comply with the Champaign Park District's affirmative action program? ☐ Yes ☐ No

Comments: _____

_____

_____

Part III: Personnel Inventory

Occupations	White		Black		Hispanic		Other	
	Male	*Female*	*Male*	*Female*	*Male*	*Female*	*Male*	*Female*
Officials & Managers								
Professionals								
Technical								
Sales Workers								
Office & Clerical								
Crafts (skilled)								
Operatives (semi-skilled)								
Laborers (unskilled)								
Service Workers								
Apprentices (blue collar)								
On the job trainees (blue collar)								
On the job trainees (white collar)								
Totals								

The undersigned bidder/contractor/vendor/supplier has analyzed the workforce and submits the following workforce figures. The Champaign Park District will hold all information in the strictest confidence.

Above employee figures were obtained from: ☐ Visual check ☐ Employment records

_____ _____
Signature of Authorized Agent Date

_____ _____
Title Telephone Number

CHAMPAIGN PARK DISTRICT CONTRACTOR AGREEMENT

This Agreement (hereafter called, "Agreement") made and effective as of _____ ___, 2026 by and between the CHAMPAIGN PARK DISTRICT, a municipal corporation of the State of Illinois, located at 706 Kenwood Road, Champaign, IL 61821 (hereafter referred to as,"Owner"), and _____,. a _____ corporation (hereafter referred to as, ("Contractor"), located at _____, and individually or collectively referred to as "Party" or "Parties", as the case may be.

TERMS AND CONDITIONS

Owner and Contractor desire to enter into this Agreement, pursuant to which Contractor shall perform certain construction work and other duties in strict accordance with the following terms and conditions (collectively the "Work"), and, subject to the terms and conditions of this Agreement, the Owner shall pay for such performance of the Work. In consideration of these terms and conditions and other good and valuable consideration, the receipt of which is hereby acknowledged and intending to be legally bound, the Parties agree as follows:

1. **Project.** Contractor shall perform all Work required for the office walls conversion at the Leonhard Recreation Center, located at 2307 Sangamon Dr, Champaign, Illinois (the "Project"). Contractor shall undertake the Project and perform all Work and other duties in strict accordance with the "Contract Documents," which consist of this Agreement, the Scope of Work, and Specifications attached to this Agreement as Exhibit A.

2. **Contractor's Performance.** Contractor shall perform all Work utilizing the highest standards of workmanship and materials. Contractor shall maintain a sufficient staff to perform all Work in the most expeditious manner consistent with the interests of Owner. Contractor shall promptly notify Owner immediately in writing: (i) of any information required from Owner and necessary for Contractor to complete its Work in a timely manner; and (ii) of any Work requested by Owner that is not included in the scope of Work provided in the Contract Documents. Contractor shall be solely responsible for means and methods selected in performing the Work. Contractor shall supervise all Work so that it is performed in a safe and expeditious manner. Contractor shall be solely responsible for the Work of its employees and its subcontractors' and suppliers' employees.

a. Contractor shall carry the Work forward regularly, diligently, uninterruptedly and expeditiously at such a rate of progress and with an adequate work force as shall ensure the completion of the Work in accordance with the Contract Documents by the Final Completion date. It is expressly understood and agreed by and between Contractor and Owner that the time for completion of the Work is a reasonable time, taking into consideration the average climatic range, usual industrial conditions, and all other conditions and actors prevailing in this locality. Contractor shall promptly notify the Owner immediately in writing: (i) of any information required from the Owner and necessary for Contractor to complete its Work in a timely manner; and (ii) of any Work requested by the Owner or required for the Project that is not included in the scope of Work reflected in the Contract Documents. Contractor shall be solely responsible for means and methods selected in performing the Work. Contractor shall supervise all Work so that it is performed in a safe manner. Contractor shall be solely responsible for the Work of its employees and its subcontractors' and suppliers' employees. Contractor shall keep all documents and information related to the Project confidential and, except as required by law, shall not disclose such documents or information to any person or other party except the employees of Contractor and its subcontractors who need such documents or information to perform the Work and complete the Project.

b. Contractor shall confine all equipment, the storage of materials and the operations of its workers, to limits indicated by law, ordinances, permits, or directions of the Owner and shall not unreasonably encumber the Project site with such materials. The Project site shall not be utilized for the storage of vehicles, materials, equipment, or fixtures not intended for the Work to be performed.

c. Contractor shall notify all utility companies, public and private, as necessary in advance of commencing performance of the Work. The responsibility for moving water lines, gas lines, wire lines, service connections, water and gas meter boxes, water and gas valve boxes, light standards, cable ways, signals and all other utility appurtenances which are within the limits of the proposed construction shall be assumed by the Contractor, at no additional compensation. The Contractor shall verify the location of all utilities prior to the start of construction and shall be responsible for the preservation of existing utility installation and the cost of providing precautionary

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supports, braces, or other equipment to insure against damage to said utility installation. The cost to repair and replace any new or existing utilities damaged shall be paid for by the Contractor.

d. If Contractor uncovers or discovers any concealed condition differing materially from conditions depicted in the Contract Documents or differing from conditions reasonably anticipated or inherent in the Work, Contractor shall immediately stop the Work and notify the Owner of the condition in writing. The Owner shall then issue written directions. Contractor shall not proceed with the Work until the Owner has issued written directions. The contract time and Contract Sum shall be equitably adjusted if necessitated by such directions of the Owner.

e. Contractor acknowledges and agrees that neither Contractor nor anyone with whom it may hire as an employee or independent contractor is an employee of the Owner, and are not entitled to any benefits or protections afforded employees of the Owner, nor controlled as employees of the Owner. Nevertheless, Contractor, its employees and independent contracts shall not act contrary to the policies of the Owner. Contractor understands and agrees that Contractor shall not be insured under provisions of the unemployment compensation insurance of the Owner or the workers' compensation insurance of the Owner, and that any injury or property damage in connection with the work performed shall be Contractor's sole responsibility and not that of the Owner. It is also understood that Contractor is not protected as an employee or as a person acting as an agent or employee under the provisions of the general liability insurance of the Owner and, therefore, Contractor shall be solely responsible for Contractor's own acts or omissions, and those of Contractor's employees, contractors, and agents, if any. The Owner shall not in any manner whatsoever be obligated to defend, indemnify or hold harmless Contractor, or Contractor's employees and agents, if any, in matters of liability.

f. Contractor acknowledges and agrees that Contractor is solely responsible to pay all applicable federal, state and local income and withholding tax obligations or contributions imposed pursuant to Social Security, unemployment insurance and worker's compensation insurance on behalf of Contractor and those employees, contractors, and agents, if any, employed by Contractor.

3. **Correction of Work.** If the Contractor defaults or neglects to carry out the Work in accordance with the Contract Documents or fails within a seven (7) day period after receipt of written notice from the Owner to commence and continue correction of such default or neglect with diligence and promptness, the Owner may, without prejudice to other remedies, correct such deficiencies. If the Contractor fails to correct nonconforming Work within a reasonable time as determined in the sole reasonable discretion of Owner, the Owner may correct it as provided for herein.

4. **Substantial Completion.** Contractor shall cause all Work required by the Contract Documents to be substantially completed by March 5th, 2027 ("Substantial Completion"). "Substantial Completion" means that the Owner can occupy and fully utilize the completed Project for its intended use, and that all warranties, manuals, instructions, certifications, reports, record or as-built drawings, and any other document required by the Contract Documents have been properly submitted to and accepted by the Owner; and that the only remaining Work is minor cosmetic work that does not interfere with the Owner's operations (the "Punch List Work"). The Contractor shall complete the Punch List Work within ten (10) days after the date of Substantial Completion. Time is of the essence under this Agreement.

5. **Materials.** All materials incorporated into the Work shall be new and of high quality. Contractor shall follow all manufacturer=s instructions and recommendations. If requested by Owner or otherwise required by the Contract Documents, Contractor shall, before purchase of such material, submit to Owner for Owner=s review, and in a format acceptable to Owner, all product data, literature, and shop drawings.

6. **Differing Site Conditions.** If Contractor uncovers or discovers any concealed condition differing materially from conditions depicted in the Contract Documents or differing from conditions reasonably anticipated or inherent in the Work, Contractor shall immediately stop the Work and notify the Owner of the condition in writing. The Owner shall then issue directions. The contract time and contract price may be equitably adjusted if necessitated by such directions of the Owner. However, prompt written notice by the Contractor of the condition, followed by written directions from the Owner, shall be conditions precedent to such adjustments.

7. **Changes in the Work.** The Owner, without invalidating the Contract, may order changes in the

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Work within the general scope of the Contract, consisting of additions, deletions, or other revisions, and the Contract Sum and Contract Time shall be adjusted accordingly, in writing. If the Owner and Contractor cannot agree to a change in the Contract Sum, the Owner shall pay the Contractor its actual cost plus reasonable overhead and profit. If concealed or unknown physical conditions are encountered at the site that differ materially from those indicated in the Contract Documents or from those conditions ordinarily found to exist, the Contract Sum and Contract Time shall be subject to equitable adjustment.

8. **Contractor's Compensation.** Owner shall pay Contractor the sum of [INSERT AMOUNT OF CONTRACT] for Work properly performed under this Agreement. In the event conditions arise which Contractor believe warrant a change in compensation, Contractor shall notify Owner of such conditions in writing to request approval of additional compensation. Contractor shall not be entitled to any additional compensation unless previously approved by Owner in writing.

[THIS SECTION IS OPTIONAL] The Contractor's Compensation includes an allowance for [INSERT AMOUNT OF ALLOWANCE] for installation of materials. Use of the allowance is subject to the written pre-approval of the Owner. Such allowance shall cover the cost to the Contractor of materials and equipment delivered at the site and all required taxes (if any), less applicable trade discounts. Contractor's costs for unloading and handling at the site, labor, installation costs, overhead, profit, and other expenses contemplated for the stated allowance amounts shall be included and deemed part of the Contract Sum. In the event of a change order, the amount of the change order shall reflect the difference between actual costs and the allowances under this Section.

9. **Payments to the Contractor.** On a monthly basis during the progress of the Work, Contractor shall, by such day as the Owner may specify, submit monthly payment applications to the Owner reflecting on an itemized percentage basis of the Contract Sum the value of all Work completed in the previous month. Owner shall pay properly submitted pay applications within thirty (30) days after receipt. Such payments shall be made as a percentage of the Contract Sum which is equal to the percentage of completion of the Work, less retention of ten percent (10%). When the Work is fifty percent (50%) complete, the retention held by Owner shall be five percent (5%) until final completion of the Project, including the completion of all Punch List Work. Each monthly pay application shall be accompanied by lien waivers covering all lien rights, including lien rights related to the then-current pay period, and all lien rights arising from payments previously made by Owner. Owner may elect to receive from Contractor trailing lien waivers from Contractor's subcontractors. At least once per month or as otherwise required prior to final completion of the Work, the Contractor and each subcontractor shall submit to the Illinois Department of Labor certified payrolls in accordance with Section 5 of the Illinois Prevailing Wage Act, 820 ILCS 130/5.

In the event the contract work has been awarded on a unit price bid basis, the form of each application shall follow the Bid Proposal Form, listing each item number, the total quantity of units completed to date of the estimate, the unit price and subtotal. The subtotal column shall be added to show the total cost of work completed to date, less ten (10%) percent to be withheld until the Contract is fifty percent (50%) complete, giving the total amount requested for payment. Until the Contract is fifty percent (50%) complete, previous applications for payment paid by the Owner shall be shown on each subsequent request and subtracted after the ten percent (10%) has been withheld.

After fifty percent (50%) of the Contract is complete, the subtotal column shall be added to show the total cost of work completed to date, less five percent (5%) to be withheld, giving the total amount requested for payment. After the Contract is fifty percent (50%) complete, previous applications for payment paid by the Owner shall be shown on each subsequent request and subtracted after the five percent (5%) has been withheld.

When issuing payment, Contractor and all subcontractors shall comply with the retainage limits as set forth in the Public Construction Bond Act, 30 ILCS 550/1 et seq.

In the event of any past due payment by Owner, such payment shall not bear interest in excess of the rate of twelve percent (12%) per annum pursuant to the Illinois Local Government Prompt Payment Act and this provision shall control regardless of any amendment, addendum, or exhibit to this Agreement.

10. **Defective Work and Guarantee.** All Work shall be of high quality and free of defect. Contractor shall promptly correct any defective Work. Payment by Owner for any Work later determined to be

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defective shall not relieve Contractor of its obligation to correct defective Work. Contractor hereby warrants that all Work is and shall remain free from defect for two (2) years following Substantial Completion, and upon notice by the Owner, Contractor shall promptly correct such defects appearing within such two (2) year period. This warranty is in addition to any warranties that may be required by the Contract Documents, statutes of limitation under applicable law, and this warranty does not abrogate or nullify any breach of contract claim or other causes of action Owner may have against Contractor.

11. **Default.** In the event that either Party fails to comply with the terms of this Agreement, and cure such default within ten (10) days' written notice from the other Party, then the non-defaulting Party shall have the right to terminate this Agreement. Subject to section 12, any such termination shall not terminate or affect the obligations or rights to enforce the same as they may have accrued prior to termination which shall survive such termination.

12. **Termination.** The Owner may terminate this Agreement at any time for convenience and without cause by written notice to the Contractor and the Owner shall pay the Contractor for Work properly completed to the date of termination. This Agreement may be terminated at any time by mutual agreement of the Parties and the Owner shall pay the Contractor for Work properly completed to the date of termination. This Agreement may be terminated by either Party for "cause" by giving ten (10) days' notice to the other Party in writing of such termination. For the purposes of this Agreement, "termination for cause" is defined as termination for breach or an intentional or willful violation of any of the provisions of this Agreement by a Party. The Party terminating this Agreement for cause shall specify in such writing the nature of the "cause" resulting in termination. In the event of termination for cause, Owner shall have no further obligation other than to make payments to Contractor for Work completed satisfactorily, and Contractor shall be liable to Owner for any increase in cost incurred by Owner in completing the Work. Regardless of whether Owner exercises its right to termination, Contractor hereby waives any and all claims for lost profits, and any for any other consequential or incidental damages arising because of a termination.

13. **Prevailing Wage Act.** The Contractor shall pay prevailing wages in accordance with and shall fully comply with all requirements of the Prevailing Wage Act, 820 ILCS 130/0.01, *et seq.* This Agreement calls for the construction of a "public work," within the meaning of the Illinois Prevailing Wage Act, 820 ILCS 130/.01 et seq. ("the Act"). The Act requires contractors and subcontractors to pay laborers, workers and mechanics performing services on public works projects no less than the current "prevailing rate of wages" (hourly cash wages plus amount for fringe benefits) in the county where the work is performed. The Department publishes the prevailing wage rates on its website at http://labor.illinois.gov/. The Department revises the prevailing wage rates and the contractor/subcontractor has an obligation to check the Department's website for revisions to prevailing wage rates. For information regarding current prevailing wage rates, the Illinois Department of Labor's website is to be examined. All Contractors, subcontractors, and sub-subcontractors rendering services under this Agreement must comply with all requirements of the Act, including but not limited to, all wage requirements, notice, and record keeping duties.

14. **Person and Property Protection.** The Contractor shall be responsible for initiating, maintaining, and supervising all safety precautions and programs, including all those required by law in connection with performance of the Contract. The Contractor shall take reasonable precautions to prevent damage, injury, or loss to employees on the Work and other persons who may be affected thereby, the Work and materials and equipment to be incorporated therein, and other property at the site or adjacent thereto. The Contractor shall promptly remedy damage and loss to property caused in whole or in part by the Contractor, or by anyone for whose acts the Contractor may be liable.

15. **Liens.** If any liens or claims of lien are placed on the Work, property of Owner, or the funds designated for the Project, and such liens or claims of lien are due to Contractor's breach of this Agreement or other circumstances or events under Contractor's control, Contractor shall indemnify Owner for all costs, expenses, and attorneys' fees incurred in the resolution of such lien, and Owner shall have the right to withhold from payments due to the Contractor an amount sufficient to satisfy such lien or claim of lien, along with an amount sufficient to cover attorneys' fees and other costs and expenses that have been or may be incurred by Owner in connection with the resolution of such lien or claim of lien.

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16. **Insurance.** Contractor shall keep in full force and effect at all times during this Agreement a comprehensive general liability insurance policy, with contractual liability coverage, with minimum limits of not less than $1,000,000 per occurrence and $2,000,000 annual aggregate together with property damage insurance of not less than $1,000,000. All insurance carriers providing the coverage set forth herein shall have a rating of A as assigned by A.M. Best and Co. and shall be reasonably satisfactory to Owner. All insurance coverage provided by Contractor shall be primary insurance as to Owner. Any insurance or self-insurance maintained by Owner shall be in excess of Contractor's insurance and shall not contribute with it. The Owner, its commissioners, officers, employees, agents, representatives, and volunteers shall be covered as additional insured's under the general liability coverage which shall contain no special limitation on the scope of protection afforded to the additional insured's, and shall contain appropriate endorsements, extensions or riders necessary to assure coverage, together with such certificates of insurance which identify the required coverages. All liability insurance shall provide coverage on an "occurrence" basis and not on a "claims made" basis. Such policies shall not be cancelled or amended without at least ten (10) days prior written notice having been given to the Owner. Cancellation of any such coverage without a substitute policy containing the required coverage's being put in force, shall be grounds for the Owner to immediately terminate this Agreement with no further rights afforded Contractor At its option, Owner may continue such insurance at its cost and obtain reimbursement and repayment thereof from Contractor. In such event, Contractor shall pay the amount due within ten (10) days of payment by Owner. The Parties acknowledge that Contractor may from time to time change insurers; provided that, the Owner shall be provided with a certificate of such insurance otherwise conforming to and in compliance with the terms hereof, promptly upon such change. Contractor shall maintain worker's compensation insurance sufficient to satisfy all applicable state and/or federal laws and must show policy number on certificate of insurance if workman's compensation is provided. Contractor shall keep comprehensive automobile liability insurance with a bodily injury limit of $1,000,000 per person and $1,000,000 per accident. Such automobile liability insurance shall cover property damage of $500,000 each occurrence or combined single limit of $500,000. Contractor shall carry umbrella liability insurance with minimum limits of $5,000,000 in the aggregate.

17. **Performance and Payment Bond.** If the contract amount is in excess of $50,000, prior to performing the Work, Contractor shall provide the Owner with a Performance Bond and a Labor/Material Payment Bond in a form acceptable to the Owner for the full amount of the contract price.

18. **Indemnification.** Contractor shall indemnify, defend, and hold harmless Owner, its commissioners, directors, officers, employees, agents, representatives, and volunteers from any and all claims, demands, causes of action, losses, liens, claims of lien, liabilities, penalties, and damages, including reasonable attorneys' fees and court costs, to the extent arising from any negligent act or omission of Contractor, its employees, or its subcontractors, suppliers, and their employees, and to the extent arising from any breach of this Agreement by Contractor. The Contractor hereby knowingly and intentionally waives the right to assert, under the case of *Kotecki v. Cyclops Welding Corp*., 146 Ill.2nd 155 (1991) that Contractor's liability may be limited to the amount of its statutory liability under the Workers' Compensation Act, and agrees that Contractor's liability to indemnify and defend the Owner and Architect is not limited by the so called "Kotecki Cap". The Contractor shall include this provision in each of its subcontract agreements and shall require its subcontractors to be so bound. Owner shall not be obligated in any manner whatsoever to pay or reimburse Contractor's attorneys' fees and expenses and this provision shall control regardless of any amendment, addendum, or exhibit to this Agreement.

19. **Successors and Assigns.** Contractor shall not assign any rights, delegate, or subcontract any obligations or duties under this Agreement without the prior written consent of the Owner, and any attempted assignment, delegation or subcontracting without such consent shall be void. This Agreement shall be binding upon and inure to the benefit of the Parties hereto and their respective permitted successors and assigns.

20. **Applicable Law and Venue.** This Agreement is governed by and shall be interpreted according to the laws of the State of Illinois, without application of its conflict of laws provisions. Each Party has reviewed and approved this Agreement and the rule of construction that resolves ambiguities against the drafting party shall not be employed in the interpretation of this Agreement. In the event of any claims or lawsuits regarding this Agreement, a state or federal court located in Champaign County, Illinois, shall be the venue for such claims or suits.

21. **Severability.** In the event any one or more of the provisions set forth in this Agreement shall be

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invalid, illegal, or unenforceable in any respect, such provision shall be deemed severed from this Agreement, and the validity, legality, or enforceability of the remaining provisions of this Agreement or any other application thereof shall not be affected or impaired thereby, and shall, therefore, remain in effect.

22. **Waiver.** Failure to insist upon strict compliance with any of the terms, covenants, or conditions of this Agreement, shall not be deemed a waiver of that term, covenant, or condition, nor shall any waiver or relinquishment of any right or power at any one time or times be deemed a waiver or relinquishment of the right or power at all or any other times.

23. **Counterparts.** This Agreement may be executed in any number of counterparts as may be convenient or required for the benefit of the Parties. It shall not be necessary that the signature of, or on behalf of, each Party, or that the signature of all persons required to bind any Party, appear on each counterpart. All counterparts shall collectively constitute a single instrument. It shall not be necessary in making proof of this instrument to produce or account for more than a single counterpart containing the respective signatures of, or on behalf of, each of the Parties hereto. Any signature page to any counterpart may be detached from any such counterpart without impairing the legal effect of the signatures thereon and thereafter attached to another counterpart identical thereto, except having attached to it additional signature pages.

24. **Digital Transmissions.** The Parties agree that each may rely, without investigation, upon the genuineness and authenticity of any document, including any signature or purported signature, transmitted digitally, without reviewing or requiring receipt of the original document. Each document or signature so transmitted shall be deemed an enforceable original. Upon request, the transmitting Party agrees to provide the receiving Party with the original document transmitted digitally; however, the Parties agree that the failure of either Party to comply with such a request shall in no manner whatsoever affect the genuineness, authenticity, or enforceability of the document or this contract. Each Party waives and relinquishes as a defense to the formation or enforceability of any contract between the Parties, or provision thereof, the fact that a digital transmission was utilized.

25. **Notice.** All notices required pursuant to this Agreement shall be in writing, and shall be deemed to have been given at the time they are mailed to the respective Party via certified mail, return receipt requested with an additional copy sent via U.S. first class mail at the address set forth below, or at such other place or address as the Parties shall provide to each other in writing.

Champaign Park District
Attn: Executive Director
706 Kenwood Road
Champaign, IL 61821

_____
_____
_____
_____
_____

26. **Force Majeure.** The Parties shall not be liable for, nor shall either of them be considered in breach of this Agreement due to, in whole or in part, any delay, failure or inability to perform the Services or other obligations under this Agreement as a result of a cause beyond its reasonable control, including, without limitation, any act of God or a public enemy or terrorist; any act, omission, or delay in action of any military, governmental, quasi-governmental, or regulatory authority or agency; any local, state, regional, or federal emergency; change in any law, rule, or regulation; any natural disaster or other like event; any epidemic or pandemic; any quarantine, self-quarantine, shelter-in-place, or like preventive measure issued or recommended by any governmental or quasi-governmental authority or agency; or any disruption or outage of communications, power or other utility. The time for performance required of the Parties (to the extent such delay, failure, or inability is reasonably curable by additional time) shall be extended by the period of such delay and in no event shall a Party be expected to expend or incur any additional costs or expenses beyond those reasonably anticipated at the commencement of this Agreement, nor shall the occurrence of the Force Majeure Event affect the obligation of a Party to pay money (or cause any third party to make payment of money on a Party's behalf) in a timely manner which matured prior to the occurrence of Force Majeure Event.

In the event the Work is delayed due to a cause beyond the reasonable control of Contractor, including strikes, labor disputes, lockouts, fire, shortages of labor or material, inclemency of weather, accidents, casualties,

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pandemic outbreaks, or government orders, Contractor shall not be liable for any damages caused by such delays, shortages, or disruptions and, provided that Contractor is in compliance with all other relevant provisions of this Agreement, the contract time shall be extended for such reasonable time as the Owner may determine; provided that, such extension of contract time shall be net of any delays caused by or due to the fault or negligence of Contractor or which are otherwise the responsibility of Contractor and shall also be net of any contingency or "float" time allowance included in Contractor's construction schedule. Contractor shall, in the event of any occurrence likely to cause a delay, cooperate in good faith with the Owner to minimize and mitigate the impact of any such occurrence and do all things reasonable under the circumstances to achieve this goal. Any such extension of contract time pursuant to this section shall be reduced to a Change Order. Extension of contract time pursuant to this section shall be the Contractor's sole and exclusive remedy for delay.

27. **Representation of Authority.** Each person executing this Agreement represents that they are authorized to execute the Agreement. Each person executing this Agreement on behalf of any entity represents that they are authorized to execute this Agreement on behalf of such entity.

28. **Entire Agreement.** This Agreement and the Contract Documents and any exhibits or amendments represent the entire agreement between Contractor and Owner with respect to this Project, and supersede all prior representations, negotiations or agreements, written or oral, which are not included herein. This Agreement may only be amended by written instrument executed by Owner and Contractor. In the event of a conflict between this Agreement and the Contract Documents, this Agreement shall control.

29. **Time of the Essence.** Time is of the essence of this Agreement. It shall be binding upon the representatives, successors and permitted assigns of the Parties hereto.

WHEREOF, the Parties hereto have caused this Agreement to be executed and effective as of the date first above written.

Champaign Park District, **a municipal corporation**	**[CONTRACTOR]**
By: _____	By: _____
Its: _____	Its: _____

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EXHIBIT A – SCOPE OF WORK

Refer to Bid Documents.

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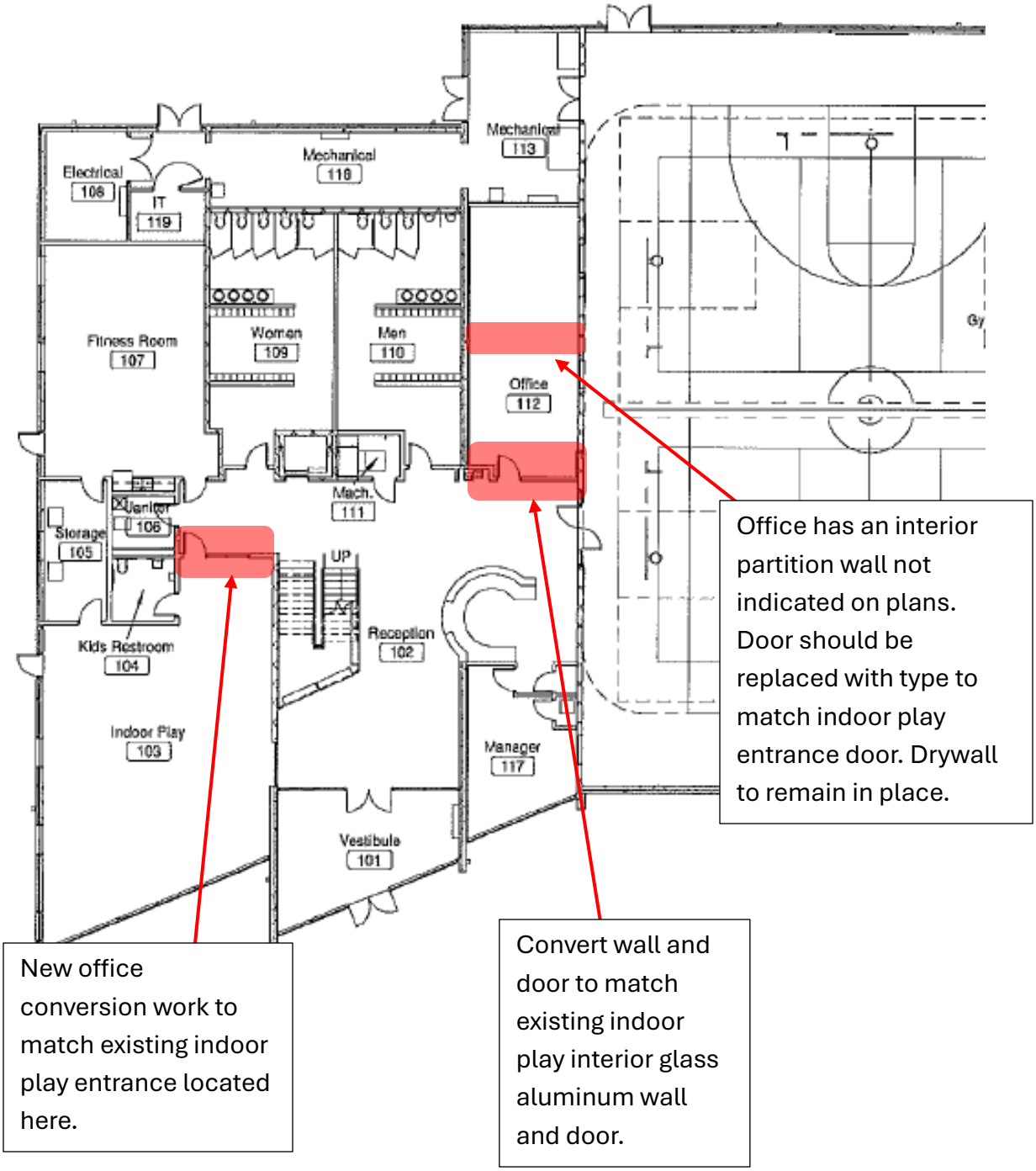
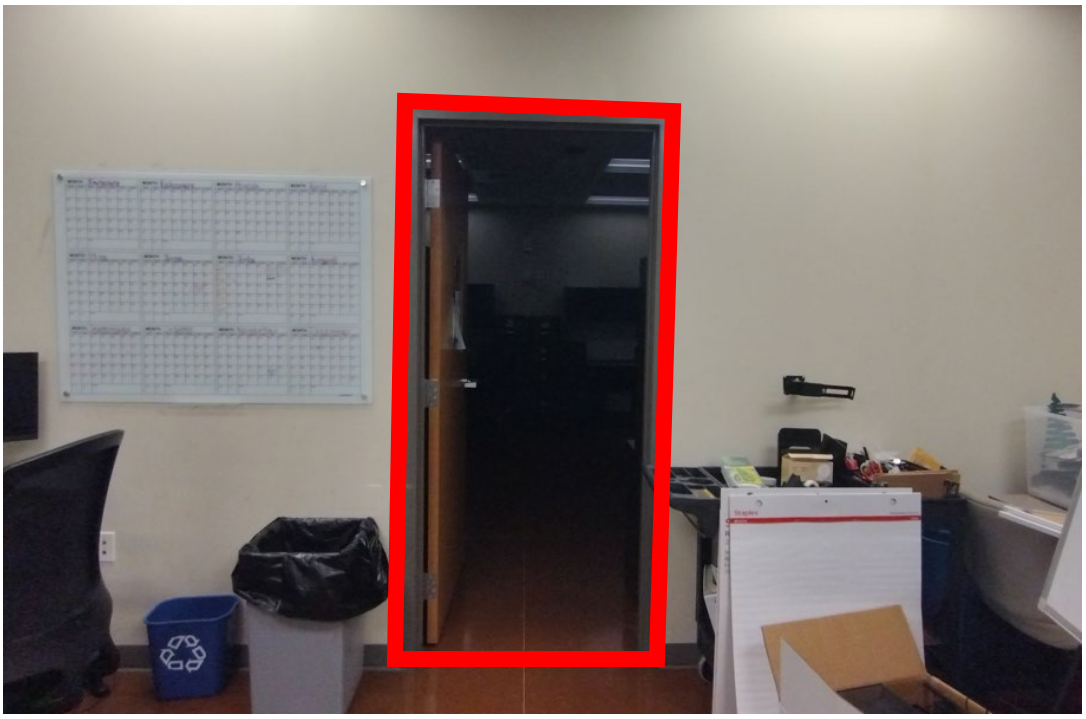
EXHIBIT A

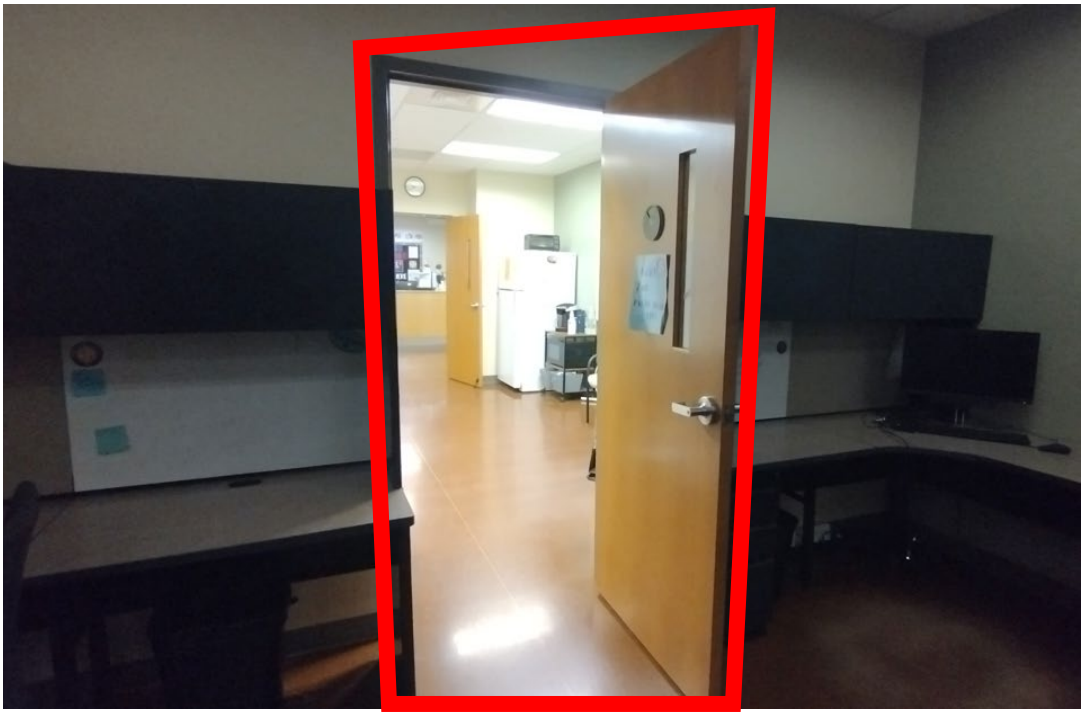
LEONHARD REC CENTER FIRST FLOOR



ENTRANCE OF OFFICE 112

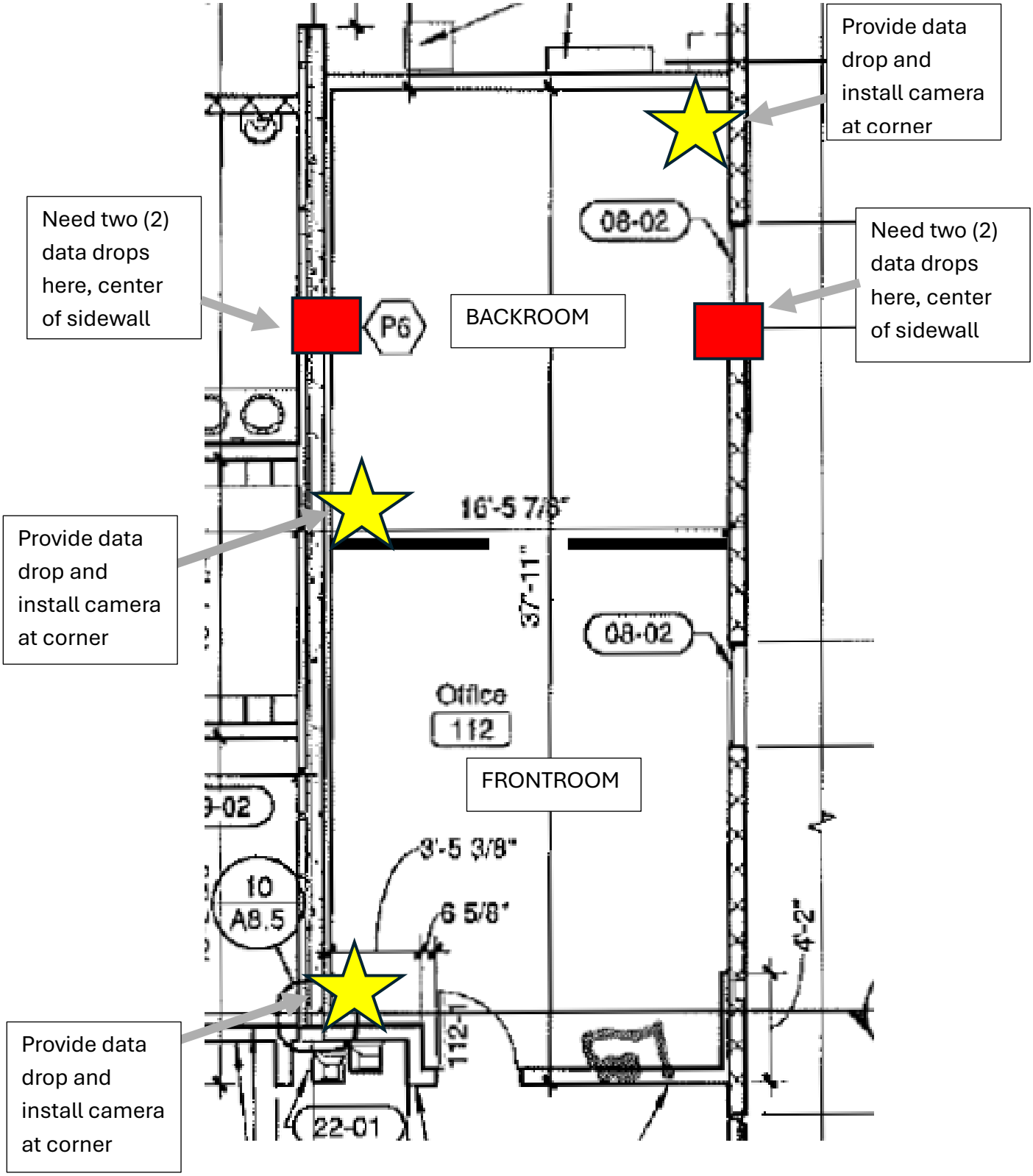
INTERIOR PARTITION WALL OF OFFICE 112





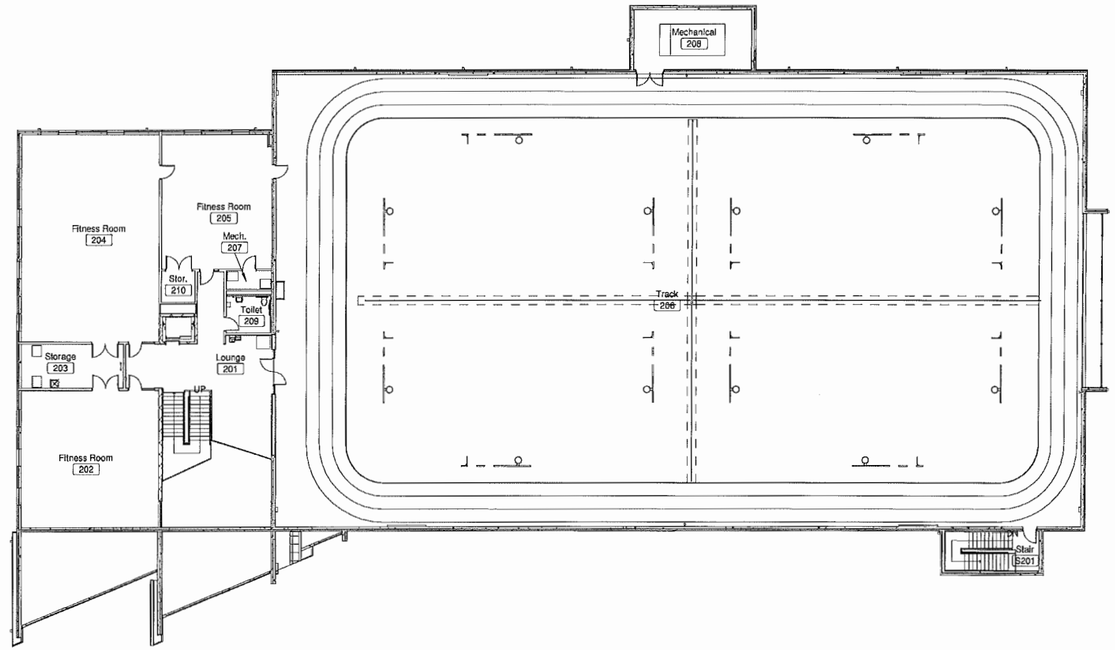
RENOVATION WORK TO MATCH INDOOR PLAY AREA ENTRANCE

INSTALL REQUIRED INFRASTRUCTURE FOR ADDITIONAL DATA LINES AND CAMERAS

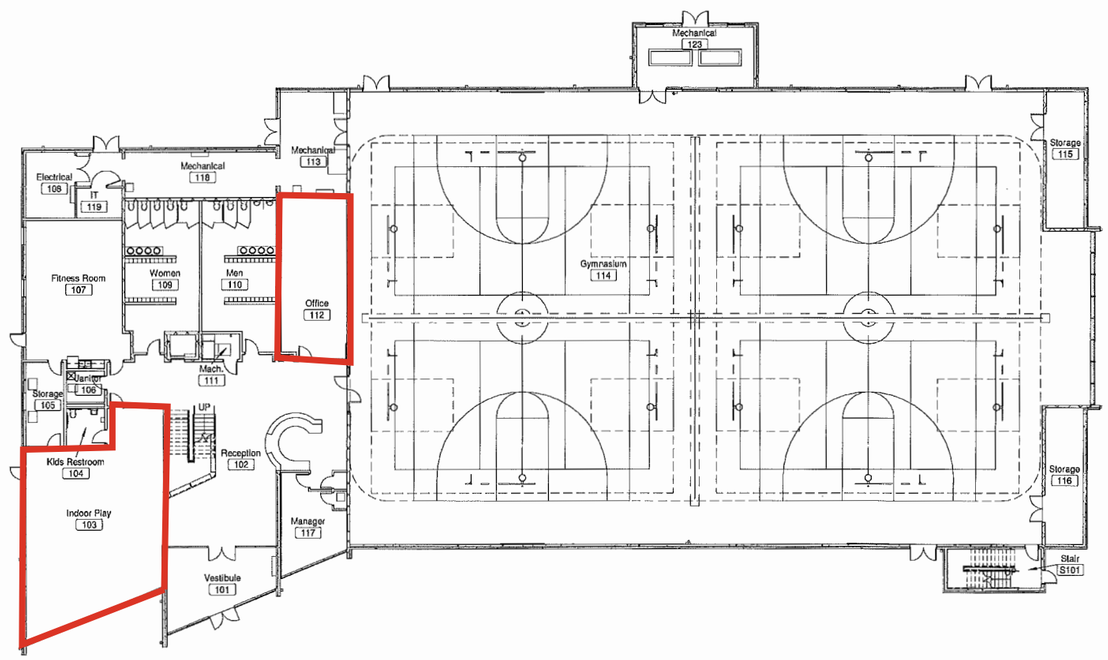


MEP DRAWINGS

AS-BUILTS



2 Second Floor Plan
Scale: 1/16" = 1'-0"



1 First Floor Plan
Scale: 1/16" = 1'-0"

ENGINEERS
ARCHITECTS
SURVEYORS
SCIENTISTS

Farnsworth GROUP

1819 S. NEIL STREET, SUITE F
CHAMPAIGN, ILLINOIS 61820
(217) 352-7408 / (217) 352-7409 Fax
www.f-w.com

ISSUE:

#	Date:	Description:

CHAMPAIGN PARK DISTRICT

Bid Set

PROJECT:
Champaign Park District

Patricia H. Leonhard Recreation Center

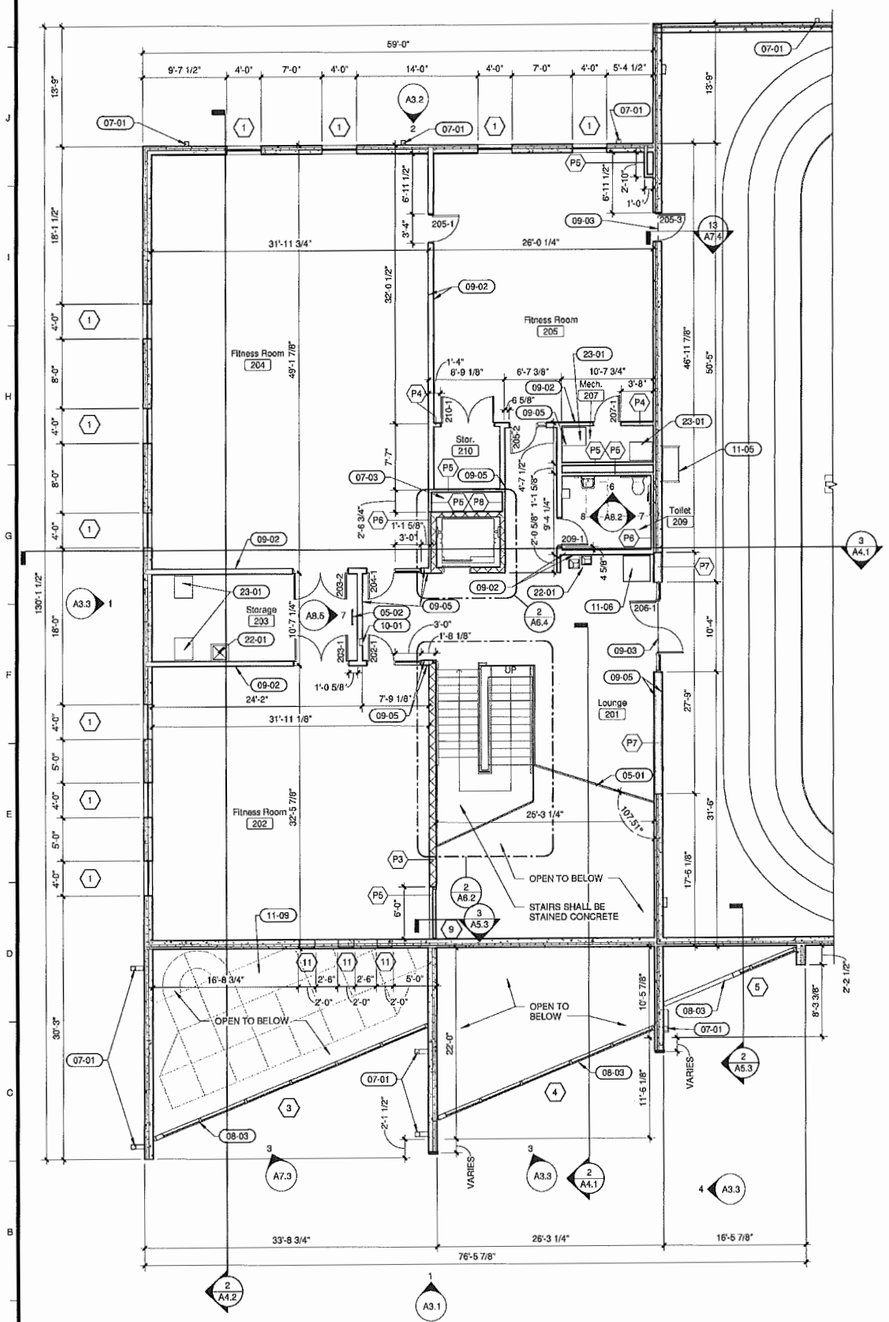
2307 W. Sangamon Dr.
Champaign, IL 61821

Date:	05/01/13
Design/Drawn:	CJ/KR/SCB
Reviewed:	SCB
Book No.:	-

SHEET TITLE:
Overall Floor Plans

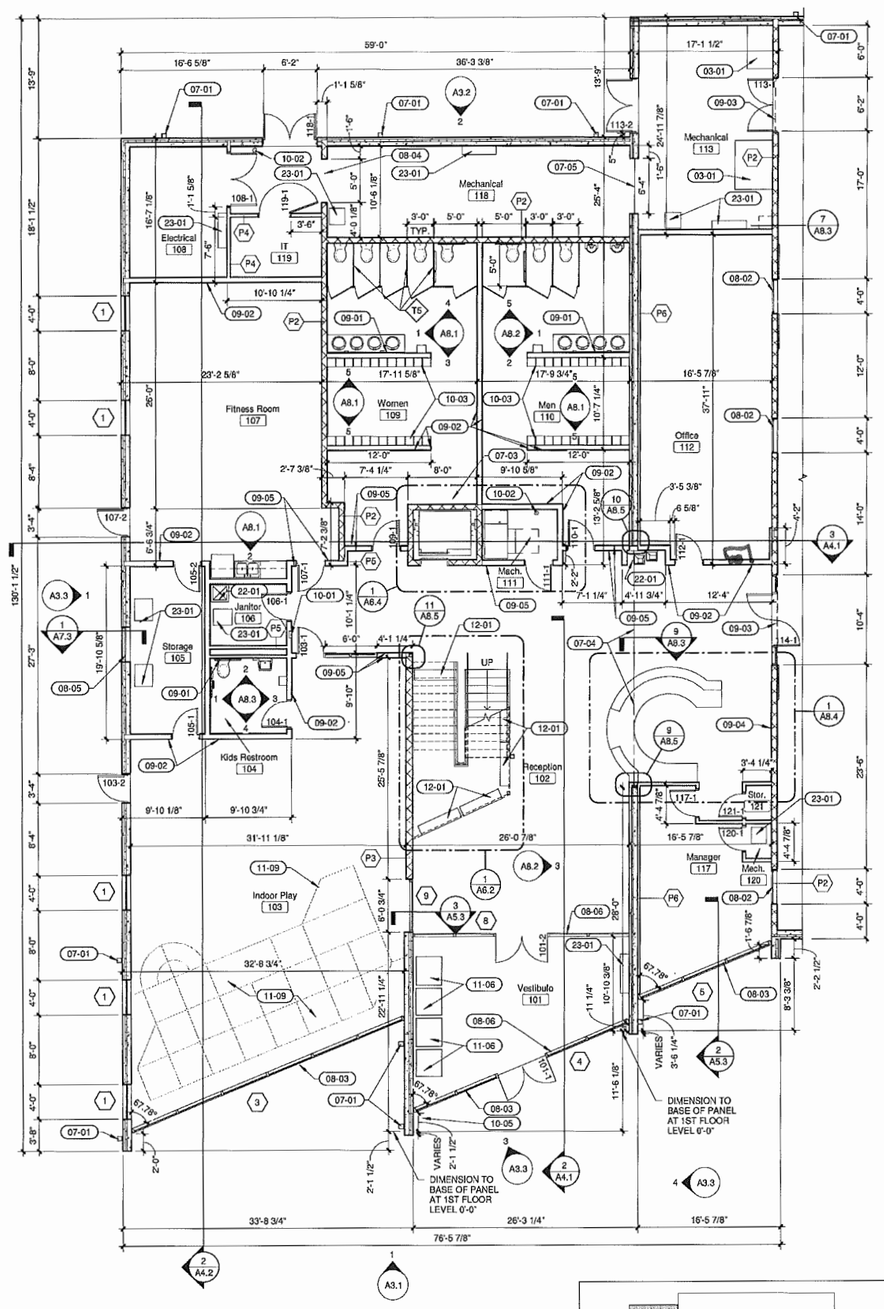
SHEET NUMBER:
A1.0

Project No.: 0111316.00



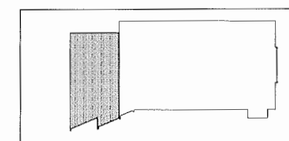
2 2nd Floor Enlarged Office

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



1 First Floor Enlarged Office

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



Key Plan - Non-Gym

Scale: No Scale

General Proposed Plan Notes

1. ALL WALL TYPES ARE TO BE PARTITION TYPE P1 UNLESS NOTED OTHERWISE. REFER TO SHEET A7.1 FOR PARTITION TYPES. ALL PARTITIONS SHALL EXTEND TO THE BOTTOM OF THE ROOF DECK ABOVE UNLESS NOTED OTHERWISE.
2. ALL DIMENSIONS ARE TO FACE OF STUD, FACE OF CMU, OR FACE OF PRECAST CONCRETE UNLESS NOTED OTHERWISE.
3. REFER TO LIFE SAFETY SHEET LS1.1 FOR LOCATIONS AND RATINGS OF FIRE SEPARATIONS.
4. PROVIDE METAL BLOCKING IN METAL STUD WALLS FOR CASEWORK, OWNER FURNISHED FURNISHINGS, HANDRAILS, DOOR STOPS, & ACCESSORIES TOO LARGE TO BE SUPPORTED BY DRYWALL ANCHORS.
5. REFER TO ELECTRICAL DRAWINGS FOR EXIT SIGNS, COMMUNICATION DEVICES, & ELECTRICALLY POWERED LIFE SAFETY DEVICES.
6. REFER TO CIVIL DRAWINGS FOR ALL EXTERIOR CONCRETE WALK LOCATIONS. COORDINATE FINAL CONCRETE PAD LOCATIONS WITH ARCHITECTURAL DRAWINGS.
7. SEE STRUCTURAL DRAWINGS FOR FRAMING INFORMATION & FRAMING DIMENSIONS. ALL COLUMN CENTERLINES ARE FOR REFERENCE ONLY - VERIFY ALL FRAMING WITH STRUCTURAL DRAWINGS.
8. ALL OUTSIDE CORNERS IN INTERIOR CONCRETE MASONRY WALLS ARE TO BE BULLNOSE UNLESS OTHERWISE NOTED OR SHOWN.
9. MASONRY OPENING DIMENSIONS INDICATED ON PLANS ARE NOMINAL (+/-) ONE JOINT. MASONRY IS TO BE MODULAR WITH EVEN JOINT SIZE THROUGHOUT.
10. FOR FINISHED FLOOR ELEVATION, REFER TO CIVIL DRAWINGS.
11. SEE LIFE SAFETY PLAN FOR LOCATION OF RATED PARTITIONS.
12. IT IS THE RESPONSIBILITY OF EACH CONTRACTOR TO PROVIDE COMPLETE WORKING SYSTEMS FOR NEW ELEMENTS.
13. ALL CONTRACTORS SHALL PROVIDE NEW, UNDAMAGED MATERIALS UNLESS OTHERWISE SPECIFIED.
14. INSTALL ALL WORK IN ACCORDANCE WITH CURRENT APLICABLE CODES, PUBLISHED STANDARDS, AND ACCEPTABLE CONSTRUCTION STANDARDS.
15. ALL NEW WORK SHALL BE PLUMB AND LEVEL UNLESS OTHERWISE NOTED.
16. DISSIMILAR FLOOR MATERIALS SHALL MEET UNDER CENTER OF DOOR LEAF.
17. EACH CONTRACTOR SHALL COORDINATE THEIR WORK WITH ALL OTHER TRADES.
18. DO NOT SCALE DRAWINGS TO DETERMINE DIMENSIONS. IF A REQUIRED DIMENSION IS NOT INDICATED, CONTACT THE ARCHITECT FOR DETERMINATION.
19. THE CONTRACTOR SHALL NOT CUT STRUCTURAL MEMBERS/ELEMENTS IN A MANNER RESULTING IN A REDUCTION OF LOAD CARRYING CAPACITY OR LOAD/DEFLECTION RATIO.
20. PATCH AND REPAIR WALLS AT ALL NEW MECHANICAL AND PLUMBING PENETRATIONS.

Plan Keynotes (By Division)

DIVISION 03	
03-01	4" THICK CONCRETE EQUIPMENT PAD - COORDINATE WITH MECHANICAL
DIVISION 05	
05-01	PAINTED STEEL GUARDRAIL ASSEMBLY
05-02	METAL ROOF HATCH ACCESS LADDER
05-03	PAINTED STEEL COLUMN - SEE STRUCTURAL
DIVISION 07	
07-01	PREFINISHED ALUMINUM DOWNSPOUT - TYP.
07-02	SURFACE DRAINED, PREFINISHED METAL DOWNSPOUT - PROVIDE SPLASH BLOCK
07-03	ANNULAR SPACE BETWEEN DUCT PENETRATION & FLOOR OPENING TO BE FIREBLOCKED AS PER UL ASSEMBLY C-AJ-7016
07-04	FLOOR EXPANSION JOINT
07-05	SLAB JOINT - CAULK
DIVISION 08	
08-01	HOLLOW METAL FRAMED OPENING HM5. REFER TO SHEET A7.2
08-02	HOLLOW METAL BORROWED LIGHT HM6 - SEE A7.2
08-03	ALUMINUM FRAMED CURTAIN WALL - SEE SHEET A7.3
08-04	7'-4" TALL MASONRY OPENING
08-05	PREFINISHED METAL LOUVER - COORDINATE WITH MECHANICAL
08-06	EXIT SIGN ELECTRICAL CONDUIT TO EXTEND THROUGH CURTAIN WALL - COORDINATE WITH ELECTRICAL CONTRACTOR
DIVISION 09	
09-01	MOISTURE RESISTANT GYPSUM BOARD TO COVER EXTENTS OF WALL, FROM FINISHED FLOOR TO FINISHED CEILING - SEE PARTITION TYPES
09-02	ABUSE RESISTANT GYPSUM BOARD TO COVER EXTENTS OF WALL, FROM FINISHED FLOOR TO FINISHED CEILING - SEE PARTITION TYPES
09-03	FLOOR TRANSITION TO BE PROVIDED BY SPORTS FLOOR SUPPLIER
09-04	WOOD SLAT WALL WITH CONCEALED HANGER CLIPS
09-05	FIRE-RATED, ABUSE RESISTANT GYPSUM BOARD TO COVER EXTENTS OF WALL, FROM FINISHED FLOOR TO ROOF DECK - SEE PARTITION TYPES
DIVISION 10	
10-01	FIRE EXTINGUISHER & CABINET
10-02	BRACKET MOUNTED FIRE EXTINGUISHER
10-03	PLASTIC LAMINATE LOCKERS WITH BENCHES
10-04	ATHLETIC FLOOR MARKINGS AS PART OF THE ATHLETIC FLOOR SYSTEM - SEE INTERIORS
10-05	HIGH SECURITY EMERGENCY ACCESS KEY HOLDER - SURFACE MOUNTED
DIVISION 11	
11-01	GYM SPORTS EQUIPMENT
11-02	GYM DIVIDER CURTAIN
11-03	WALL PADDING
11-04	ELECTRONIC SCOREBOARD WITH PADDING AT BOTTOM CORNERS
11-05	WALL-MOUNTED CHINNING BAR
11-06	VENDING MACHINES - FURNISH & INSTALLED BY OWNER
11-07	COLUMN PADDING
11-08	VOLLEYBALL STANDARDS RECESSED SLEEVE
11-09	PREFABRICATED INDOOR PLAY STRUCTURE - SHOWN FOR DESIGN INTENT ONLY - SEE SHEET G1.0
DIVISION 12	
12-01	60" LONG X 14" DEEP PRECAST CONCRETE BENCH AS PER DOTY & SONS "PLAZA BENCH" OR APPROVED EQUAL. DO NOT ANCHOR TO CONCRETE FLOOR
DIVISION 22	
22-01	PLUMBING FIXTURE - SEE PLUMBING. AT MOPSINKS, PROVIDE FRP PANEL WITH TRIM ON BOTH ADJACENT WALLS TO A HEIGHT APPROXIMATELY 4'-0" ABOVE SINK TOP. WIDTH SHALL EQUAL WIDTH OF SINK. PROVIDE MOP SHELF AND HOLDER
DIVISION 23	
23-01	MECHANICAL EQUIPMENT - SEE MECHANICAL

ENGINEERS ARCHITECTS SURVEYORS SCIENTISTS

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ISSUE:

#	Date:	Description:

CHAMPAIGN PARK DISTRICT

Bid Set

PROJECT

Champaign Park District

Patricia H. Leonhard Recreation Center

2307 W. Sangamon Dr.
Champaign, IL 61821

Date:	05/01/13
Design/Drawn:	CJ/KR/SCB
Reviewed:	SCB
Book No.:	-

SHEET TITLE

Enlarged Floor Plans

SHEET NUMBER

A1.3

Project No.: 0111316.00

4/30/2013 4:29:19 PM
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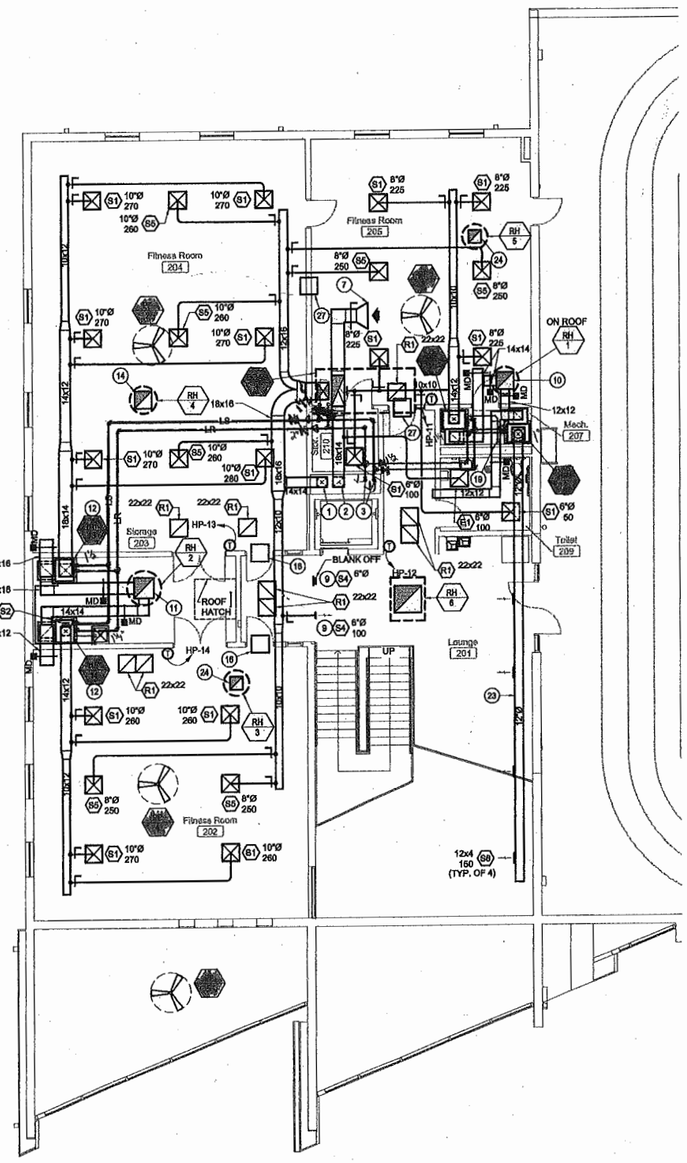
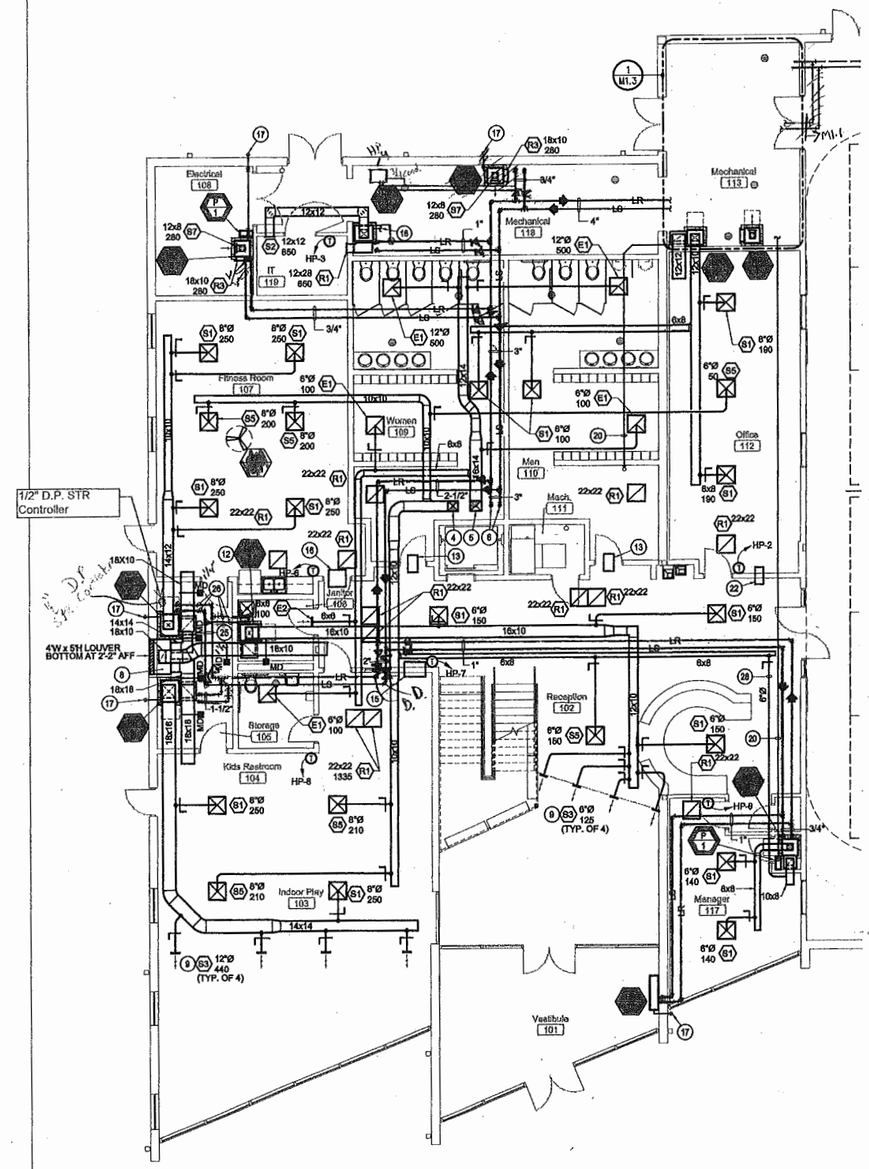


3 **Enlarged Second Floor - Offices**
Scale: 1/8"=1'-0"



2 **Enlarged First Floor - Offices**
Scale: 1/8"=1'-0"

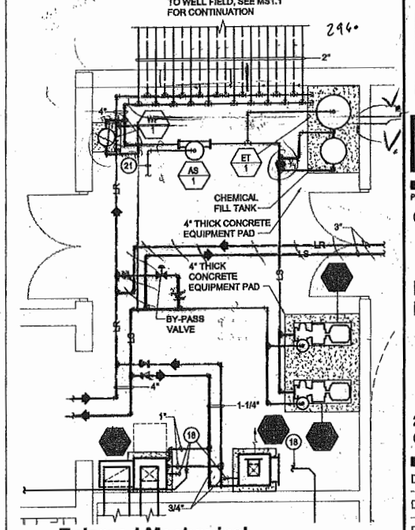
General Notes

1. ALL BRANCH DUCT RUN-OUTS TO DIFFUSERS SHALL BE SAME SIZE AS ASSOCIATED DIFFUSER NECK SIZE UNLESS OTHERWISE INDICATED ON PLANS.

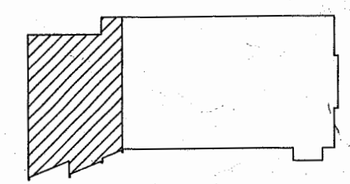
Keyed Notes

1. 14x14 TO FLOOR BELOW
2. 16x14 FROM FLOOR BELOW
3. 3"LS FROM FLOOR BELOW, 3"LR TO FLOOR BELOW
4. 14x14 FROM FLOOR ABOVE
5. 16x14 TO FLOOR ABOVE
6. 3"LS TO FLOOR ABOVE, 3"LR FFA
7. 36x18 DUCT OPEN TO PLENUM, BALANCE TO 1,200 CFM EA.
8. 24" DEEP BY LOUVER SIZE OA PLENUM.
9. DIFFUSER IN FACE OF WALL
10. 24x24 UP TO RH-1 ON ROOF
11. 28x28 UP TO RH-2 ON ROOF
12. ROUTE 3/4" CONDENSATE LINE TO TERMINATE AT MOP SINK.
13. 14x12 TRANSFER DUCT ABOVE CEILING
14. 24x24 UP TO ROOF HOOD
15. 30x24 TRANSFER DUCT ABOVE CEILING
16. 24x12 TRANSFER DUCT ABOVE CEILING
17. 3/4" CONDENSATE DRAIN OUT THROUGH WALL, TERMINATE WITH 90° ELBOW DOWN.
18. 3/4" CONDENSATE DRAIN TO FLOOR DRAIN
19. 3/4" CONDENSATE DRAIN TO FLOOR BELOW
20. 3/4" CONDENSATE TO TERMINATE AT FLOOR DRAIN IN MECHANICAL 113
21. 3/4" MAKE-UP WATER LINE FROM BACK FLOW PREVENTER, COORDINATE WITH PLUMBING CONTRACTOR.
22. 12x10 TRANSFER DUCT ABOVE CEILING
23. ROUTE DUCT TIGHT TO BOTTOM OF STRUCTURE ABOVE.
24. 18x18 UP TO ROOF HOOD
25. 1-1/2" LS/LR
26. 1-1/4" LS/LR
27. 24x20 TRANSFER DUCT ABOVE CEILING
28. 30 CFM OUTDOOR AIR TO RETURN DUCT OF HP-9

TO WELL FIELD, SEE MS1.1
FOR CONTINUATION



1 **Enlarged Mechanical Room Plan**
Scale: 1/8"=1'-0"



Key Plan
Scale: None

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#	Date:	Description:
		9"x9 3/4" Pump Discharge Detail

CHAMPAIGN PARK DISTRICT

BID SET

PROJECT:
Champaign Park District

Patricia H. Leonhard Recreation Center

2307 W. Sangamon Dr.
Champaign, IL 61821

Date:	05/01/13
Design/Drawn:	DRR/DPS
Reviewed:	RDL
Book No.: -	Field: -

SHEET TITLE:
MECHANICAL PLANS - OFFICES

SHEET NUMBER:
M1.3

Project No.: 0111316.00

HEAT PUMP SCHEDULE

MARK	LOCATION	SERVICE	MANUFACTURER	MODEL	ARRANGEMENT	SUPPLY AIR VOLUME (CFM)	EXTERNAL STATIC PRESSURE (IN. WC)	OUTDOOR AIR VOLUME (CFM)	UNIT WEIGHT (LB.)	DIMENSIONS W x D x H (INCHES)	BLOWER MOTOR		BOOSTER COIL	ELECTRICAL DATA			COOLING CAPACITY *				HEATING CAPACITY *				CONDENSER DATA				REMARKS
											HP	FLA	KW	VOLTS / PH	MCA	MOCP	TOTAL (MBH)	SENSIBLE (MBH)	EAT (DEG. F) DB /WB	EER @ 90 DEG. F EWT	TOTAL (MBH)	EAT (DEG. F) DB	LAT (DEG. F) DB	COP @ 40 DEG. F EWT	FLUID FLOW (GPM)	PRES. DROP (FT. WC)	THR @ 80 DEG. F EWT	THA @ 40 DEG. F EWT	
HP-1	MECHANICAL 113	MECHANICAL 113	CLIMATE MASTER	TSV009	VERTICAL	280	0.25	-	156	22-1/2 x 21-1/2 x 34-1/2	1/20	0.4	-	208 / 1	5.3	15	6.2	5.6	76.0 / 63.5	13.0	7.8	68.0	93.8	3.6	2.1	7.1	11.3	6.0	1,2,7,8,10
HP-2	MECHANICAL 113	OFFICE 112 / 109 /110	CLIMATE MASTER	TSV018	VERTICAL	580	0.40	-	257	22-1/2 x 21-1/2 x 44-1/2	1/2	3.9	-	208 / 1	16.2	20	14.5	11.3	76.0 / 63.5	13.6	15.3	68.0	92.4	3.5	4.1	6.8	21.8	11.7	1,3,7,8
HP-3	MECHANICAL 118	IT 119	CLIMATE MASTER	TSV024	VERTICAL	850	0.30	-	266	22-1/2 x 21-1/2 x 48-1/2	1/2	3.9	-	208 / 3	13.9	20	23.5	16.9	76.0 / 63.5	13.9	20.4	68.0	90.2	3.7	4.0	3.7	29.1	16.0	1,3,7,8
HP-4	MECHANICAL 118	MECHANICAL 118	CLIMATE MASTER	TSV009	VERTICAL	280	0.25	-	156	22-1/2 x 21-1/2 x 34-1/2	1/20	0.4	-	208 / 1	5.3	15	6.2	5.6	76.0 / 63.5	13.0	7.8	68.0	93.6	3.6	2.1	7.1	11.3	6.0	1,2,7,8,10
HP-5	ELECTRICAL 108	ELECTRICAL 108	CLIMATE MASTER	TSV009	VERTICAL	280	0.25	-	156	22-1/2 x 21-1/2 x 34-1/2	1/20	0.4	-	208 / 1	5.3	15	6.2	5.6	76.0 / 63.5	13.0	7.8	68.0	93.8	3.6	2.1	7.1	11.3	6.0	1,2,7,8,10
HP-6	STORAGE 105	CLASSROOM 107	CLIMATE MASTER	TSV036	VERTICAL	1,100	0.60	-	327	25-1/2 x 30-1/2 x 60-1/2	1/2	3.9	-	208 / 3	16.9	25	31.5	17.0	76.0 / 63.5	15.4	27.4	68.0	91.0	4.1	6.9	11.4	38.8	22.2	1,5,7,8
HP-7	JANITORS 106	RECEPTION 102	CLIMATE MASTER	TSV030	VERTICAL	950	0.70	-	268	22-1/2 x 21-1/2 x 48-1/2	1/2	3.9		208 / 3	14.3	20	23.8	19.7	76.0 / 63.5	13.9	24.9	68.0	92.3	4.0	6.0	9.9	34.2	19.7	1,5,7,8
HP-8	STORAGE 105	INDOOR PLAY 103	CLIMATE MASTER	TSV070	VERTICAL	2,250	0.60	-	443	25-1/2 x 30-1/2 x 58-1/2	1	6.9	-	208 / 3	32.5	50	66.0	43.9	76.0 / 63.5	13.6	58.5	68.0	92.1	3.8	12.4	18.0	83.7	46.4	1,6,7,8
HP-9	MANAGERS 117	MANAGERS 117	CLIMATE MASTER	TSV009	VERTICAL	280	0.35	-	156	22-1/2 x 21-1/2 x 34-1/2	1/20	0.4	-	208 / 1	5.3	15	6.2	5.6	76.0 / 63.5	13.0	7.8	68.0	93.8	3.6	2.1	7.1	11.3	6.0	1,2,7,8,10
HP-10	VESTIBULE 101	VESTIBULE 101	CLIMATE MASTER	TRC18	CONSOLE	620	---	-	220	54 x 12 x 26		0.7	-	208 / 1	9.2	15	14.1	13.1	76.0 / 63.5	11.6	16.1	68.0	92.0	3.8	3.4	14.7	19.7	12.6	1,3,7,8
HP-11	MECH. 201A	CLASSROOM 205	CLIMATE MASTER	TSV042	VERTICAL	1,040	0.45	-	414	25-1/2 x 30-1/2 x 54-1/2	1/2	3.9	-	208 / 3	18.9	25	38.4	18.8	76.0 / 63.5	15.8	32.7	68.0	96.8	3.8	11.0	15.1	43.3	25.7	1,5,7,8
HP-12	MECH. 201A	LOUNGE 201	CLIMATE MASTER	TSV018	VERTICAL	600	0.45	-	257	22-1/2 x 21-1/2 x 44-1/2	1/2	3.9	-	208 / 1	15.2	20	14.6	13.1	76.0 / 63.5	13.7	15.5	68.0	91.6	3.5	4.1	6.8	23.7	11.7	1,3,7,8
HP-13	STORAGE 203	STORAGE 203	CLIMATE MASTER	TSV060	VERTICAL	1,630	0.55	-	441	25-1/2 x 30-1/2 x 58-1/2	1	6.9	-	208 / 1	28.9	45	63.5	35.1	76.0 / 63.5	15.7	49.8	68.0	96.3	4.0	15.0	20.3	71.7	39.2	1,6,7,8
HP-14	STORAGE 203	STORAGE 203	CLIMATE MASTER	TSV042	VERTICAL	1,160	0.50	-	414	25-1/2 x 30-1/2 x 54-1/2	1/2	3.9	-	208 / 3	18.9	25	42.2	23.5	76.0 / 63.5	15.8	33.0	68.0	94.6	3.8	11.0	15.1	43.7	26.1	1,5,7,8
HP-15	GYM MECH. RM.	GYM MECH. RM.	CLIMATE MASTER	TLV192	VERTICAL	6,000	1.20	-	1,600	107 x 34 x 79	3	4.3	-	460 / 3	31.8	40	182.9	131.4	77.7 / 64.5	11.8	162.0	60.1	85.1	3.6	36.0	4.3	225.0	117.9	1,7,8,9
HP-16	GYM MECH. RM.	GYM MECH. RM.	CLIMATE MASTER	TLV192	VERTICAL	6,000	1.20	-	1,600	107 x 34 x 79	3	4.3	-	460 / 3	31.8	40	182.9	131.4	77.7 / 64.5	11.8	162.0	60.1	85.1	3.6	36.0	4.3	225.0	117.9	1,7,8,9
																	720.7				648.8				158.2		904.9	491.1	

* UNIT CAPACITIES BASED ON 25% PROPYLENE GLYCOL SOLUTION.

NOTES:
1. FLEXIBLE CONNECTION AT AIR INLET AND OUTLET CONNECTIONS.
2. NEOPRENE / RUBBER MOUNTING PADS AND 4-INCH HIGH CONCRETE EQUIPMENT BASE FOR VERTICAL FLOOR MOUNTED UNITS.
3. 3/4-INCH DIAMETER 24-INCH LONG FLEXIBLE STAINLESS STEEL HOSES FOR FLUID SUPPLY AND FLUID RETURN. PROVIDE BALL VALVE, PRESSURE / TEMPERATURE TAPS, CONTROL VALVE, AND SWIVEL ON SUPPLY SIDE. PROVIDE BALL VALVE, PRESSURE/ TEMPERATURE TAPS, CALIBRATED BALANCING VALVE, AND SWIVEL ON RETURN SIDE.
4. 1-INCH DIAMETER 24-INCH LONG FLEXIBLE STAINLESS STEEL HOSES FOR FLUID SUPPLY AND FLUID RETURN. PROVIDE BALL VALVE, PRESSURE / TEMPERATURE TAPS, CONTROL VALVE, AND SWIVEL ON SUPPLY SIDE. PROVIDE BALL VALVE, PRESSURE/ TEMPERATURE TAPS, CALIBRATED BALANCING VALVE, AND SWIVEL ON RETURN SIDE.
5. 1 1/4-INCH DIAMETER 24-INCH LONG FLEXIBLE STAINLESS STEEL HOSES FOR FLUID SUPPLY AND FLUID RETURN. PROVIDE BALL VALVE, PRESSURE / TEMPERATURE TAPS, CONTROL VALVE, AND SWIVEL ON SUPPLY SIDE. PROVIDE BALL VALVE, PRESSURE/ TEMPERATURE TAPS, CALIBRATED BALANCING VALVE, AND SWIVEL ON RETURN SIDE.
6. 1-1/2-INCH DIAMETER 24-INCH LONG FLEXIBLE STAINLESS STEEL HOSES FOR FLUID SUPPLY AND FLUID RETURN. PROVIDE BALL VALVE, PRESSURE / TEMPERATURE TAPS, CONTROL VALVE, AND SWIVEL ON SUPPLY SIDE. PROVIDE BALL VALVE, PRESSURE/ TEMPERATURE TAPS, CALIBRATED BALANCING VALVE, AND SWIVEL ON RETURN SIDE.
7. 2-INCH DIAMETER 24-INCH LONG FLEXIBLE STAINLESS STEEL HOSES FOR FLUID SUPPLY AND FLUID RETURN. PROVIDE BALL VALVE, PRESSURE / TEMPERATURE TAPS, CONTROL VALVE, AND SWIVEL ON SUPPLY SIDE. PROVIDE BALL VALVE, PRESSURE/ TEMPERATURE TAPS, CALIBRATED BALANCING VALVE, AND SWIVEL ON RETURN SIDE.
8. CONDENSATE DRAIN WITH TRAP AND VENT.
9. STAND-ALONE CONTROLLER. ROOM THERMOSTAT SHALL HAVE TEMPERATURE AND SETPOINT ADJUSTMENT (LIMITED TO +/- 3°F OF CONTROL). INTERFACE WITH BUILDING AUTOMATION SYSTEM.
10. CONDENSATE PUMP P-1

DEDICATED OUTDOOR AIR SYSTEM SCHEDULE

MARK	LOCATION	SERVICE	MANUFACTURER	MODEL	WEIGHT (LB)	SUPPLY / OUTDOOR AIR STREAM			RETURN / EXHAUST AIR STREAM			UNIT ELECTRICAL DATA			COOLING CAPACITY *				HEATING CAPACITY *			CONDENSER DATA			REMARKS
						AIR FLOW (CFM)	EXTERNAL STATIC PRES. (IN. WC)	FAN MOTOR HP	AIR FLOW (CFM)	EXTERNAL STATIC PRES. (IN. WC)	FAN MOTOR HP	VOLTS / PH	MCA	MOCP	TOTAL (MBH)	SENSIBLE (MBH)	EAT (DEG. F) DB /WB	EER	TOTAL (MBH)	EAT (DEG. F) DB	COP	FLUID FLOW (GPM)	PRES. DROP (FT. WC)	THR @ 90 DEG. F EWT	
DOAS-1	CLASSROOM ROOF	VENTILATION	CLIMATE MASTER	TOHW08	3,000	3,000	1.20	3	2,700	0.60	2	460 / 3	30	35	128.6	81.9	81.2 / 68.4		78.7	44.0	3.3	26.0	12.5	140.0	

* DESIGN BASED ON INDOOR CONDITIONS OF 75 DEGREES F db @ 50% rh IN SUMMER AND 72 DEGREES F db @ 35 % rh IN WINTER. COOLING AND HEATING CAPACITY ENTERING AIR TEMPERATURES ARE THE LEAVING AIR TEMPERATURES REQUIRED FROM THE ENERGY WHEEL. CAPACITIES BASED ON 25% PROPYLENE GLYCOL SOLUTION.

NOTES:
1. PROVIDE 2-INCH DIAMETER 36-INCH LONG FLEXIBLE STAINLESS STEEL HOSES FOR FLUID SUPPLY AND FLUID RETURN. PROVIDE BALL VALVE, PRESSURE / TEMPERATURE TAPS, CONTROL VALVE, AND SWIVEL ON SUPPLY SIDE. PROVIDE BALL VALVE, PRESSURE / TEMPERATURE TAPS, CALIBRATED BALANCING VALVE, AND SWIVEL ON RETURN SIDE.
2. 16-INCH HIGH INSULATED ROOF CURB.
3. ENERGY RECOVERY SECTION

ENERGY RECOVERY VENTILATOR SCHEDULE

MARK	MANUFACTURER	MODEL	LOCATION	SERVICE	OUTDOOR DESIGN				INDOOR DESIGN				SUPPLY CONDITIONS				AIR PERFORMANCE						ELECTRICAL					PHYSICAL DATA				REMARKS
					SUMMER		WINTER		SUMMER		WINTER		SUMMER		WINTER		SUPPLY FAN			EXHAUST FAN												
					DB	WB	DB	WB	DB	RH	DB	RH	DB	WB	DB	WB	CFM	ESP	HP	CFM	ESP	HP	V	PH	FLA (EACH)	MCA	MOCP	L	W	H	WT	
ERV-1	GREENHECK	ERV-522S-15-A	GYM MECH. RM.	GYM	95.0	75.0	-3.0	-4.4	75.0	50.0	70.0	35.0	79.8	65.9	51.0	43.0	5,500	0.50	5	5,250	0.50	5	460	3	-	17.9	25	124	84	64	3,000	1

NOTES: 1. MANUFACTURER'S VFD ON SUPPLY AND EXHAUST FANS

PUMP SCHEDULE

MARK	LOCATION	SERVICE	MANUFACTURER	MODEL	ARRANGEMENT	TYPE	FLUID FLOW (GPM)*	PRESSURE (FT. WC)	PUMP EFFICIENCY	FLUID OPER. TEMP. (°F)	MOTOR			REMARKS
											HP	RPM	VOLTS / PH	
LP-1	MECHANICAL 113	LOOP PUMP	ITT BELL & GOSSETT	1510 - 3E	BASE MOUNTED	END-SUCTION, CENT.	180	75	67%	40-80	10	1750	480 / 3	1
LP-2	MECHANICAL 113	LOOP PUMP	ITT BELL & GOSSETT	1510 - 3E	BASE MOUNTED	END-SUCTION, CENT.	180	75	67%	40-80	10	1750	480 / 3	1
P-1	VARIOUS	CONDENSATE	LITTLE GIANT	VCMA-15 ULS	VERTICAL PUMP	LOW PROFILE	0.25	12	-	50 - 70	1/50	-	120 / 1	3

NOTES: *25% PROPYLENE GLYCOL SOLUTION
1. VARIABLE FREQUENCY DRIVE.
2. STAND-BY.
3. 1/2 GALLON RESERVOIR

AIR SEPARATOR SCHEDULE

MARK	LOCATION	SYSTEM	SIZE (INCHES)	DESIGN FLOW (GPM)	MAXIMUM PRES. DROP (FT. WC)	OPERATING WT. (LBS.)	MANUFACTURER	MODEL	REMARKS
AS-1	MECH. ROOM 113	LOOP WATER	4	185	1.0	280	ITT BELL & GOSSETT	RL-4	

EXPANSION TANK SCHEDULE

MARK	LOCATION	SERVICE	MANUFACTURER	MODEL	TYPE	MINIMUM ACCEPTANCE (GAL.)	MIN. TANK VOLUME (GAL.)	DIMENSIONS (DIA. X H)	FULL WEIGHT (LBS.)	DESIGN OPERATING PRESS. (PSI)	FILL PRESSURE (PSI)	RELIEF PRESSURE (PSI)	REMARKS
ET-1	MECH. ROOM 113	LOOP WATER	ITT BELL & GOSSETT	B-200	BLADDER	18	32	24 x 37	629	50	12	60	

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CHAMPAIGN PARK DISTRICT

BID SET

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Champaign Park District

Patricia H. Leonhard Recreation Center

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Date:	05/01/13
Design/Drawn:	DRR/DPS
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Book No.: -	Field: -

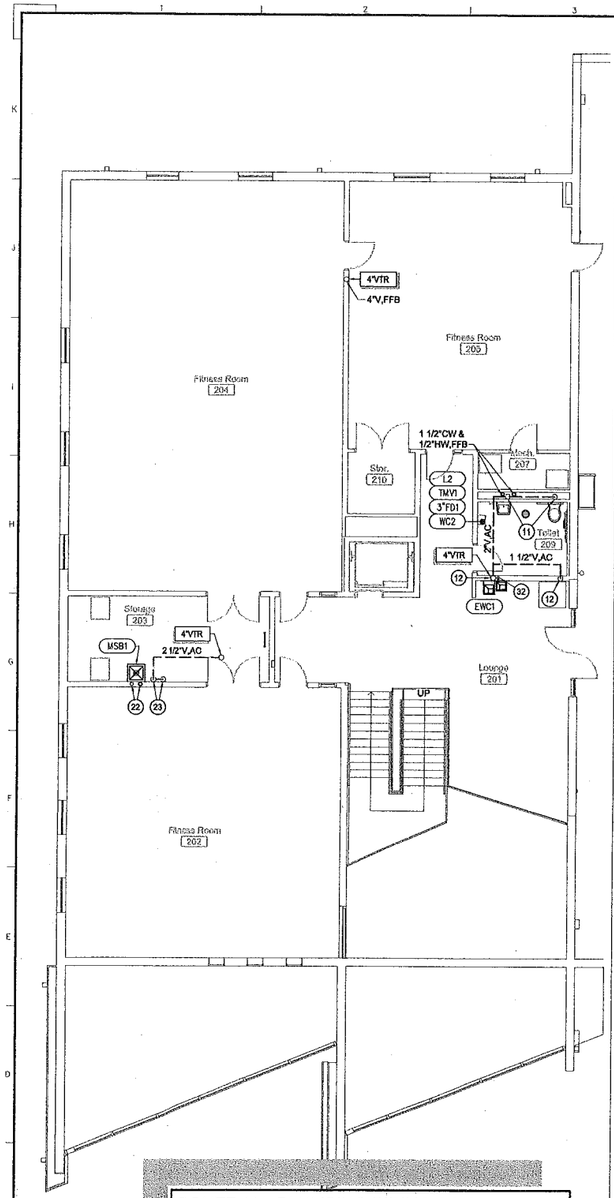
SHEET TITLE:

MECHANICAL SCHEDULES

SHEET NUMBER:

M3.1

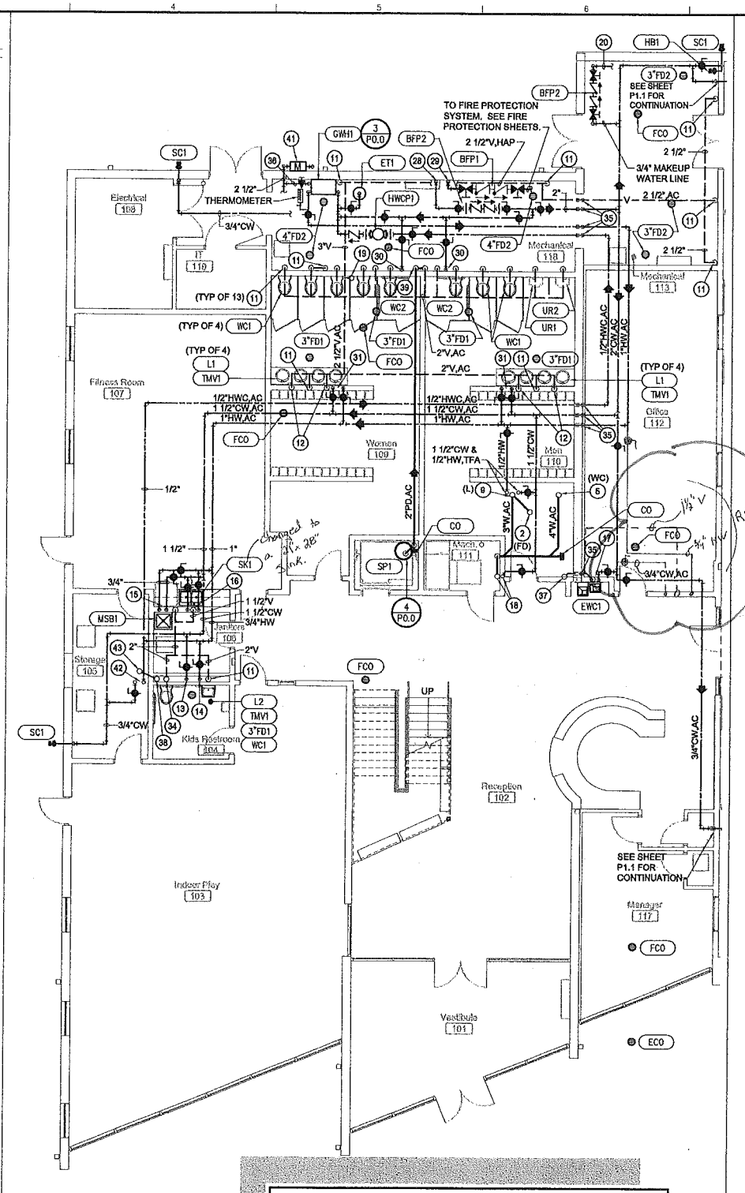
Project No.: 0111316.00



ROUTE ALL PLUMBING PIPING AS CLOSE TO STRUCTURE AS POSSIBLE THROUGH JOISTS.

3 Second Floor Plan - Offices

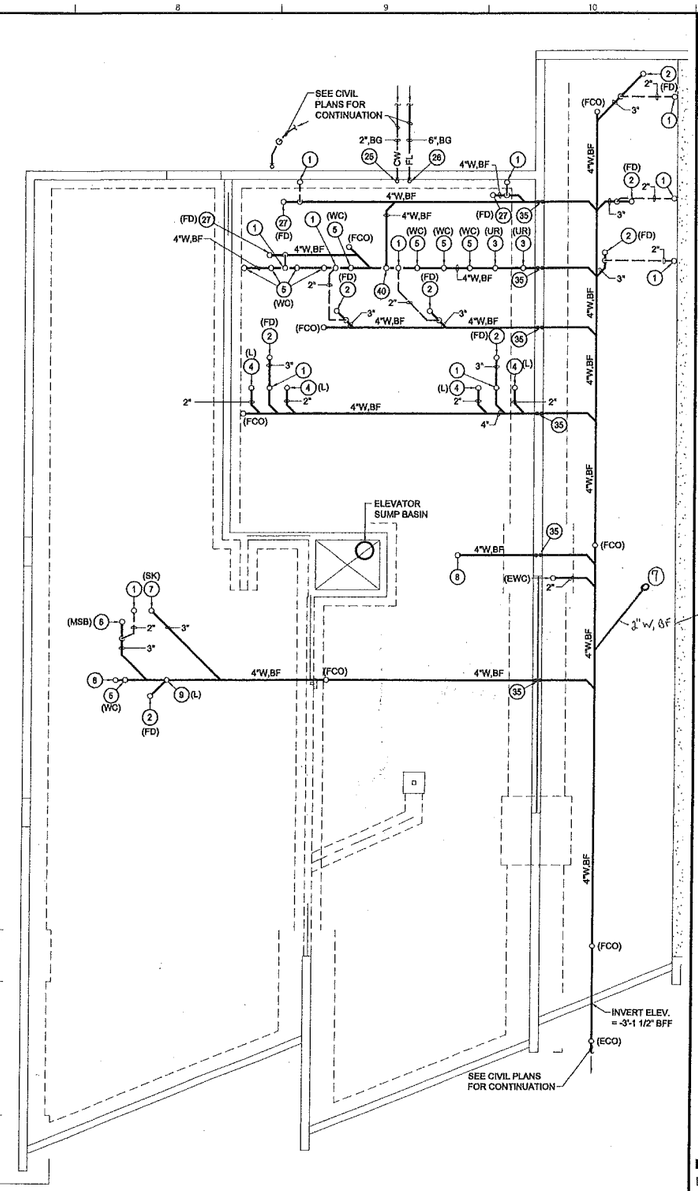
Scale: 1/8"=1'-0"



ROUTE ALL PLUMBING PIPING AS CLOSE TO STRUCTURE AS POSSIBLE THROUGH JOISTS.

2 First Floor Plan - Offices

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



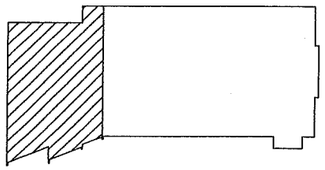
1 Foundation Plan - Offices

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

Keyed Notes

1. 2"V UP.
2. 3"W UP TO FLOOR DRAIN.
3. 2"W UP TO URINAL.
4. 2"W UP TO LAVATORY.
5. 4"W UP TO WATER CLOSET.
6. 3"W UP TO MOP SERVICE BASN.
7. 2"W UP TO SINK.
8. 4"W UP.
9. 3"W DOWN, 2"W UP TO LAVATORY.
10. NOT USED.
11. 2"V DOWN.
12. 1 1/2"V DOWN.
13. 1 1/2"CW DOWN IN CHASE. EXTEND CW IN CHASE TO FIXTURES.
14. 1/2"HW DOWN IN CHASE.
15. 3/4"CW/HW, 2"V DOWN.
16. 1/2"CW/HW, 1 1/2"V DOWN.
17. 1/2"CW, 1 1/2"V DOWN.
18. 1/2"CW, 2"W UP TO EWC.
19. 4"V,TFA.
20. 3/4" MAKEUP WATER TO MECHANICAL EQUIPMENT (AS-1). REFER TO MECHANICAL PLANS FOR EXACT LOCATION.
21. 1/2"CW,FFB & 1 1/2"V DOWN.
22. 3/4"CW & HW,FFB.
23. 2"V,FFB.
24. NATURAL GAS SERVICE UP TO METER.
25. 2" DOMESTIC WATER SERVICE UP TO ABOVE FLOOR.
26. 6" FIRE PROTECTION SERVICE UP TO ABOVE FLOOR.
27. 4"W UP TO FLOOR DRAIN.
28. 2" DOMESTIC WATER SERVICE FROM BELOW.
29. 6" FIRE PROTECTION SERVICE FROM BELOW.
30. 2"CW DOWN. EXTEND ALONG WALL TO EACH WATER CLOSET.
31. 1"HW/CW DOWN. EXTEND HOT & COLD WATER PIPING IN WALL TO EACH LAVATORY.
32. 1/2"CW,FFB.
33. 2 1/2"V,FFB.
34. 2"V,TFA/4"W,DOWN.
35. COORDINATE PIPE PENETRATION LOCATIONS WITH GENERAL CONTRACTOR.
36. 1"G TO GWH-1 (199 CFH PROJECTED LOAD).
37. 1 1/2"V UP.
38. 4"W,DOWN/2"V,TFA.
39. 2" PUMP DISCHARGE DOWN TO AIR GAP FITTING.
40. 4"W FROM AIR GAP FITTING.
41. GAS METER FURNISHED AND INSTALLED BY GAS UTILITY CO. TO REDUCED PRESSURE FROM SERVICE PRESSURE DOWN TO 11-14 INCHES WATER COLUMN (199 CFH PROJECTED LOAD).
42. 3/4"CW & HW,TFA.
43. 4"W,FFA (MSB).

NOTE:
ANY PLUMBING EMBEDS AND INSERTS WITHIN PRECAST CONCRETE PANELS SHALL BE COORDINATED DURING THE SHOP DRAWING PHASE WITH THE PLUMBING CONTRACTOR TO LOCATE ALL INSERTS PRE-ASSEMBLED, LABELED, AND DELIVERED TO THE PRECASTER'S PRODUCTION FACILITY.



Key Plan

Scale: None

ENGINEERS
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ISSUE:

#	Date:	Description:

CHAMPAIGN PARK DISTRICT

BID SET

PROJECT:

Champaign Park District

Patricia H. Leonhard Recreation Center

2307 W. Sangamon Dr.
Champaign, IL 61821

Date:	05/01/13
Design/Drawn:	EJG/DPS
Reviewed:	EJG
Book No.: -	Field: -

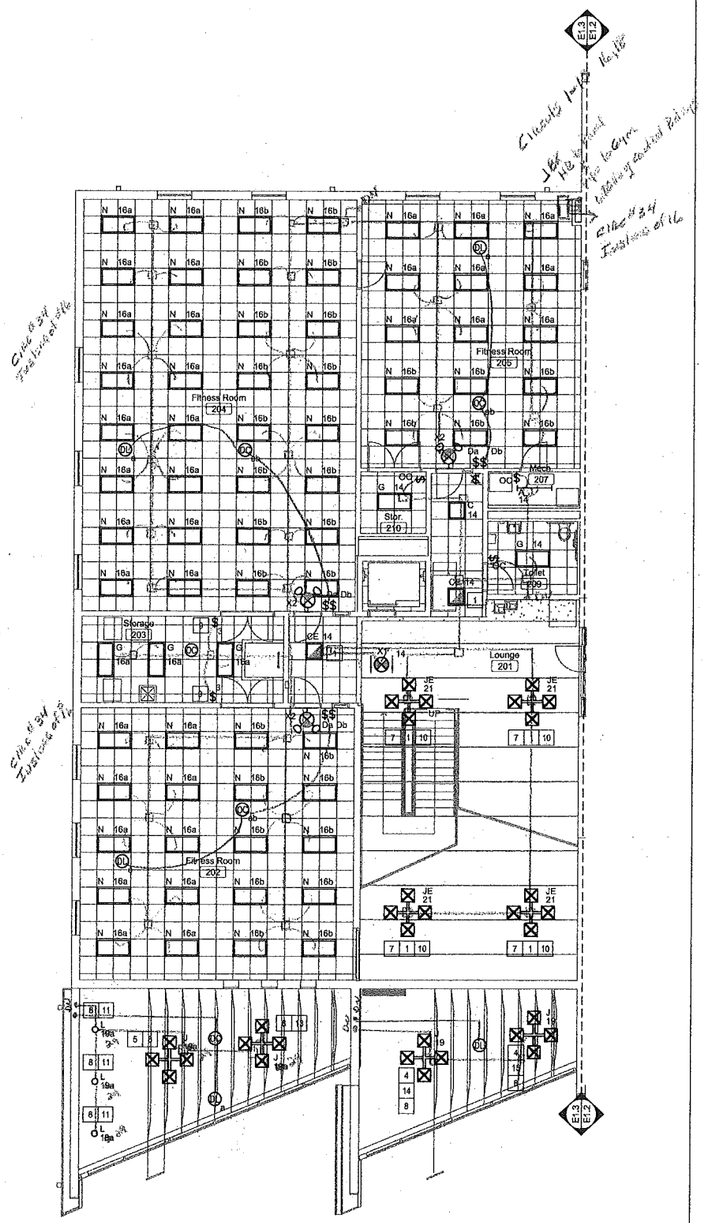
SHEET TITLE:

PLUMBING PLANS - OFFICES

SHEET NUMBER:

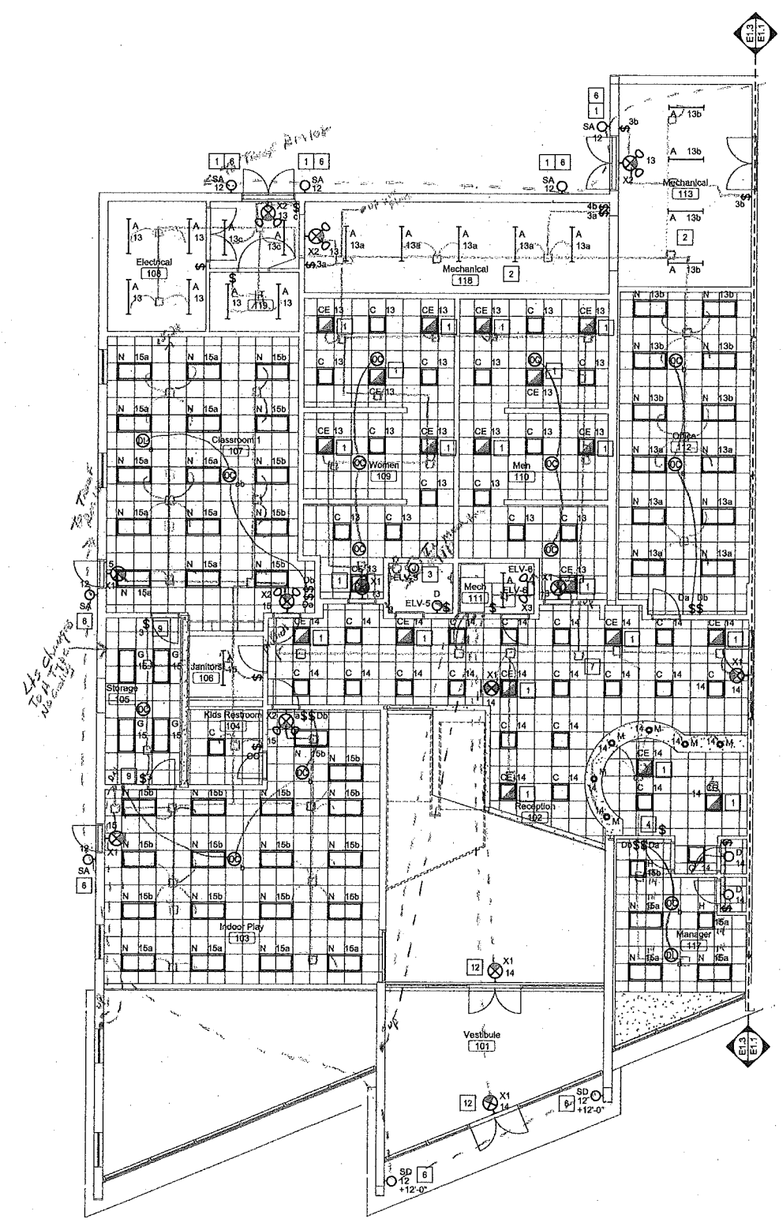
P1.2

Project No.: 0111316.00



Enlarged Second Floor Lighting Plan - Offices

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



Enlarged First Floor Lighting Plan - Offices

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

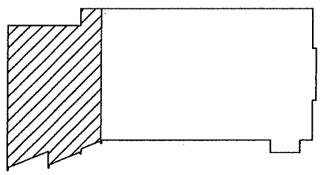
Keyed Notes

1. ROUTE UN-SWITCHED HOT CONDUCTOR TO BATTERY CHARGER IN FIXTURE TO ALLOW NORMAL MODE SWITCHING WITH RELAY PANEL.
2. COORDINATE FIXTURE LOCATION WITH MECHANICAL EQUIPMENT IN SPACE.
3. ELEVATOR CAB LIGHTING.
4. DAYLIGHT SENSOR OVERRIDE CONTROL BEHIND DESK.
5. BOTTOM OF BOWL 16'-3 1/2" AFF.
6. ROUTE CIRCUIT VIA LIGHT RELAY PANEL - SEE SCHEDULE ON SHEET E5.1.
7. ROUTE LOBBY LIGHTING VIA LIGHTING RELAY PANEL - SEE SHEET E5.1.
8. ROUTE LIGHTING VIA LIGHTING RELAY PANEL - SEE SHEET E5.1.
9. THREE-WAY OVERRIDE SWITCH.
10. BOTTOM OF BOWL, 9'-0" AFF SECOND LEVEL.
11. MOUNT TO BOTTOM OF STRUCTURE.
12. CONTRACTOR SHALL ROUTE CONDUIT WITHIN CURTAIN WALL FRAMING.
13. BOTTOM OF BOWL 19'-3" AFF.
14. BOTTOM OF BOWL 16'-0" AFF.
15. BOTTOM OF BOWL 18'-6" AFF.

General Notes

A. OCCUPANCY SENSOR LAYOUT IS DIAGRAMATIC AND MUST BE CONFIRMED BY SUCCESSFUL VENDOR. ALL RELAYS, POWER PACKS, ETC. MUST BE PROVIDED AS REQUIRED FOR A COMPLETE AND OPERATIONAL SYSTEM.

B. ALL CIRCUITS REFER TO PANEL LPA UNLESS OTHERWISE NOTED.



Key Plan

Scale: None

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CHAMPAIGN PARK DISTRICT

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Patricia H. Leonhard Recreation Center

2307 W. Sangamon Dr.
Champaign, IL 61821

Date:	05/01/13
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ENLARGED FLOOR PLANS - LIGHTING

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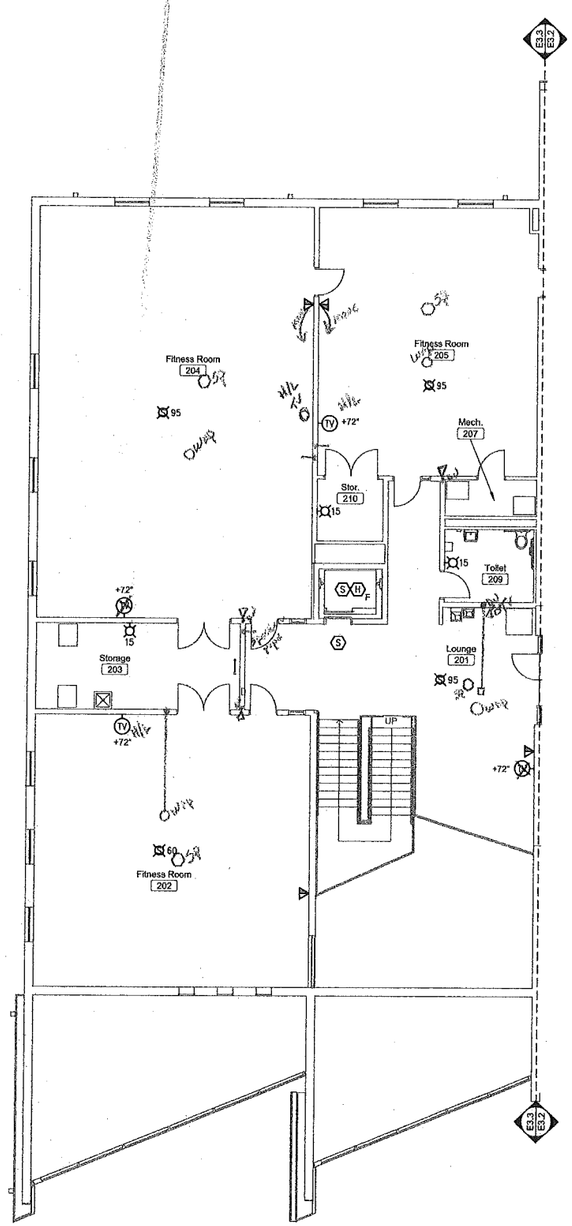
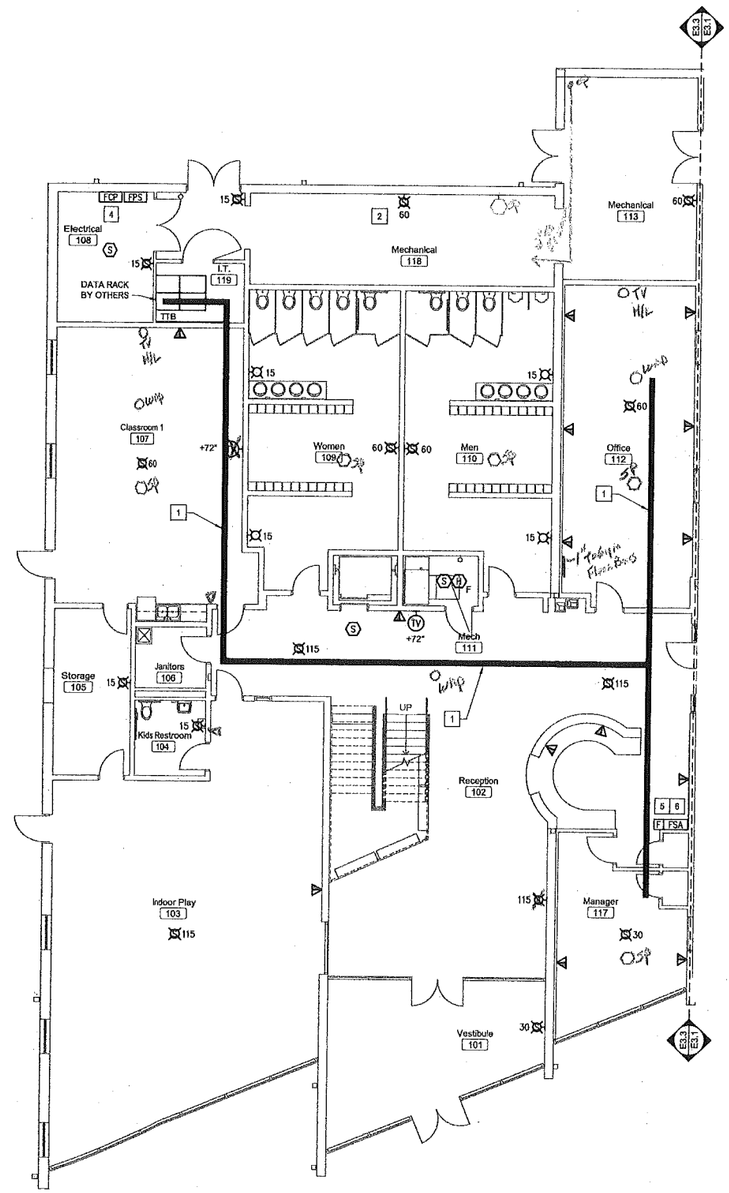


Enlarged Second Floor Special Systems Plan - Offices

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



Enlarged First Floor Special Systems Plan - Offices

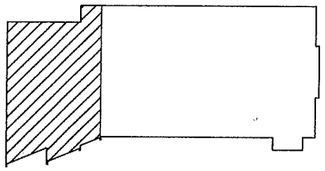
Scale: 1/8"=1'-0"

Keyed Notes

1. 8" W x 4" D WIRE BASKET CABLE TRAY FOR LOW VOLTAGE WIRING.
2. LOCATION OF FIRE PROTECTION SPRINKLER VALVES. COORDINATE EXACT REQUIREMENTS WITH FIRE PROTECTION SPRINKLER SHOP DRAWINGS AND PROVIDE FOR ALL REQUIRED TAMPER SWITCHES AND SUPERVISORY VALVED ANNUNCIATOR IN FIRE ALARM CONTROL PANEL.
3. THREE CONTROL MODULES LOCATED AT THIS LOCATION:
   * ONE FOR PRIMARY LEVEL ELEVATOR RECALL
   * ONE FOR SECONDARY LEVEL ELEVATOR RECALL
   * ONE FOR FIRE FIGHTER CAB ALARM
4. THREE ADDITIONAL DEVICES THIS LOCATION:
   * CONTROL MODULE FOR SHUNT TRIP
   * POWER SUPERVISORY RELAY
   * MONITOR MODULE FOR POWER SUPERVISORY RELAY
5. INSTALL REMOTE MICROPHONE ADJACENT TO FSA.
6. VERIFY WITH LOCAL AHJ THE EXACT LOCATION (PRIOR TO INSTALLATION) OF THE FSA, MICROPHONE, AND MANUAL PULL STATION.

General Notes

1. UNLESS OTHERWISE NOTED, TAP ALL FA SPEAKERS PER NFPA REQUIREMENTS.
2. ALL TELEPHONE/DATA DEVICES ON SECOND FLOOR SHALL HAVE 2-1"C STUBBED INTO CEILING PLENUM OF FIRST FLOOR.
3. ALL TELEPHONE/DATA DEVICES ON FIRST FLOOR SHALL HAVE 2-1"C STUBBED INTO CEILING PLENUM.



Key Plan

Scale: None

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ENLARGED FLOOR PLANS - SPECIAL SYSTEMS

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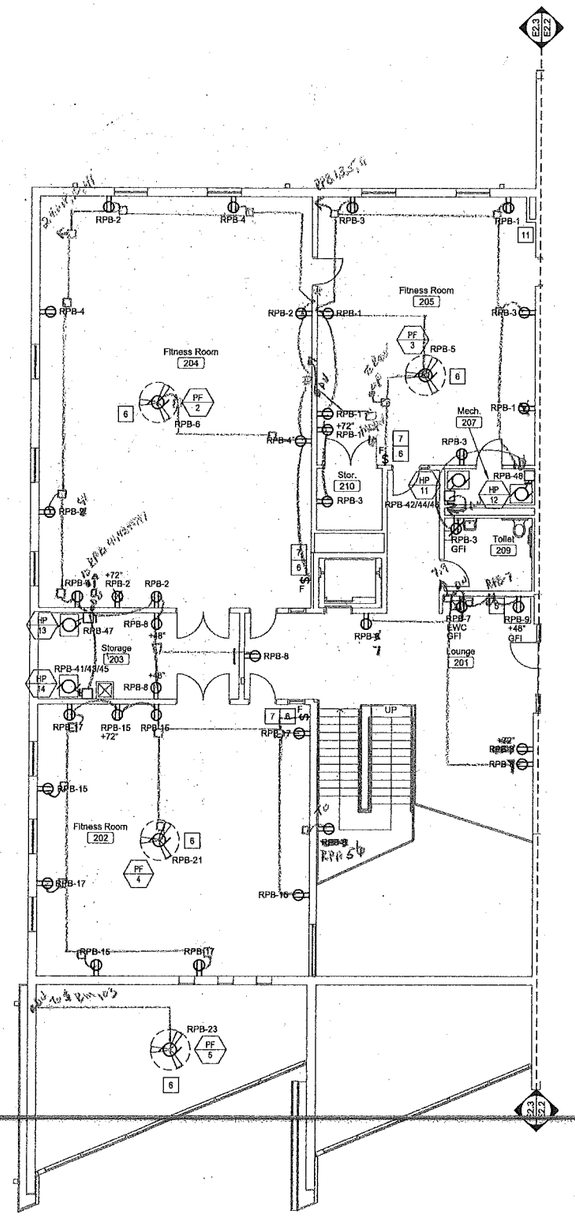
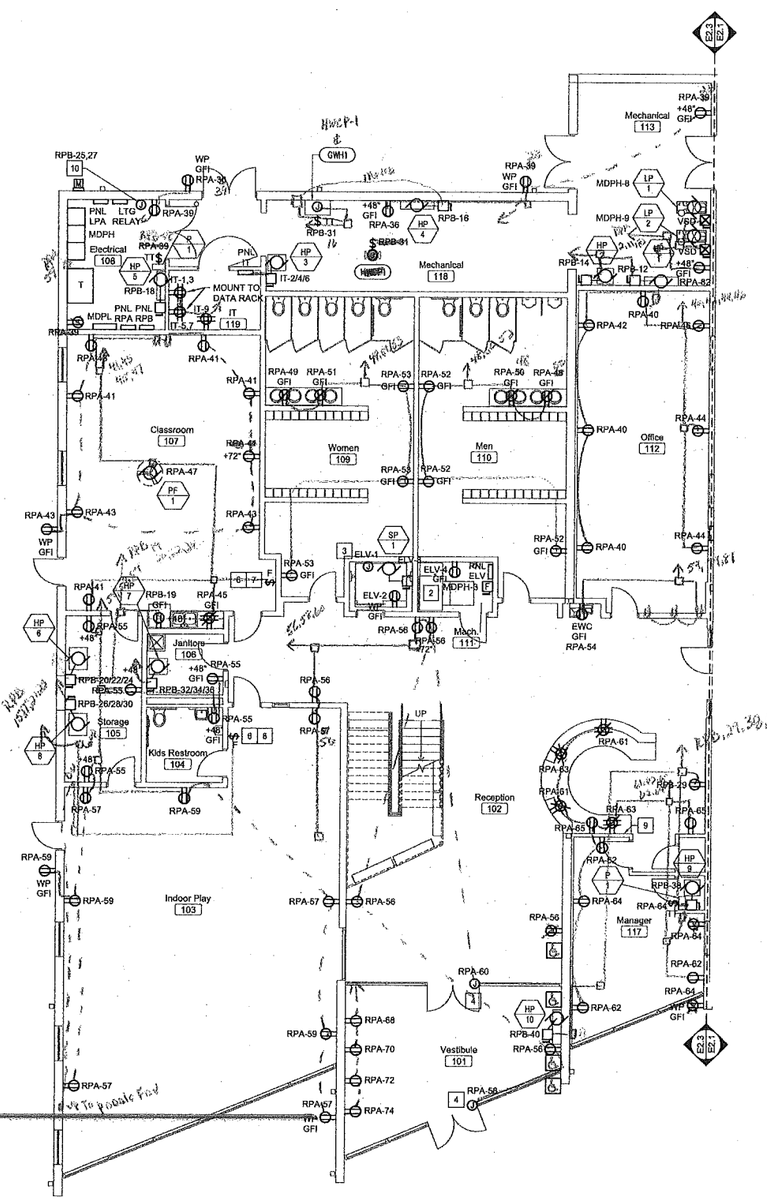


Enlarged Second Floor Power Plan - Offices

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

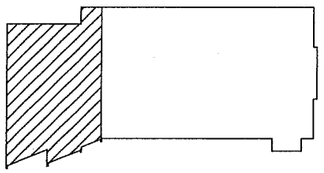


Enlarged First Floor Power Plan - Offices

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

Keyed Notes

1. POWER CONNECTOR FOR MOTORIZED APA ACCESS DOOR CONTROLS FURNISHED WITH OPERATOR - INSTALLED BY ELECTRICAL CONTRACTOR.
2. ALL MISCELLANEOUS CIRCUITS FOR ELEVATOR EQUIPMENT ROOM SHALL BE ROUTED TO PANEL ELV (IE. CAB LIGHTING, PIT LIGHTING, EQUIPMENT ROOM RECEPTACLES, PIT RECEPTACLES, ETC.).
3. ELEVATOR CAB RECEPTACLE.
4. MOTORIZED ADA DOOR, WIRE CONTROL AS REQUIRED.
5. VENDING RECEPTACLE.
6. FAN SPEED CONTROL BY PADDLE FAN VENDOR, INSTALLED BY E.C.
7. CONTROL FOR FAN THIS ROOM.
8. CONTROL FOR FAN SHOWN ON SECOND FLOOR PLAN.
9. STUD WALL THIS LOCATION. ROUTE CONDUITS FOR DEVICES IN RECEPTION DESK, SEE ARCHITECTURAL DETAILS FOR MOUNTING AND CONDUIT AREAS IN DESK.
10. POWER CONNECT FOR FCP AND FSP.
11. CHASE FOR ELECTRICAL CONDUIT TO RISE FROM ROOM BELOW INTO GYM.



Key Plan

Scale: None

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Date:	05/01/13
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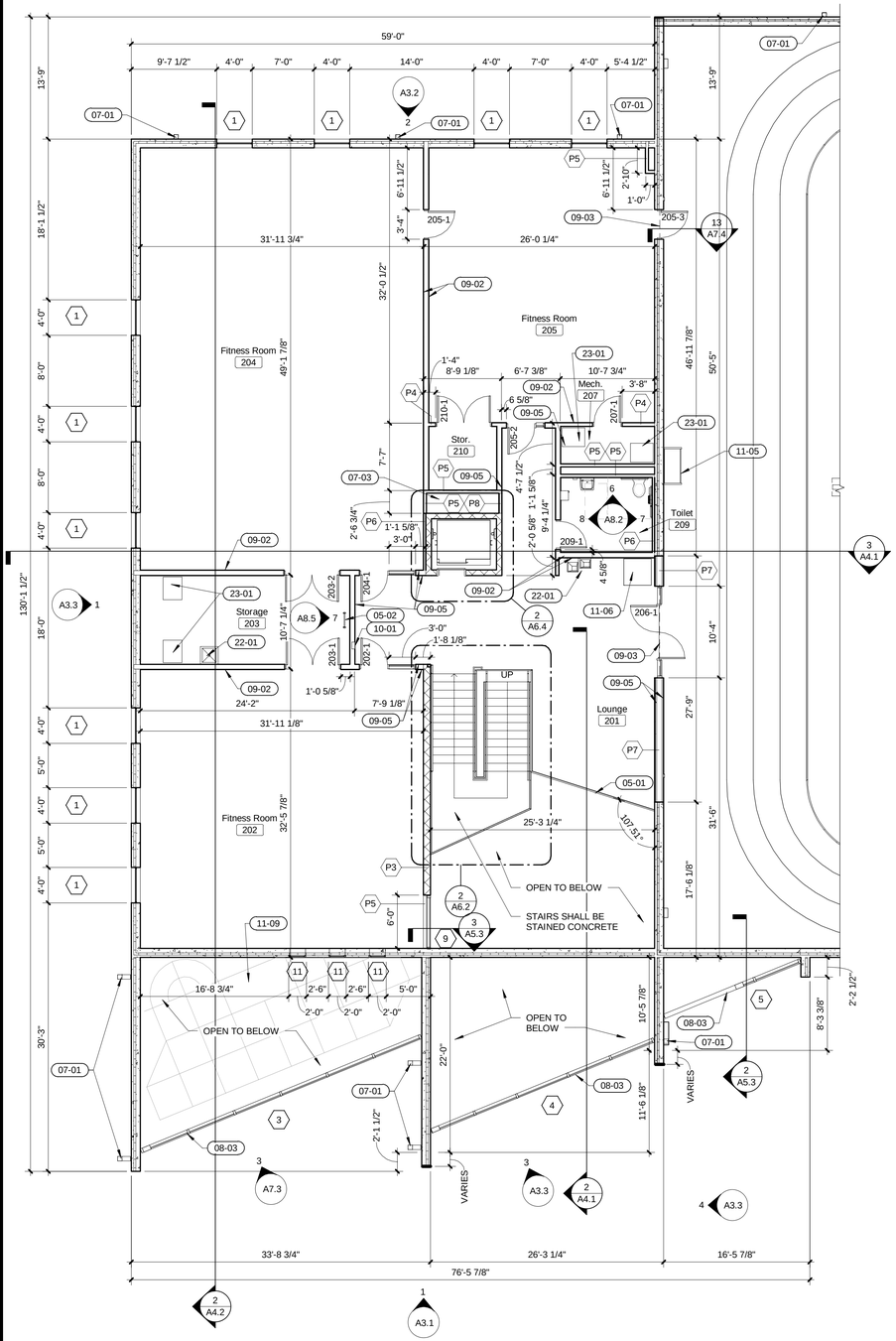
SHEET NUMBER:

E2.3

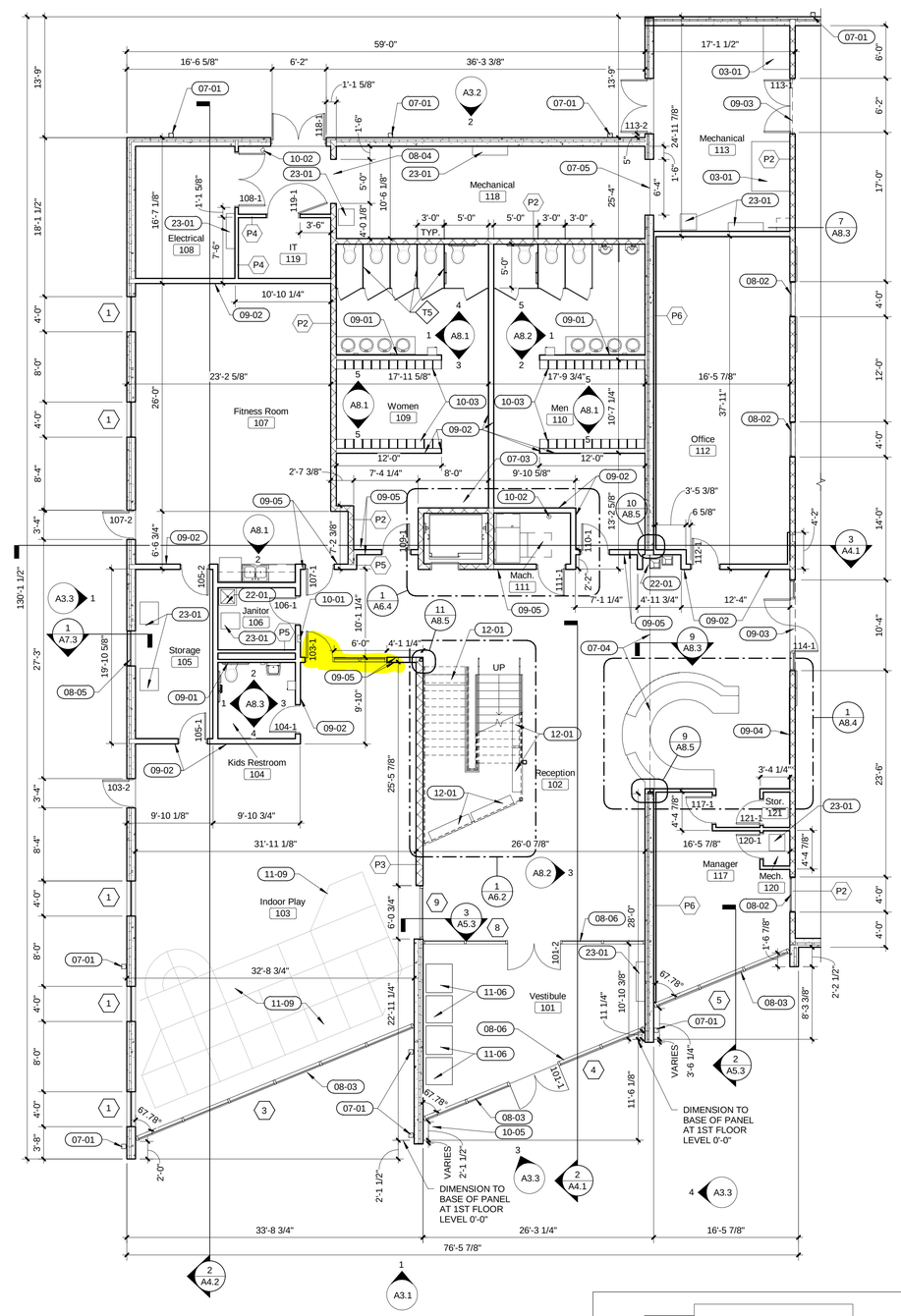
Project No.: 0111316.00

INTERIOR WINDOW AND DOOR DETAILS AND SPECIFICATIONS FROM AS-BUILTS



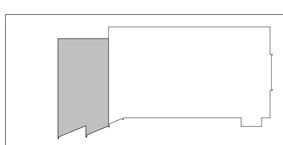
2 2nd Floor Enlarged Office

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



1 First Floor Enlarged Office

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



Key Plan - Non-Gym

Scale: No Scale

General Proposed Plan Notes

1. ALL WALL TYPES ARE TO BE PARTITION TYPE P1 UNLESS NOTED OTHERWISE. REFER TO SHEET A7.1 FOR PARTITION TYPES. ALL PARTITIONS SHALL EXTEND TO THE BOTTOM OF THE ROOF DECK ABOVE UNLESS NOTED OTHERWISE.
2. ALL DIMENSIONS ARE TO FACE OF STUD, FACE OF CMU, OR FACE OF PRECAST CONCRETE UNLESS NOTED OTHERWISE.
3. REFER TO LIFE SAFETY SHEET LS1.1 FOR LOCATIONS AND RATINGS OF FIRE SEPARATIONS.
4. PROVIDE METAL BLOCKING IN METAL STUD WALLS FOR CASEWORK, OWNER FURNISHED FURNISHINGS. HANDRAILS, DOOR STOPS, & ACCESSORIES TOO LARGE TO BE SUPPORTED BY DRYWALL ANCHORS.
5. REFER TO ELECTRICAL DRAWINGS FOR EXIT SIGNS, COMMUNICATION DEVICES, & ELECTRICALLY POWERED LIFE SAFETY DEVICES.
6. REFER TO CIVIL DRAWINGS FOR ALL EXTERIOR CONCRETE WALK LOCATIONS. COORDINATE FINAL CONCRETE PAD LOCATIONS WITH ARCHITECTURAL DRAWINGS.
7. SEE STRUCTURAL DRAWINGS FOR FRAMING INFORMATION & FRAMING DIMENSIONS. ALL COLUMN CENTERLINES ARE FOR REFERENCE ONLY - VERIFY ALL FRAMING WITH STRUCTURAL DRAWINGS.
8. ALL OUTSIDE CORNERS IN INTERIOR CONCRETE MASONRY WALLS ARE TO BE BULLNOSE UNLESS OTHERWISE NOTED OR SHOWN.
9. MASONRY OPENING DIMENSIONS INDICATED ON PLANS ARE NOMINAL (+/-) ONE JOINT. MASONRY IS TO BE MODULAR WITH EVEN JOINT SIZE THROUGHOUT.
10. FOR FINISHED FLOOR ELEVATION, REFER TO CIVIL DRAWINGS.
11. SEE LIFE SAFETY PLAN FOR LOCATION OF RATED PARTITIONS.
12. IT IS THE RESPONSIBILITY OF EACH CONTRACTOR TO PROVIDE COMPLETE WORKING SYSTEMS FOR NEW ELEMENTS.
13. ALL CONTRACTORS SHALL PROVIDE NEW, UNDAMAGED MATERIALS UNLESS OTHERWISE SPECIFIED.
14. INSTALL ALL WORK IN ACCORDANCE WITH CURRENT APLICABLE CODES, PUBLISHED STANDARDS, AND ACCEPTABLE CONSTRUCTION STANDARDS.
15. ALL NEW WORK SHALL BE PLUMB AND LEVEL UNLESS OTHERWISE NOTED.
16. DISSIMILAR FLOOR MATERIALS SHALL MEET UNDER CENTER OF DOOR LEAF.
17. EACH CONTRACTOR SHALL COORDINATE THEIR WORK WITH ALL OTHER TRADES.
18. DO NOT SCALE DRAWINGS TO DETERMINE DIMENSIONS. IF A REQUIRED DIMENSION IS NOT INDICATED, CONTACT THE ARCHITECT FOR DETERMINATION.
19. THE CONTRACTOR SHALL NOT CUT STRUCTURAL MEMBERS/ELEMENTS IN A MANNER RESULTING IN A REDUCTION OF LOAD CARRYING CAPACITY OR LOAD/DEFLECTION RATIO.
20. PATCH AND REPAIR WALLS AT ALL NEW MECHANICAL AND PLUMBING PENETRATIONS.

Plan Keynotes (By Division)

DIVISION 03	
03-01	4" THICK CONCRETE EQUIPMENT PAD - COORDINATE WITH MECHANICAL
DIVISION 05	
05-01	PAINTED STEEL GUARDRAIL ASSEMBLY
05-02	METAL ROOF HATCH ACCESS LADDER
05-03	PAINTED STEEL COLUMN - SEE STRUCTURAL
DIVISION 07	
07-01	PREFINISHED ALUMINUM DOWNSPOUT - TYP.
07-02	SURFACE DRAINED, PREFINISHED METAL DOWNSPOUT - PROVIDE SPLASH BLOCK
07-03	ANNULAR SPACE BETWEEN DUCT PENETRATION & FLOOR OPENING TO BE FIREBLOCKED AS PER UL ASSEMBLY C-AJ-7016
07-04	FLOOR EXPANSION JOINT
07-05	SLAB JOINT - CAULK
DIVISION 08	
08-01	HOLLOW METAL FRAMED OPENING HM5. REFER TO SHEET A7.2
08-02	HOLLOW METAL BORROWED LIGHT HM6 - SEE A7.2
08-03	ALUMINUM FRAMED CURTAIN WALL - SEE SHEET A7.3
08-04	7'-4" TALL MASONRY OPENING
08-05	PREFINISHED METAL LOUVER - COORDINATE WITH MECHANICAL
08-06	EXIT SIGN ELECTRICAL CONDUIT TO EXTEND THROUGH CURTAIN WALL - COORDINATE WITH ELECTRICAL CONTRACTOR
DIVISION 09	
09-01	MOISTURE RESISTANT GYPSUM BOARD TO COVER EXTENTS OF WALL, FROM FINISHED FLOOR TO FINISHED CEILING - SEE PARTITION TYPES
09-02	ABUSE RESISTANT GYPSUM BOARD TO COVER EXTENTS OF WALL, FROM FINISHED FLOOR TO FINISHED CEILING - SEE PARTITION TYPES
09-03	FLOOR TRANSITION TO BE PROVIDED BY SPORTS FLOOR SUPPLIER
09-04	WOOD SLAT WALL WITH CONCEALED HANGER CLIPS
09-05	FIRE-RATED, ABUSE RESISTANT GYPSUM BOARD TO COVER EXTENTS OF WALL, FROM FINISHED FLOOR TO ROOF DECK - SEE PARTITION TYPES
DIVISION 10	
10-01	FIRE EXTINGUISHER & CABINET
10-02	BRACKET MOUNTED FIRE EXTINGUISHER
10-03	PLASTIC LAMINATE LOCKERS WITH BENCHES
10-04	ATHLETIC FLOOR MARKINGS AS PART OF THE ATHLETIC FLOOR SYSTEM - SEE INTERIORS
10-05	HIGH SECURITY EMERGENCY ACCESS KEY HOLDER - SURFACE MOUNTED
DIVISION 11	
11-01	GYM SPORTS EQUIPMENT
11-02	GYM DIVIDER CURTAIN
11-03	WALL PADDING
11-04	ELECTRONIC SCOREBOARD WITH PADDING AT BOTTOM CORNERS
11-05	WALL-MOUNTED CHINNING BAR
11-06	VENDING MACHINES - FURNISH & INSTALLED BY OWNER
11-07	COLUMN PADDING
11-08	VOLLEYBALL STANDARDS RECESSED SLEEVE
11-09	PREFABRICATED INDOOR PLAY STRUCTURE - SHOWN FOR DESIGN INTENT ONLY - SEE SHEET G1.0
DIVISION 12	
12-01	60" LONG X 14" DEEP PRECAST CONCRETE BENCH AS PER DOTY & SONS "PLAZA BENCH" OR APPROVED EQUAL. DO NOT ANCHOR TO CONCRETE FLOOR
DIVISION 22	
22-01	PLUMBING FIXTURE - SEE PLUMBING. AT MOPSINKS, PROVIDE FRP PANEL WITH TRIM ON BOTH ADJACENT WALLS TO A HEIGHT APPROXIMATELY 4'-0" ABOVE SINK TOP. WIDTH SHALL EQUAL WIDTH OF SINK. PROVIDE MOP SHELF AND HOLDER
DIVISION 23	
23-01	MECHANICAL EQUIPMENT - SEE MECHANICAL

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CHAMPAIGN PARK DISTRICT

Bid Set

PROJECT:

Champaign Park District

Patricia H. Leonhard Recreation Center

2307 W. Sangamon Dr.
Champaign, IL 61821

Date:	05/01/13
Design/Drawn:	CJ/KR/SCB
Reviewed:	SCB
Book No.:	-

SHEET TITLE:

Enlarged Floor Plans

SHEET NUMBER:

A1.3

Project No.: 0111316.00

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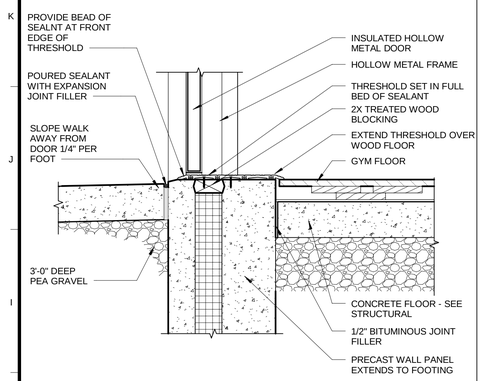
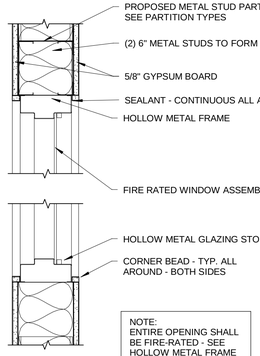


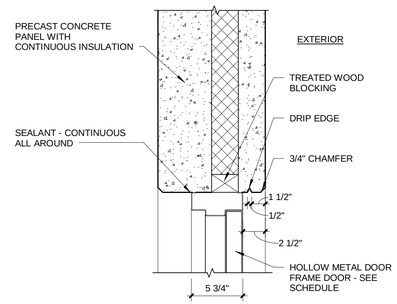
11 Door Threshold Detail - Gym

Scale: 1 1/2" = 1'-0"



8 Window Detail - HM Head/Sill

Scale: 1 1/2" = 1'-0"



5 Door Head Detail - Precast Concrete

Scale: 1 1/2" = 1'-0"

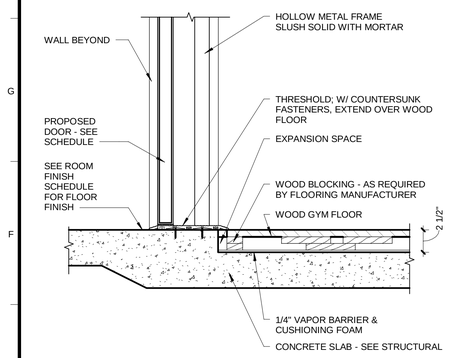
GENERAL NOTES:
1. ALL EXTERIOR HOLLOW METAL DOORS SHALL BE INSULATED.
2. FOR DOOR HARDWARE, REFER TO SPECIFICATION SECTION 087100 - DOOR HARDWARE.
3. FOR WOOD DOOR COLOR & HOLLOW METAL PAINT COLOR, REFER TO INTERIOR FINISHES.

REMARKS:
1. REFER TO SHEET A7.3 FOR ALUMINUM FRAME ELEVATIONS.
2. GLAZING SHALL BE INSULATED GLASS - SEE SPECS.

SCHEDULE LEGEND:
ALUM - ALUMINUM
HM - HOLLOW METAL
PF - PREFINISHED
PNT - PAINT

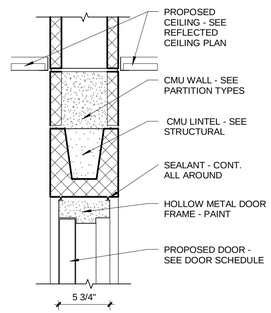
Door Schedule

	DOOR						DOOR FRAME			HEAD DETAIL NO.	JAMB DETAIL NO.	THRESH. DETAIL NO.	LBL	Hardware Set	REMARKS
NO.	WIDTH	HEIGHT	THICK	MAT'L	FINISH	ELEV	MAT'L	FINISH	ELEV						
1st Floor															
101-1	6'-0"	7'-9 1/2"	1 3/4"	ALUM	PF	C	ALUM	PF	-	-	-	1/A7.4		X04	1,2
101-2	6'-0"	7'-9 1/2"	1 3/4"	ALUM	PF	C	ALUM	PF	-	-	-	1/A7.4		K04	1
103-1	3'-0"	7'-0"	1 3/4"	WD	PF	C	HM	PNT	HM-7	2/A7.2	1/A7.2	-	-	C03-R	
103-2	3'-0"	7'-0"	1 3/4"	HM	PNT	A	HM	PNT	HM-1	5/A7.2	4/A7.2	3/A7.2	-	C03-E	
104-1	3'-0"	7'-0"	1 3/4"	WD	PF	A	HM	PNT	HM-1	2/A7.2	1/A7.2	-	-	T01	
105-1	3'-0"	7'-0"	1 3/4"	WD	PF	A	HM	PNT	HM-1	2/A7.2	1/A7.2	-	-	S01	
105-2	3'-0"	7'-0"	1 3/4"	WD	PF	A	HM	PNT	HM-1	2/A7.2	1/A7.2	-	-	S01	
106-1	3'-0"	7'-0"	1 3/4"	WD	PF	A	HM	PNT	HM-1	2/A7.2	1/A7.2	-	-	S02-R	
107-1	3'-0"	7'-0"	1 3/4"	WD	PF	C	HM	PNT	HM-1	2/A7.2	1/A7.2	-	-	C03-R	
107-2	3'-0"	7'-0"	1 3/4"	HM	PNT	A	HM	PNT	HM-1	5/A7.2	4/A7.2	3/A7.2	-	C03-E	
108-1	6'-0"	7'-0"	1 3/4"	HM	PNT	A	HM	PNT	HM-1	2/A7.2	1/A7.2	-	-	X04-R	
109-1	3'-0"	7'-0"	1 3/4"	WD	PF	A	HM	PNT	HM-1	2/A7.2	1/A7.2	-	-	P02-R	
110-1	3'-0"	7'-0"	1 3/4"	WD	PF	A	HM	PNT	HM-1	2/A7.2	1/A7.2	-	-	P02-R	
111-1	3'-0"	7'-0"	1 3/4"	WD	PF	A	HM	PNT	HM-1	2/A7.2	1/A7.2	-	0.75	S03-R	
112-1	3'-0"	7'-0"	1 3/4"	WD	PF	B	HM	PNT	HM-1	2/A7.2	1/A7.2	-	-	E02-S	
113-1	6'-0"	7'-0"	1 3/4"	HM	PNT	A	HM	PNT	HM-2	7/A7.2	6/A7.2	10/A7.2	-	S04-S	
113-2	6'-0"	7'-0"	1 3/4"	HM	PNT	A	HM	PNT	HM-1	5/A7.2	4/A7.2	3/A7.2	-	S04-E	
114-1	6'-0"	7'-0"	1 3/4"	HM	PNT	D	HM	PNT	HM-3	7/A7.2	6/A7.2	10/A7.2	-	X03-R	
114-2	6'-0"	7'-0"	1 3/4"	HM	PNT	A	HM	PNT	HM-1	5/A7.2	4/A7.2	11/A7.2	-	X05	
114-3	6'-0"	7'-0"	1 3/4"	HM	PNT	A	HM	PNT	HM-1	5/A7.2	4/A7.2	11/A7.2	-	X05	
114-4	6'-0"	7'-0"	1 3/4"	HM	PNT	A	HM	PNT	HM-1	5/A7.2	4/A7.2	11/A7.2	-	X05	
115-1	6'-0"	7'-0"	1 3/4"	HM	PNT	A	HM	PNT	HM-2	7/A7.2	6/A7.2	10/A7.2	-	S04-S	
116-1	6'-0"	7'-0"	1 3/4"	HM	PNT	A	HM	PNT	HM-2	7/A7.2	6/A7.2	10/A7.2	-	S04-S	
117-1	3'-0"	7'-0"	1 3/4"	WD	PF	B	HM	PNT	HM-1	2/A7.2	1/A7.2	-	-	E02-R	
118-1	6'-0"	7'-0"	1 3/4"	HM	PNT	A	HM	PNT	HM-1	5/A7.2	4/A7.2	3/A7.2	-	X05-R	
119-1	3'-6"	7'-0"	1 3/4"	HM	PNT	A	HM	PNT	HM-1	2/A7.2	1/A7.2	-	-	S03	
120-1	2'-8"	7'-0"	1 3/4"	HM	PNT	A	HM	PNT	HM-1	2/A7.2	1/A7.2	-	-	S01-R	
121-1	2'-8"	7'-0"	1 3/4"	HM	PNT	A	HM	PNT	HM-1	2/A7.2	1/A7.2	-	-	S01-R	
123-1	6'-0"	7'-0"	1 3/4"	HM	PNT	A	HM	PNT	HM-1	5/A7.2	4/A7.2	11/A7.2	-	S04-E	
123-2	6'-0"	7'-0"	1 3/4"	HM	PNT	A	HM	PNT	HM-1	5/A7.2	4/A7.2	10/A7.2		S04-S	
S101-1	3'-0"	7'-0"	1 3/4"	HM	PNT	B	HM	PNT	HM-1	5/A7.2	4/A7.2	10/A7.2	1.00	X02-R	
S101-2	3'-0"	7'-0"	1 3/4"	HM	PNT	A	HM	PNT	HM-1	5/A7.2	4/A7.2	3/A7.2	-	X01	
2nd Floor															
202-1	3'-0"	7'-0"	1 3/4"	WD	PF	C	HM	PNT	HM-5	2/A7.2	1/A7.2	-	-	C03-R	
203-1	6'-0"	7'-0"	1 3/4"	WD	PF	A	HM	PNT	HM-1	2/A7.2	1/A7.2	-	-	S04	
203-2	6'-0"	7'-0"	1 3/4"	WD	PF	A	HM	PNT	HM-1	2/A7.2	1/A7.2	-	-	S04	
204-1	3'-0"	7'-0"	1 3/4"	WD	PF	C	HM	PNT	HM-5	2/A7.2	1/A7.2	-	-	C03-R	
205-1	3'-0"	7'-0"	1 3/4"	WD	PF	A	HM	PNT	HM-1	2/A7.2	1/A7.2	-	-	C03	
205-2	3'-0"	7'-0"	1 3/4"	WD	PF	C	HM	PNT	HM-4	2/A7.2	1/A7.2	-	-	C03-R	
205-3	3'-0"	7'-0"	1 3/4"	HM	PNT	A	HM	PNT	HM-1	5/A7.2	4/A7.2	14/A7.4	-	C03-S	
206-1	6'-0"	7'-0"	1 3/4"	HM	PNT	D	HM	PNT	HM-3	5/A7.2	1/A7.2	-	-	X03-R	
207-1	3'-0"	7'-0"	1 3/4"	WD	PF	A	HM	PNT	HM-1	2/A7.2	1/A7.2	-	-	S02	
208-1	6'-0"	7'-0"	1 3/4"	HM	PNT	A	HM	PNT	HM-1	5/A7.2	4/A7.2	13/A7.4	-	S04-S	
209-1	3'-0"	7'-0"	1 3/4"	WD	PF	A	HM	PNT	HM-1	2/A7.2	1/A7.2	-	-	T02	
210-1	6'-0"	7'-0"	1 3/4"	WD	PF	A	HM	PNT	HM-1	2/A7.2	1/A7.2	-	-	S04	
S201-1	3'-0"	7'-0"	1 3/4"	HM	PNT	B	HM	PNT	HM-1	5/A7.2	4/A7.2	13/A7.4	1.00	X02-R	



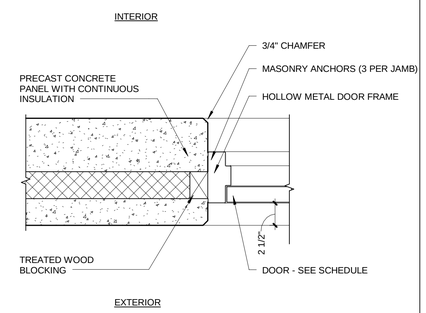
10 Floor Detail - Threshold

Scale: 1 1/2" = 1'-0"



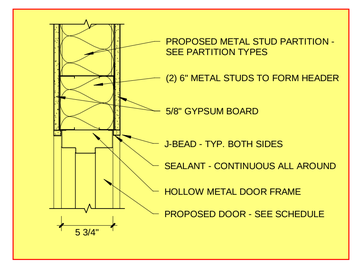
7 Door Head Detail - Masonry Wall

Scale: 1 1/2" = 1'-0"



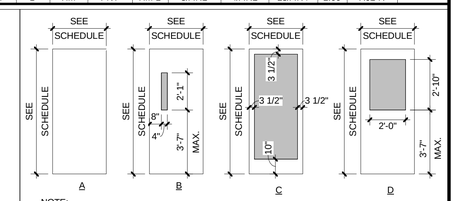
4 Door Jamb Detail - Precast Concrete

Scale: 1 1/2" = 1'-0"



2 Door Head Detail

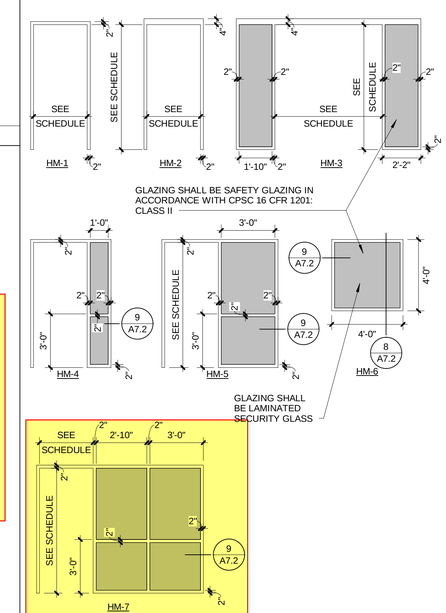
Scale: 1 1/2" = 1'-0"



NOTE:
ALL GLAZING SHALL BE SAFETY GLAZING IN ACCORDANCE WITH CPSC 16 CFR 1201
CLASS I (TYPES B & D)
CLASS II (TYPE C)

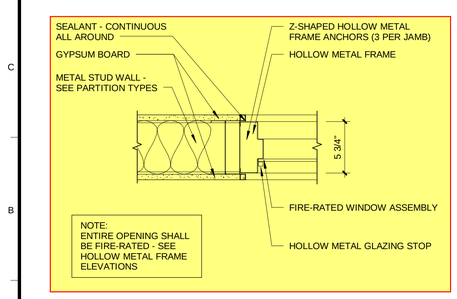
Door Elevations

Scale: 1/4" = 1'-0"



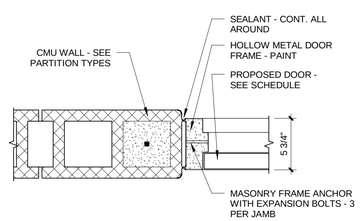
Hollow Metal Frame Elevations

Scale: 1/4" = 1'-0"



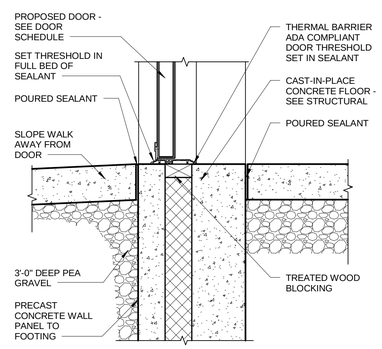
9 Window Detail - HM Jamb

Scale: 1 1/2" = 1'-0"



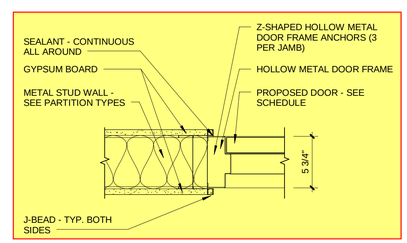
6 Door Jamb Detail - Masonry Wall

Scale: 1 1/2" = 1'-0"



3 Door Threshold Detail

Scale: 1 1/2" = 1'-0"



1 Door Jamb Detail

Scale: 1 1/2" = 1'-0"

ENGINEERS
ARCHITECTS
SURVEYORS
SCIENTISTS

Farnsworth GROUP
1819 S. NEIL STREET, SUITE F
CHAMPAIGN, ILLINOIS 61820
(217) 352-7408 / (217) 352-7409 Fax
www.f-w.com

ISSUE:

#	Date:	Description:

CHAMPAIGN PARK DISTRICT

Bid Set

PROJECT:
Champaign Park District

Patricia H. Leonhard Recreation Center

2307 W. Sangamon Dr.
Champaign, IL 61821

Date:	05/01/13
Design/Drawn:	CJ/KR/SCB
Reviewed:	SCB
Book No.:	-

SHEET TITLE:
Door Schedule & Details

SHEET NUMBER:
A7.2

Project No.: 0111316.00

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SECTION 081113 - HOLLOW METAL DOORS AND FRAMES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

A. Section Includes:

1. Standard hollow metal doors and frame for exterior and interior doors.
2. Knock down frames for use with interior doors in gypsum board partitions.

B. Related Sections:

1. Division 08 Section “Flush Wood Doors”
2. Division 08 Section "Door Hardware" for door hardware for hollow metal doors.
3. Division 09 Sections "Exterior Painting" and "Interior Painting" for field painting hollow metal doors and frames.

1.3 DEFINITIONS

A. Minimum Thickness: Minimum thickness of base metal without coatings.

B. Standard Hollow Metal Work: Hollow metal work fabricated according to ANSI/SDI A250.8.

C. Custom Hollow Metal Work: Hollow metal work fabricated according to ANSI/NAAMM-HMMA 861.

1.4 SUBMITTALS

A. Product Data: For each type of product indicated. Include construction details, material descriptions, core descriptions, fire-resistance rating, and finishes.

B. Shop Drawings: Include the following:

1. Elevations of each door design.
2. Details of doors, including vertical and horizontal edge details and metal thicknesses.
3. Frame details for each frame type, including dimensioned profiles and metal thicknesses.
4. Locations of reinforcement and preparations for hardware.
5. Details of each different wall opening condition.

6. Details of anchorages, joints, field splices, and connections.
7. Details of accessories.
8. Details of moldings, removable stops, and glazing.
9. Details of conduit and preparations for power, signal, and control systems.

C. Samples for Initial Selection: For units with factory-applied color finishes.

D. Samples for Verification:

1. For each type of exposed finish required, prepared on Samples of not less than 3 by 5 inches (75 by 125 mm).
2. For the following items, prepared on Samples about 12 by 12 inches (305 by 305 mm) to demonstrate compliance with requirements for quality of materials and construction:

a. Doors: Show vertical-edge, top, and bottom construction; core construction; and hinge and other applied hardware reinforcement. Include separate section showing glazing if applicable.
b. Frames: Show profile, corner joint, floor and wall anchors, and silencers. Include separate section showing fixed hollow metal panels and glazing if applicable.

E. Other Action Submittals:

1. Schedule: Provide a schedule of hollow metal work prepared by or under the supervision of supplier, using same reference numbers for details and openings as those on Drawings. Coordinate with door hardware schedule.

F. Oversize Construction Certification: For assemblies required to be fire rated and exceeding limitations of labeled assemblies.

G. Product Test Reports: Based on evaluation of comprehensive tests performed by a qualified testing agency, for each type of hollow metal door and frame assembly.

1.5 QUALITY ASSURANCE

A. Source Limitations: Obtain hollow metal work from single source from single manufacturer.

B. Fire-Rated Door Frame Assemblies: Assemblies complying with NFPA 80 that are listed and labeled by a testing and inspecting agency acceptable to authorities having jurisdiction, for fire-protection ratings indicated.

1. Test Pressure: Test at atmospheric (neutral) pressure according to NFPA 252 or UL 10B.
2. Test Pressure: Test according to NFPA 252 or UL 10C. After 5 minutes into the test, the neutral pressure level in furnace shall be established at 40 inches (1000 mm) or less above the sill.

C. Temperature-Rise Rating: At exit enclosures, provide doors that have a temperature-rise rating of 450 deg F (250 deg C) maximum in 30 minutes of fire exposure.

1.6 DELIVERY, STORAGE, AND HANDLING

A. Deliver hollow metal work palletized, wrapped, or crated to provide protection during transit and Project-site storage. Do not use nonvented plastic.

1. Provide additional protection to prevent damage to finish of factory-finished units.

B. Deliver welded frames with two removable spreader bars across bottom of frames, tack welded to jambs and mullions.

C. Store hollow metal work under cover at Project site. Place in stacks of five units maximum in a vertical position with heads up, spaced by blocking, on minimum 4-inch- (102-mm-) high wood blocking. Do not store in a manner that traps excess humidity.

1. Provide minimum 1/4-inch (6-mm) space between each stacked door to permit air circulation.

1.7 PROJECT CONDITIONS

A. Field Measurements: Verify actual dimensions of openings by field measurements before fabrication.

1.8 COORDINATION

A. Coordinate installation of anchorages for hollow metal frames. Furnish setting drawings, templates, and directions for installing anchorages, including sleeves, concrete inserts, anchor bolts, and items with integral anchors. Deliver such items to Project site in time for installation.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:

1. Ceco Door Products; an ASSA ABLOY Group Company.
2. Curries Company; an ASSA ABLOY Group Company.
3. Kewanee Corporation (The).
4. Republic Builders Products Company.
5. Steelcraft; an Ingersoll-Rand Company.

2.2 MATERIALS

A. Cold-Rolled Steel Sheet: ASTM A 1008/A 1008M, Commercial Steel (CS), Type B; suitable for exposed applications.

B. Hot-Rolled Steel Sheet: ASTM A 1011/A 1011M, Commercial Steel (CS), Type B; free of scale, pitting, or surface defects; pickled and oiled.

C. Metallic-Coated Steel Sheet: ASTM A 653/A 653M, Commercial Steel (CS), Type B; with minimum G60 (Z180) or A60 (ZF180) metallic coating.

D. Frame Anchors: ASTM A 591/A 591M, Commercial Steel (CS), 40Z (12G) coating designation; mill phosphatized.

1. For anchors built into exterior walls, steel sheet complying with ASTM A 1008/A 1008M or ASTM A 1011/A 1011M, hot-dip galvanized according to ASTM A 153/A 153M, Class B.

E. Inserts, Bolts, and Fasteners: Hot-dip galvanized according to ASTM A 153/A 153M.

F. Powder-Actuated Fasteners in Concrete: Fastener system of type suitable for application indicated, fabricated from corrosion-resistant materials, with clips or other accessory devices for attaching hollow metal frames of type indicated.

G. Grout: ASTM C 476, except with a maximum slump of 4 inches (102 mm), as measured according to ASTM C 143/C 143M.

H. Mineral-Fiber Insulation: ASTM C 665, Type I (blankets without membrane facing); consisting of fibers manufactured from slag or rock wool with 6- to 12-lb/cu. ft. (96- to 192-kg/cu. m) density; with maximum flame-spread and smoke-development indexes of 25 and 50, respectively; passing ASTM E 136 for combustion characteristics.

I. Glazing: Comply with requirements in Division 08 Section "Glazing."

J. Bituminous Coating: Cold-applied asphalt mastic, SSPC-Paint 12, compounded for 15-mil (0.4-mm) dry film thickness per coat. Provide inert-type noncorrosive compound free of asbestos fibers, sulfur components, and other deleterious impurities.

2.3 EXTERIOR DOORS AND FRAMES

A. Construct exterior doors and frames to comply with the standards indicated for materials, fabrication, hardware locations, hardware reinforcement, tolerances, and clearances, and as specified.

B. Heavy-Duty Doors and Frames: SDI A250.8, Level 2. At locations indicated in the Door and Frame Schedule.

1. Physical Performance: Level B according to SDI A250.4.
2. Doors:

a. Type: As indicated in the Door and Frame Schedule.
b. Thickness: 1-3/4 inches (44.5 mm.)

c. Face: Metallic-coated steel sheet, minimum thickness of 0.042 inch (1.0 mm), with minimum A40 (ZF120) coating.
d. Edge Construction: Model 1, Full Flush.
e. Core: Manufacturer's standard kraft-paper honeycomb, polystyrene, polyurethane, polyisocyanurate, mineral-board, or vertical steel-stiffener core at manufacturer's discretion.
f. Core: Polyurethane or Polyisocyanurate.

1) Thermal-Rated Doors: Provide doors fabricated with thermal-resistance value (R-value) of not less than 11.1 deg F x h x sq. ft./Btu when tested according to ASTM C 1363.

3. Frames:

a. Materials: Metallic-coated steel sheet, minimum thickness of 0.053 inch (1.3 mm), with minimum A40 (ZF120) coating.
b. Construction: Knocked down.

4. Exposed Finish: Prime.

2.4 INTERIOR FRAMES

A. General: Provide doors of design indicated, not less than thickness indicated; fabricated with smooth surfaces, without visible joints or seams on exposed faces unless otherwise indicated. Comply with ANSI/SDI A250.8.

1. Frames:

a. Materials: Uncoated, cold-rolled steel sheet, minimum thickness of 0.042 inch (1.0 mm).
b. Construction: Knocked down.

2. Exposed Finish: Prime.

B. Hardware Reinforcement: Fabricate according to ANSI/SDI A250.6 with reinforcing plates from same material as door face sheets.

C. Fabricate concealed stiffeners and hardware reinforcement from either cold- or hot-rolled steel sheet.

2.5 FRAME ANCHORS

A. Jamb Anchors:

1. Postinstalled Expansion Type for In-Place Concrete or Masonry: Minimum 3/8-inch-(9.5-mm-) diameter bolts with expansion shields or inserts. Provide pipe spacer from frame to wall, with throat reinforcement plate, welded to frame at each anchor location.

2. Stud-Wall Type: Designed to engage stud, welded to back of frames; not less than 0.042 inch (1.0 mm) thick.

B. Floor Anchors: Formed from same material as frames, not less than 0.042 inch (1.0 mm) thick, and as follows:

1. Monolithic Concrete Slabs: Clip-type anchors, with two holes to receive fasteners.

2.6 STOPS AND MOLDINGS

A. Moldings for Glazed Lites in Doors: Minimum 0.032 inch (0.8 mm) thick, fabricated from same material as door face sheet in which they are installed.

B. Fixed Frame Moldings: Formed integral with hollow metal frames, a minimum of 5/8 inch (16 mm) high unless otherwise indicated.

2.7 ACCESSORIES

A. Mullions and Transom Bars: Join to adjacent members by welding or rigid mechanical anchors.

B. Ceiling Struts: Minimum 1/4-inch-thick by 1-inch- (6.4-mm-thick by 25.4-mm-) wide steel.

C. Grout Guards: Formed from same material as frames, not less than 0.016 inch (0.4 mm) thick.

2.8 FABRICATION

A. Electrical Hardware: When there are electrical hardware items being installed in hollow metal frames that are to be grouted, the hollow metal supplier shall shop weld in ½” metal conduit and masonry mud boxes to protect the hardware devices from damage and to allow room for installation of the electrified hardware items specified in Section 087100. When there are two or more electrical items to be installed in the same frame provide conduit between the components to result in one feed conduit out the top of the frame. Extend conduit to a location 18” above the top of the frame. Include a pull line in the conduit for pulling the electric wire.

B. Fabricate hollow metal work to be rigid and free of defects, warp, or buckle. Accurately form metal to required sizes and profiles, with minimum radius for thickness of metal. Where practical, fit and assemble units in manufacturer's plant. To ensure proper assembly at Project site, clearly identify work that cannot be permanently factory assembled before shipment.

C. Tolerances: Fabricate hollow metal work to tolerances indicated in SDI 117.

D. Hollow Metal Doors:

1. Exterior Doors: Provide weep-hole openings in bottom of exterior doors to permit moisture to escape. Seal joints in top edges of doors against water penetration.

2. Astragals: Provide overlapping astragal on one leaf of pairs of doors where required by NFPA 80 for fire-performance rating or where indicated. Extend minimum 3/4 inch (19 mm) beyond edge of door on which astragal is mounted.

E. Hollow Metal Frames: Where frames are fabricated in sections due to shipping or handling limitations, provide alignment plates or angles at each joint, fabricated of same thickness metal as frames.

1. Provide countersunk, flat- or oval-head exposed screws and bolts for exposed fasteners unless otherwise indicated.
2. Grout Guards: Weld guards to frame at back of hardware mortises in frames to be grouted.
3. Floor Anchors: Weld anchors to bottom of jambs and mullions with at least four spot welds per anchor.
4. Jamb Anchors: Provide number and spacing of anchors as follows:

   a. Postinstalled Expansion Type: Locate anchors not more than 6 inches (152 mm) from top and bottom of frame. Space anchors not more than 26 inches (660 mm) o.c.

   b. Stud-Wall Type: Locate anchors not more than 18 inches (457 mm) from top and bottom of frame. Space anchors not more than 32 inches (813 mm) o.c. and as follows:

      1) Three anchors per jamb up to 60 inches (1524 mm) high.
      2) Four anchors per jamb from 60 to 90 inches (1524 to 2286 mm) high.
      3) Five anchors per jamb from 90 to 96 inches (2286 to 2438 mm) high.
      4) Five anchors per jamb plus 1 additional anchor per jamb for each 24 inches (610 mm) or fraction thereof above 96 inches (2438 mm) high.
      5) Two anchors per head for frames above 42 inches (1066 mm) wide and mounted in metal-stud partitions.

5. Door Silencers: Except on weather-stripped doors, 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.
   b. Double-Door Frames: Drill stop in head jamb to receive two door silencers.

F. Manufacturer’s Standard Steel Casings: Provide manufactures standard S56 Colonial Steel Casing trim for all resident room doors.

G. Fabricate concealed stiffeners, edge channels, and hardware reinforcement from either cold- or hot-rolled steel sheet.

H. Hardware Preparation: Factory prepare hollow metal work to receive templated mortised hardware; include cutouts, reinforcement, mortising, drilling, and tapping according to the Door Hardware Schedule and templates furnished as specified in Division 08 Section "Door Hardware."

1. Locate hardware as indicated, or if not indicated, according to ANSI/SDI A250.8.
2. Reinforce doors and frames to receive nontemplated, mortised and surface-mounted door hardware.
3. Comply with applicable requirements in ANSI/SDI A250.6 and ANSI/DHI A115 Series specifications for preparation of hollow metal work for hardware.
4. Coordinate locations of conduit and wiring boxes for electrical connections with Division 26 Sections.

I. Stops and Moldings: Provide stops and moldings around glazed lites where indicated. Form corners of stops and moldings with butted or mitered hairline joints.

1. Provide fixed frame moldings on outside of exterior and on secure side of interior doors and frames.
2. Provide loose stops and moldings on inside of hollow metal work.
3. Coordinate rabbet width between fixed and removable stops with type of glazing and type of installation indicated.

2.9 STEEL FINISHES

A. Prime Finish: Apply manufacturer's standard primer immediately after cleaning and pre-treating.

1. Shop Primer: Manufacturer's standard, fast-curing, lead- and chromate-free primer complying with ANSI/SDI A250.10 acceptance criteria; recommended by primer manufacturer for substrate; compatible with substrate and field-applied coatings despite prolonged exposure.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of the Work.

B. Examine roughing-in for embedded and built-in anchors to verify actual locations before frame installation.

C. For the record, prepare written report, endorsed by Installer, listing conditions detrimental to performance of the Work.

D. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

A. Remove welded-in shipping spreaders installed at factory. Restore exposed finish by grinding, filling, and dressing, as required to make repaired area smooth, flush, and invisible on exposed faces.

B. Prior to installation, adjust and securely brace welded hollow metal frames for squareness, alignment, twist, and plumbness to the following tolerances:

1. Squareness: Plus or minus 1/16 inch (1.6 mm), measured at door rabbet on a line 90 degrees from jamb perpendicular to frame head.
2. Alignment: Plus or minus 1/16 inch (1.6 mm), measured at jambs on a horizontal line parallel to plane of wall.
3. Twist: Plus or minus 1/16 inch (1.6 mm), measured at opposite face corners of jambs on parallel lines, and perpendicular to plane of wall.
4. Plumbness: Plus or minus 1/16 inch (1.6 mm), measured at jambs on a perpendicular line from head to floor.

C. Drill and tap doors and frames to receive nontemplated, mortised, and surface-mounted door hardware.

3.3 INSTALLATION

A. General: Install hollow metal work plumb, rigid, properly aligned, and securely fastened in place; comply with Drawings and manufacturer's written instructions.

B. Hollow Metal Frames: Install hollow metal frames of size and profile indicated. Comply with ANSI/SDI A250.11.

1. Set frames accurately in position, plumbed, aligned, and braced securely until permanent anchors are set. After wall construction is complete, remove temporary braces, leaving surfaces smooth and undamaged.

   a. At fire-protection-rated openings, install frames according to NFPA 80.
   b. Where frames are fabricated in sections because of shipping or handling limitations, field splice at approved locations by welding face joint continuously; grind, fill, dress, and make splice smooth, flush, and invisible on exposed faces.
   c. Install frames with removable glazing stops located on secure side of opening.
   d. Install door silencers in frames before grouting.
   e. Remove temporary braces necessary for installation only after frames have been properly set and secured.
   f. Check plumbness, squareness, and twist of frames as walls are constructed. Shim as necessary to comply with installation tolerances.
   g. Field apply bituminous coating to backs of frames that are filled with grout containing antifreezing agents.

2. Floor Anchors: Provide floor anchors for each jamb and mullion that extends to floor, and secure with postinstalled expansion anchors.

a. Floor anchors may be set with powder-actuated fasteners instead of postinstalled expansion anchors if so indicated and approved on Shop Drawings.

3. Metal-Stud Partitions: Solidly pack mineral-fiber insulation behind frames.
4. Masonry Walls: Coordinate installation of frames to allow for solidly filling space between frames and masonry with grout.
5. Installation Tolerances: Adjust hollow metal door frames for squareness, alignment, twist, and plumb to the following tolerances:

a. Squareness: Plus or minus 1/16 inch (1.6 mm), measured at door rabbet on a line 90 degrees from jamb perpendicular to frame head.
b. Alignment: Plus or minus 1/16 inch (1.6 mm), measured at jambs on a horizontal line parallel to plane of wall.
c. Twist: Plus or minus 1/16 inch (1.6 mm), measured at opposite face corners of jambs on parallel lines, and perpendicular to plane of wall.
d. Plumbness: Plus or minus 1/16 inch (1.6 mm), measured at jambs at floor.

C. Hollow Metal Doors: Fit hollow metal doors accurately in frames, within clearances specified below. Shim as necessary.

1. Non-Fire-Rated Standard Steel Doors:

a. Jambs and Head: 1/8 inch (3 mm) plus or minus 1/16 inch (1.6 mm).
b. Between Edges of Pairs of Doors: 1/8 inch (3 mm) plus or minus 1/16 inch (1.6 mm).
c. Between Bottom of Door and Top of Threshold: Maximum 3/8 inch (9.5 mm).
d. Between Bottom of Door and Top of Finish Floor (No Threshold): Maximum 3/4 inch (19 mm).

2. Fire-Rated Doors: Install doors with clearances according to NFPA 80.

D. Install frames in accordance with manufacturer's printed instructions and approved shop drawings; in addition, install frames for fire-rated openings in accordance with requirements of NFPA 80.Install casings in accordance with manufacturer's printed instructions.

3.4 ADJUSTING AND CLEANING

A. Final Adjustments: Check and readjust operating hardware items immediately before final inspection. Leave work in complete and proper operating condition. Remove and replace defective work, including hollow metal work that is warped, bowed, or otherwise unacceptable.

B. Remove grout and other bonding material from hollow metal work immediately after installation.

C. 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.

D. Metallic-Coated Surfaces: Clean abraded areas and repair with galvanizing repair paint according to manufacturer's written instructions.

END OF SECTION 081113

SECTION 081416 - FLUSH WOOD DOORS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

A. This Section includes the following:

1. Solid-core doors with wood-veneer faces.
2. Factory finishing flush wood doors.
3. Factory fitting flush wood doors to frames and factory machining for hardware.

B. Related Sections include the following:

2. Division 8 Section "Glazing" for glass view panels in flush wood doors.

1.3 SUBMITTALS

A. General: Submit each item in this Article according to the Conditions of the Contract and Division 1 Specifications Section.

B. Product Data: For each type of door. Include details of core and edge construction, trim for openings, and louvers.

C. Shop Drawings: Indicate location, size, and hand of each door; elevation of each kind of door; construction details not covered in Product Data; location and extent of hardware blocking; and other pertinent data.

1. For factory-machined doors, indicate dimensions and locations of cutouts for locksets and other cutouts adjacent to light and louver openings.

D. Samples for Verification: As follows:

1. Corner sections of doors approximately 8 by 10 inches (200 by 250 mm) with door faces and edgings representing the typical range of color and grain for each species of veneer and solid lumber required.
2. Frames for light openings, 6 inches (150 mm) long, for each material, type, and finish required.

1.4 QUALITY ASSURANCE

A. Source Limitations: Obtain flush wood doors through one source from a single manufacturer.

B. Quality Standard: Comply with the following standard:

1. NWWDA Quality Standard: NWWDA I.S.1-A, "Architectural Wood Flush Doors."
2. AWI Quality Standard: AWI's "Architectural Woodwork Quality Standards" for grade of door, core, construction, finish, and other requirements.

C. Fire-Rated Wood Doors: Doors complying with NFPA 80 that are listed and labeled by a testing and inspecting agency acceptable to authorities having jurisdiction, for fire ratings indicated, based on testing according to NFPA 252.

1. Test Pressure: Test at atmospheric pressure.

1.5 DELIVERY, STORAGE, AND HANDLING

A. Protect doors during transit, storage, and handling to prevent damage, soiling, and deterioration. Comply with requirements of referenced standard and manufacturer's written instructions.

1. Comply with WIC's Technical Bulletin 420-R for delivery, storage, and handling of doors.

B. Mark each door with individual opening numbers used on Shop Drawings. Use removable tags or concealed markings.

1.6 PROJECT CONDITIONS

A. Environmental Limitations: Do not deliver or install doors until building is enclosed, wet-work is complete, and HVAC system is operating and will maintain temperature and relative humidity at occupancy levels during the remainder of the construction period.

B. Environmental Limitations: Do not deliver or install doors until conditions for temperature and relative humidity have been stabilized and will be maintained in storage and installation areas during the remainder of the construction period to comply with requirements of the referenced quality standard for Project's geographical location.

1.7 WARRANTY

A. General Warranty: Door manufacturer's warranty specified in this Article shall not deprive the Owner of other rights the Owner may have under other provisions of the Contract Documents

and shall be in addition to, and run concurrent with, other warranties made by the Contractor under requirements of the Contract Documents.

B. Door Manufacturer's Warranty: Submit written agreement on door manufacturer's standard form, signed by manufacturer, Installer, and Contractor, agreeing to repair or replace defective doors that have warped (bow, cup, or twist) more than 1/4 inch (6.35 mm) in a 42-by-84-inch (1067-by-2134-mm) section or that show telegraphing of core construction in face veneers exceeding 0.01 inch in a 3-inch (0.25 mm in a 75-mm) span, or do not comply with tolerances in referenced quality standard.

1. Warranty shall also include installation and finishing that may be required due to repair or replacement of defective doors.
2. Warranty shall be in effect during the following period of time after the date of Substantial Completion:

a. Solid-Core Interior Doors: Life of installation.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

1. Solid Core Wood Doors:

a. Algoma Hardwoods Inc.
b. Chappell Door Co.
c. Oshkosh Wood Doors.
d. Graham Manufacturing Corp.
e. Mohawk Flush Doors, Inc.
f. Weyerhaeuser Co.

2.2 SOLID-CORE DOORS

A. Particleboard Cores: Comply with the following requirements:

1. Particleboard: ANSI A208.1, Grade LD-2.
2. Blocking: Provide wood blocking at particleboard-core doors as follows:

a. 5-inch (125-mm) top-rail blocking, at doors indicated to have closers.
b. 5-inch (125-mm) bottom-rail blocking, at exterior doors and doors indicated to have kick, mop, or armor plates.
c. 5-inch (125-mm) midrail blocking, at doors indicated to have exit devices.

B. Interior Veneer-Faced Doors: Comply with the following requirements:

1. Faces: Plain Sliced Select White Birch.
2. Grade: Premium, with Grade A faces.
3. Core: Particleboard core.
4. Construction: Five or seven plies with stiles and rails bonded to core, then entire unit abrasive planed before veneering.

C. Fire-Rated Doors: Comply with the following requirements:

1. Faces and Grade: Provide faces and grade to match non-fire-rated doors in same area of building, unless otherwise indicated
2. Construction: Construction and core specified above for type of face indicated or manufacturer's standard mineral-core construction as required to provide fire rating indicated.
3. Blocking: For mineral-core doors, provide composite blocking with improved screw-holding capability approved for use in doors of fire ratings indicated and as follows:

   a. 5-inch (125-mm) top-rail blocking.
   b. 5-inch (125-mm) bottom-rail blocking, at doors indicated to have kick, mop, or armor plates.
   c. 4-1/2-by-10-inch (114-by-250-mm) lock blocks.
   d. 5-inch (125-mm) midrail blocking, at doors indicated to have exit devices.

4. Pairs: Furnish formed-steel edges and astragals for pairs of fire-rated doors, unless otherwise indicated.

2.3 VENEER MATCHING

A. Within Door Faces: Provide doors with the following veneer matching:

1. Book matching.

B. Pairs and Sets: Provide pair matching and set matching for pairs of doors and for doors hung in adjacent sets.

2.4 FABRICATION

A. Fabricate flush wood doors in sizes indicated for Project site fitting.

B. Factory fit doors to suit frame-opening sizes indicated, with the following uniform clearances and bevels, unless otherwise indicated:

1. Comply with clearance requirements of referenced quality standard for fitting. Comply with requirements of NFPA 80 for fire-rated doors.

C. Factory machine doors for hardware that is not surface applied. Locate hardware to comply with DHI-WDHS-3. Comply with final hardware schedules, door frame Shop Drawings, DHI A115-W series standards, and hardware templates.

1. Coordinate measurements of hardware mortises in metal frames to verify dimensions and alignment before factory machining.
2. Metal Astragals: Premachine astragals and formed-steel edges for hardware for pairs of fire-rated doors.

D. Openings: Cut and trim openings through doors to comply with applicable requirements of referenced standards for kind(s) of door(s) required.

1. Light Openings: Trim openings with moldings of material and profile indicated.

2.5 FACTORY FINISHING

1. General: Comply with referenced quality standard's requirements for factory finishing.
2. Finish wood doors at factory.
3. Transparent Finish: Comply with requirements indicated for grade, finish system, staining effect, and sheen.

a. Grade: Premium with Grade A faces.
b. Finish: Manufacturer's standard stained finish color as selected by the Architect with performance requirements comparable to either AWI System TR-2 catalyzed lacquer or AWI System TR-4 conversion varnish.
c. Staining: Refer to drawings for color.
d. Effect: Filled finish.
e. Sheen: Satin.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine installed door frames before hanging doors.

1. Verify that frames comply with indicated requirements for type, size, location, and swing characteristics and have been installed with plumb jambs and level heads.
2. Reject doors with defects.

B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION

A. Hardware: For installation, see Division 8 Section "Door Hardware."

B. Manufacturer's Written Instructions: Install wood doors to comply with manufacturer's written instructions, referenced quality standard, and as indicated.

1. Install fire-rated doors in corresponding fire-rated frames according to NFPA 80.

C. Job-Fit Doors: Align and fit doors in frames with uniform clearances and bevels as indicated below; do not trim stiles and rails in excess of limits set by manufacturer or permitted with fire-rated doors. Machine doors for hardware. Seal cut surfaces after fitting and machining.

1. Clearances: Provide 1/8 inch (3.2 mm) at heads, jambs, and between pairs of doors. Provide 1/8 inch (3.2 mm) from bottom of door to top of decorative floor finish or covering. Where threshold is shown or scheduled, provide 1/4 inch (6.4 mm) from bottom of door to top of threshold.

a. Comply with NFPA 80 for fire-rated doors.

2. Bevel non-fire-rated doors 1/8 inch in 2 inches (3-1/2 degrees) at lock and hinge edges.
3. Bevel fire-rated doors 1/8 inch in 2 inches (3-1/2 degrees) on lock edge; trim stiles and rails only to extent permitted by labeling agency.

D. Factory-Fitted Doors: Align in frames for uniform clearance at each edge.

E. Factory-Finished Doors: Restore finish before installation

3.3 ADJUSTING AND PROTECTING

A. Operation: Rehang or replace doors that do not swing or operate freely.

B. Finished Doors: Refinish or replace doors damaged during installation.

C. Protect doors as recommended by door manufacturer to ensure that wood doors are without damage or deterioration at the time of Substantial Completion.

END OF SECTION 081416

SECTION 087100 - DOOR HARDWARE

PART 1 – GENERAL

1.1 SECTION INCLUDES

A. Furnish and install door hardware for hollow metal doors.

B. Furnish hardware for aluminum doors; installation by Section 08 4100.

C. Where items of hardware are not specified and are definitely required for the intended service, notify the Architect for clarification. If hardware is not specified but is required for a typical application, furnish and install such hardware items in the type and quantity for the appropriate service and function.

1.2 SUBMITTALS

A. Submit detailed door hardware schedule in quantities required by Division 1 - General Requirements.

B. The door hardware schedule format shall be consistent with recommendations for a vertical format set forth in the Door & Hardware Institute's (DHI) publication "Sequence and Format for the Hardware Schedule". Door hardware sets shall be consolidated to group multiple door openings which share similar hardware requirements. Schedule shall include the following information:

1. Door number, location, size, handing, and rating.
2. Door and frame material, handing.
3. Degree of swing.
4. Manufacturer
5. Product name and catalog number
6. Function, type and style
7. Size and finish of each item
8. Mounting heights
9. Explanation of abbreviations, symbols, etc.
10. Numerical door index, indicating the hardware set/ group number for each door.

C. Prepare the schedule under the direct supervision of a certified architectural hardware consultant (AHC) **using the same numbering system for each hardware group as indicated in the schedule at the end of this section.** Handwritten schedules are not acceptable. The supervising AHC shall attend meetings related to the project when requested by the Architect.

D. Review drawings from related trades as required to verify compatibility with specified hardware. Indicate unsuitable or in compatible items, and proposed substitutions in the door hardware schedule.

F. Submit manufacturers' catalog data for each item of door hardware in quantities required by Division 1 - General Requirements.

G. After final approved schedule is returned, transmit corrected copies for distribution and field use in quantities required by Division 1 - General Requirements.

H. Submit approved door hardware schedules, template lists, and pertinent templates as requested by related trades.

I. Submit necessary diagrams, schematics, voltage and amperage requirements for electro-mechanical devices and systems when indicated and as required by related trades.

J. After receipt of approved door hardware schedule, the door hardware supplier shall initiate a meeting including the Owner's Representative and the Contractor to determine keying requirements. Upon completion of the initial key meeting, the door hardware supplier shall prepare a key schedule with symbols and abbreviations as set forth in the Door and Hardware Institute's publication "Keying Procedures, Systems, and Nomenclature". Submit copies of the Owner approved key schedule for record and field use in quantities required by Division 1 - General Requirements.

1.3 QUALITY ASSURANCE

A. This section may not deal individually with minute items such as components, parts, controls and devices which may be required to produce the door hardware performance specified. Provide such items where required, whether or not specifically identified.

B. Installation of door hardware shall be installed or directly supervised and inspected by a skilled installer with not less than two (2) years experience in successful completion of projects similar in size and scope.

1.4 DELIVERY, STORAGE AND HANDLING

A. The Contractor shall receive door hardware and provide secure and proper protection of door hardware items to avoid delays caused by lost or damaged hardware.

B. Coordinate with related suppliers/fabricators under the direction of the Contractor for delivery of door hardware items necessary for factory installation.

C. Furnish hardware and templates for aluminum doors to the aluminum door supplier; installation by Section 08 4100.

1.5 PREPARATION

A. Furnish hardware templates and other information required to the fabricators of the doors and frames. This data is required to assist the fabricators in making proper cutouts, mortises, reinforcements, electrical connections and other preparations as required to properly receive the door hardware.

B. The templates and/or physical door hardware, as required, shall be shipped prepaid to the fabricators.

C. Reinforcement for all hardware for metal doors and frames shall be installed at the factory, be made to template and be furnished with machine screws. The face of locks shall be beveled to match the bevel edge of metal doors.

PART 2 - PRODUCTS

2.1 KEYING

A. Acceptable manufacturers: Schlage (SCH) Everest or equivalent.

B. Furnish locks and cylinders utilizing a patented Everest keyway. During construction, exterior doors shall be keyed to a construction key.

C. Locks shall be keyed as directed by the Owner to a grand master key system.

D. Keying shall be by the lock manufacturer where permanent records shall be kept.

E. Furnish ten (10) master keys. Furnish a total of six (6) keys per cylinder. Actual cut keys to be determined by owner.

F. Master keys and control keys to be delivered by registered mail to the Owner. Change keys shall be delivered in a set up key cabinet. Construction keys shall be delivered to the Contractor.

2.2 FASTENERS

A. Install door hardware with only fasteners provided by the manufacturer for use with the specific product and according to the manufacturer's written instructions. Furnish suitable size, quantity, and material with finish to match the hardware.

B. Exposed fasteners shall match the finish of the adjacent door hardware. Fasteners exposed to the weather shall be non-ferrous or stainless steel. Furnish correct fasteners to accommodate surrounding conditions.

C. Coordinate required hardware reinforcements for doors and frames. Furnish through-bolts as required for materials not readily reinforced.

D. Furnish self-tapping (TEC) screws for attachment of sweeps and stop-applied weatherstripping and for attaching kickplate to hollow metal or wood mineral core doors.

E. Provide machine screws for attaching hardware to metal.

2.3 BUTT HINGES

A. Acceptable manufacturers and catalog numbers:

1. Heavy weight, ball bearing, non-rated, non-ferrous or stainless steel:

Ives (IVES)	5BB1HW
Stanley (STA)	FBB199
Hager	BB1199

2. Heavy weight, ball bearing, fire rated, steel or stainless steel:

Ives (IVES)	5BB1HW
Stanley (STA)	FBB168
McKinney (MCK)	T4B3786
Hager	BB1168

B. Hinges for fire-rated interior doors shall be steel or stainless steel. Hinges for non-rated interior doors shall be non-ferrous metal, stainless steel or steel. Hinges for exterior doors shall be stainless steel or non-ferrous metal.

C. Furnish hinges with sufficient width to accommodate trim and allow for 180-degree swing.

D. Furnish hinges with flat button tips with non-rising pins at interior doors, non-removable loose pins (NRP) at exterior doors.

E. Furnish hinges to template standards.

2.4 CONTINUOUS GEARED HINGES

A. Acceptable manufacturers and catalog numbers:

1. Full Mortise Aluminum Geared - Heavy Duty Continuous Hinge

Ives (IVES)	122HD
Stanley (STA)	661HD
McKinney (MCK)	MCK-12-HD

B. Construct geared hinges of heavy-duty series, extruded 6063-T6 aluminum alloy.

C. Hinge shall be non-handed with symmetrical template hole pattern and factory drilled. Hinge shall accept a minimum of 20 fasteners on the door and 20 fasteners on the frame.

D. Provide machine screws for doors which have been reinforced to accept machine screws.

E. Coordinate continuous hinges with door and frame supplier.

2.5 EXIT DEVICES

A. Acceptable manufacturers and catalog numbers:

1. Wide style, push pad exit device

Von Duprin	99 Series
Falcon	24 Series
Precision	2000 Series
Sargent	80 Series

B. Exit devices shall be equipped with a sound-dampening feature to reduce touch pad return noise.

C. On full glass doors there shall be no exposed fasteners on the back of the mechanism visible through the glass.

D. Exit devices shall be furnished with flush end caps to reduce potential damage from impact.

E. Exit devices shall be furnished with dead-locking latchbolts to insure security.

F. Exit devices shall be U.L. listed for accident hazard. Exit device for use on fire doors shall be U.L. listed for fire exit hardware.

G. Furnish strikes, special length rods, and adapter plates to accommodate door and frame conditions. Furnish narrow style series devices in lieu of wide stile series devices where strikes will not accommodate door and frame conditions.

H. Coordinate with related trades to insure adequate clearance and reinforcement is provided in doors and frames. Furnish thru bolts as required.

I. Exit devices shall be furnished with trim designs to match other lever and pull designs used on the project.

J. Furnish glass bead kits as required to accommodate door conditions.

2.6 LOCKS AND LATCHES

A. Acceptable manufacturers and catalog numbers:
1. **Grade 1 cylindrical locks:**

Schlage	ND Series
Falcon	T Series
Sargent	11 Line

B. Lever design:
1. Schlage ND – **Rhodes**

C. Unless otherwise specified, locks and latches shall have:
1. 1/2" minimum throw latchbolt
2. ANSI A115.2 strikes

D. Cylindrical locksets shall have 2-3/4" Backset

E. Furnish guarded latchbolts for locksets, and latchbolts with sufficient throw to maintain fire rating of both single and paired door assemblies.

F. Length of strike lip shall be sufficient to clear surrounding trim.

G. Furnish wrought boxes for strikes at inactive doors, wood frames, and metal frames without integral mortar covers.

2.7 CLOSERS

A. Acceptable manufacturers and catalog numbers:
1. Heavy Duty Cast Iron Closer

LCN	4041XP
Sargent	281

B. Closers shall be constructed with high strength cast iron cylinders, forged main arms, and one piece forged steel pistons.

C. Door closers shall meet the requirements of BHMA A156.4 - *American National Standard for Door Controls.*

D. Closers shall utilize a stable fluid withstanding temperature range of +120deg F to -30deg F without seasonal adjustment of closer speed to properly close the door.

E. Furnish closers for fire-rated doors with temperature stabilizing fluid that complies with standards UL10C.

F. Door closers shall have full plastic covers and separate adjusting valves for sweeps, latch, and backcheck.

G. Furnish closers for all labeled doors. Size closers to insure exterior and fire rated doors will consistently close and latch doors under existing conditions.

H. Furnish closers complete with all components necessary for the complete installation of closers including, but not limited to special templates, mounting brackets, drop plates and cover plates as required by door conditions, frame conditions, and adjacent hardware.

I. Furnish correct fasteners for substrate (wood or metal) depending upon substrate material, blocking and internal reinforcing. Self-tapping screws are not allowed.

J. Furnish thru-bolts on doors with that have door closers and exit devices. Furnish sex bolts and sleeves for attaching surface closers or arm to mineral core doors.

2.8 KICK PLATES

A. Furnish 10" high stainless steel kick plates:
1. Metal protective plates shall be 0.050" thick metal

B. Furnish 36" high stainless steel armor plates:
1. Metal protective plates shall be 0.050" thick metal

C Protective plates shall be 2" less door width, or 1" less door width at pairs. Protective plates shall be beveled 4 sides and counter sunk.

2.9 OVERHEAD STOPS

A. Acceptable manufacturers and catalog numbers:
1. Heavy Duty Surface Mount Overhead Stop

Glynn-Johnson	90S Series
Rixson	9 Series
ABH	9000

B. Overhead stops (including slide block and end caps) shall be fabricated from metal.

C. Furnish sex bolt attachments for wood and mineral core doors unless doors are supplied with proper reinforcing blocks.

D. Provide special templates when necessary when installed with door closers.

2.10 DOOR STOPS AND HOLDERS

A. Acceptable manufacturers and catalog numbers:

1. Wrought Concave Wall

Ives	WS407CCV
Hager	236W
Trimco	1270WV

B. Provide fasteners appropriate for substrate that wall stops are attached to.

2.11 WEATHERSTRIP, GASKETING

A. Acceptable manufacturers and catalog numbers:

1. Weatherstrip

National Guard	700ES
Hager	881S
Reese	655

2. Smoke Gasket

National Guard	5050
Hager	726S
Reese	797

3. Sweep

National Guard	C627A
Hager	770S
Reese	354C

4. Mullion Seal

National Guard	5100
Hager	--
Reese	--

5. Drip Cap

National Guard	16A
Hager	810S
Reese	R201A

B. Furnish smoke gaskets at fire rated doors and smoke and draft control assemblies.

2.12 THRESHOLDS

A. Acceptable manufacturers and catalog numbers:

1. Saddle threshold

National Guard Products	425
Hager	412SMIL
Reese	S205A
Pemko	171A

B. Hardware supplier shall verify finish floor conditions and coordinate proper threshold as required to insure a smooth transition between threshold and interior floor finish.

2.3 REMOVABLE MULLIONS

A. Acceptable manufacturers and catalog numbers:
1. Key removable mullion

Von Duprin	KR4954
Falcon	--
Sargent	--

B. Furnish compatible keyed mullions with mortise cylinder for pairs of doors with rim exit devices.

C. Furnish, where electric strikes are required, keyed removable mullion with cable and twist apart connection plug.

D. Provide custom powder coat finish; color to be selected by the Architect from standard available colors.

2.14 FINISHES AND BASE MATERIALS

A. Typical hardware finish, satin chromium/satin stainless, dependent upon base metal:
1. BHMA Finish Standard #626 (US Standard Finish US26D);
2. BHMA Finish Standard #628 (US Standard Finish US28);
3. BHMA Finish Standard #652 (US Standard Finish US26D);
4. BHMA Finish Standard #630 (US Standard Finish US32D);

2.15 KEY CABINETS

A. Acceptable manufacturers and catalog numbers:
1. Key Cabinet

Lund	1200 Series
Key Control	M228-2480
Telkey	RWC Series

B. Furnish cabinet with a capacity 1.5 times the number of key sets.

C. Furnish key cabinet complete with cam lock, permanent key tags, and change key cards.

D. Door hardware supplier shall prepare key change index records, tag keys and place permanent file keys in cabinet.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Prior to installation of door hardware, the door hardware installer shall examine door frame installation to insure frames have been set square and plumb. The installer shall examine doors, door frames, and adjacent wall, floor, and ceiling for conditions, which would

adversely effect proper operation and function of door assemblies. Do not proceed with door hardware installation until such deficiencies have been corrected.

3.2 INSTALLATION

A. Before beginning the door hardware installation, the Contractor shall coordinate a door hardware installation meeting with a seven (7) working day notice to parties involved. Conduct the meeting on the installation of door hardware, specifically of locksets, closers, exit devices, continuous hinges, overhead stops and electro-mechanical items.
   1. The manufacturer's representative(s) of the above products shall present the meeting.
   2. The meeting shall be held at the job site and attended by the Architect, the Contractor, door hardware installers (including low voltage hardware), the manufacturer’s representatives for above hardware items, and other effected subcontractors or suppliers.
   3. Training shall include use of installation manuals, door hardware schedule, templates and physical products samples.

B. Mounting heights for hardware from finished floor to center line of hardware item:
   1. For steel doors and frames: Comply with DHI "Recommended Locations for Architectural Hardware for Steel Doors and Frames."
   2. For wood doors: Comply with DHI "Recommended Locations for Architectural Hardware for Wood Flush Doors."

C. Set units level, plumb and true to the line and location. Adjust and reinforce the attachment substrate as necessary for proper installation and operation.

D. Drill and countersink units which are not factory-prepared for anchorage fasteners. Space fasteners and anchors in accord with industry standards.

E. Drill appropriate size pilot holes for door hardware attached to wood doors and frames.

F. Shim doors as required to maintain proper operating clearance between door and frame.

G. Use only fasteners supplied by or approved by the manufacturer for each item of door hardware.

H. Conceal push and pull bar fasteners where possible. Do not install through bolts through push plates.

I. Install door hardware on UL labeled openings in accordance with the manufacturer's requirements to maintain the label.

J. Install wall stops to contact lever handles or pulls. Do not mount wall stops on casework, or equipment.

K. Where necessary, adjust doors and door hardware to eliminate binding between strike and latchbolt. Doors shall not rattle.

L. Install door closers on corridor side of lobby doors, room side of corridor doors, and stair side of stairways.

M. Adjust spring power of door closers to insure exterior and fire rated doors will consistently close and latch doors under existing conditions. Adjust other door closers to insure opening force does not to exceed 5 lbs.

N. Adjust "sweep", "latch", & "back check" valves on door closers to properly control door through out the opening and closing cycle. Adjust total closing speed as required to comply with applicable state and local building codes.

O. Unless otherwise specified or detailed, install thresholds with the bevel in vertical alignment with the outside door face. Notch and fit thresholds to frame profile. Set thresholds in full bed of sealant.

P. Compress sweep during installation as recommended by sweep manufacturer to facilitate a water resistant seal.

3.3 QUALITY ASSURANCE

A. After installation has been completed, the door hardware installer, the door hardware supplier and the manufacturer’s representative for locksets, door closers, exit devices, and overhead stops shall check the project and verify compliance with installation instructions, adjustment of hardware items, and proper application according to the approved door hardware schedule. The door hardware supplier shall submit a list of door hardware that has not been installed correctly.

B. After installation has been completed, the door hardware supplier and the manufacturer’s representative shall meet with the Owner’s Representative to explain the functions, uses, adjustment, and maintenance of each item of door hardware.

3.4 ADJUSTMENT AND CLEANING

A. At final completion, and when HVAC equipment is in operation, the door hardware installer shall make final adjustments to and verify proper operation of door closers and other items of door hardware. Lubricate moving parts with type lubrication recommended by the manufacturer.

B. Door hardware shall be left clean and in good operation. Door hardware found to be disfigured, defective, or inoperative shall be repaired or replaced.

C. Adjust and check each operating item of door hardware and each door to ensure proper operation or function of every unit. Replace units that cannot be adjusted to operate freely and smoothly or as intended for the application made.

D. Where door hardware is installed more than one month prior to acceptance or occupancy of a space or area, return to the installation during the week prior to acceptance or occupancy and make final check and adjustment of door hardware items in such space or area. Clean operating items as necessary to restore proper function and finish of hardware and doors. Adjust door control devices to compensate for final operation of heating and ventilating equipment.

E. Instruct Owner's Personnel in proper adjustment and maintenance of hardware and hardware finishes, during the final adjustment of hardware.

3.5 DOOR HARDWARE SCHEDULE

A. The following schedule of door hardware groups is intended to describe opening function.

Hardware Group No. C03

SGL 3' 0" X 7' 0" X 1 3/4" X WD X HMF X NONRTD
For use on mark/door #(s):
205-1

Qty		Description	Catalog Number	Finish	Mfr
3	EA	HW HINGE	5BB1HW 4.5 X 4.5	652	IVE
1	EA	CLASSROOM LOCK	ND70PD RHO	626	SCH
1	EA	SURFACE CLOSER	4040XP EDA	689	LCN
1	EA	WALL STOP	WS401CCV	626	IVE

Operational Description
Outside lever locked and unlocked by key. Inside lever always unlocked. Inside lever is always free for immediate egress.

Hardware Group No. C03-E

SGL 3' 0" X 7' 0" X 1 3/4" X HMD X HMF X EXTERIOR
For use on mark/door #(s):
103-2 107-2

Qty		Description	Catalog Number	Finish	Mfr
3	EA	HW HINGE	5BB1HW 4.5 X 4.5 NRP	630	IVE
1	EA	CLASSROOM LOCK	ND70PD RHO	626	SCH
1	EA	OH STOP	90S	630	GLY
1	EA	SURFACE CLOSER	4040XP EDA	689	LCN
1	EA	DRIP CAP	16A	CL	NGP
1	SET	SEALS	700EU	AL	NGP
1	EA	DOOR SWEEP	C627A	CL	NGP
1	EA	THRESHOLD	425	AL	NGP

Operational Description
Outside lever locked and unlocked by key. Inside lever always unlocked. Inside lever is always free for immediate egress.

Hardware Group No. C03-R

SGL 3' 0" X 7' 0" X 1 3/4" X WD X HMF X NONRTD
For use on mark/door #(s):
103-1 107-1 202-1 204-1 205-2

Qty		Description	Catalog Number	Finish	Mfr
3	EA	HW HINGE	5BB1HW 4.5 X 4.5	652	IVE
1	EA	CLASSROOM LOCK	ND70PD RHO	626	SCH

1	EA	WALL STOP	WS401CCV	626	IVE

Operational Description
Outside lever locked and unlocked by key. Inside lever always unlocked. Inside lever is always free for immediate egress.

Hardware Group No. C03-S

SGL 3' 0" X 7' 0" X 1 3/4" X HMD X HMF X NONRTD
For use on mark/door #(s):
205-3

Qty		Description	Catalog Number	Finish	Mfr
3	EA	HW HINGE	5BB1HW 4.5 X 4.5	652	IVE
1	EA	CLASSROOM LOCK	ND70PD RHO	626	SCH
1	EA	OH STOP	90S	630	GLY
1	EA	SURFACE CLOSER	4040XP EDA	689	LCN
1	SET	SEALS	2525B	BRN	NGP
1	EA	THRESHOLD	BY GYM FLOOR SUPPLIER		

Operational Description
Outside lever locked and unlocked by key. Inside lever always unlocked. Inside lever is always free for immediate egress.

Hardware Group No. E02-R

SGL 3' 0" X 7' 0" X 1 3/4" X WD X HMF X NONRTD
For use on mark/door #(s):
117-1

Qty		Description	Catalog Number	Finish	Mfr
3	EA	HW HINGE	5BB1HW 4.5 X 4.5	652	IVE
1	EA	OFFICE LOCK	ND50PD RHO	626	SCH
1	EA	WALL STOP	WS401CCV	626	IVE

Operational Description
Push-button locking. Push-button locks outside lever until unlocked with key or by turning inside lever. Inside lever is always free for immediate egress.

Hardware Group No. E02-S

SGL 3' 0" X 7' 0" X 1 3/4" X WD X HMF X NONRTD
For use on mark/door #(s):
112-1

Qty		Description	Catalog Number	Finish	Mfr
3	EA	HW HINGE	5BB1HW 4.5 X 4.5	652	IVE
1	EA	OFFICE LOCK	ND50PD RHO	626	SCH
1	EA	OH STOP	90S	630	GLY

Operational Description

SECTION 088000 - GLAZING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

A. Section includes glazing for the following products and applications, including those specified in other Sections where glazing requirements are specified by reference to this Section:

1. Windows.
2. Doors.
3. Glazed curtain walls.
4. Storefront framing.
5. Glazed entrances.
6. Sloped glazing.
7. Interior borrowed lites.

B. Related Sections:

1. Division 08 Section "All-Glass Entrances and Storefronts."

1.3 DEFINITIONS

A. Glass Manufacturers: Firms that produce primary glass, fabricated glass, or both, as defined in referenced glazing publications.

B. Glass Thicknesses: Indicated by thickness designations in millimeters according to ASTM C 1036.

C. Interspace: Space between lites of an insulating-glass unit.

1.4 PERFORMANCE REQUIREMENTS

A. General: Installed glazing systems shall withstand normal thermal movement and wind and impact loads (where applicable) without failure, including loss or glass breakage attributable to the following: defective manufacture, fabrication, or installation; failure of sealants or gaskets to remain watertight and airtight; deterioration of glazing materials; or other defects in construction.

B. Delegated Design: Design glass, including comprehensive engineering analysis according to ASTM E 1300 and ICC's 2006 International Building Code by a qualified professional engineer, using the following design criteria:

1. Design Wind Pressures: As indicated on Drawings.

2. Design Snow Loads: As indicated on Drawings.
3. Vertical Glazing: For glass surfaces sloped 15 degrees or less from vertical, design glass to resist design wind pressure based on glass type factors for short-duration load.
4. Glass Type Factors for Wired, Patterned, and Sandblasted Glass:

   a. Short-Duration Glass Type Factor for Wired Glass: 0.5.
   b. Long-Duration Glass Type Factor for Wired Glass: 0.3.
   c. Short-Duration Glass Type Factor for Patterned Glass: 1.0.
   d. Long-Duration Glass Type Factor for Patterned Glass: 0.6.
   e. Short-Duration Glass Type Factor for Sandblasted Glass: 0.5.

5. Maximum Lateral Deflection: For glass supported on all four edges, limit center-of-glass deflection at design wind pressure to not more than 1/50 times the short-side length or 1 inch, whichever is less.
6. Differential Shading: Design glass to resist thermal stresses induced by differential shading within individual glass lites.

C. Thermal Movements: Allow for thermal movements from ambient and surface temperature changes acting on glass framing members and glazing components.

1. Temperature Change: 120 deg F, ambient; 180 deg F, material surfaces.

1.5 PRECONSTRUCTION TESTING

A. Preconstruction Adhesion and Compatibility Testing: Test each glazing material type, tape sealant, gasket, glazing accessory, and glass-framing member for adhesion to and compatibility with elastomeric glazing sealants.

1. Testing will not be required if data are submitted based on previous testing of current sealant products and glazing materials matching those submitted.
2. Use ASTM C 1087 to determine whether priming and other specific joint-preparation techniques are required to obtain rapid, optimum adhesion of glazing sealants to glass, tape sealants, gaskets, and glazing channel substrates.
3. Test no fewer than eight Samples of each type of material, including joint substrates, shims, sealant backings, secondary seals, and miscellaneous materials.
4. Schedule sufficient time for testing and analyzing results to prevent delaying the Work.
5. For materials failing tests, submit sealant manufacturer's written instructions for corrective measures including the use of specially formulated primers.

1.6 ACTION SUBMITTALS

A. Product Data: For each glass product and glazing material indicated.

B. Glass Samples: For each type of glass product other than clear monolithic vision glass the following products; 12 inches square.

1. Tinted glass.
2. Coated glass.
3. Laminated glass.
4. Insulating glass.

C. Glazing Accessory Samples: For gaskets sealants and colored spacers, in 12-inch lengths. Install sealant Samples between two strips of material representative in color of the adjoining framing system.

D. Glazing Schedule: List glass types and thicknesses for each size opening and location. Use same designations indicated on Drawings.

E. Delegated-Design Submittal: For glass indicated to comply with performance requirements and design criteria, including analysis data signed and sealed by the qualified professional engineer responsible for their preparation.

1.7 INFORMATIONAL SUBMITTALS

A. Qualification Data: For installers, manufacturers of insulating-glass units with sputter-coated, low-e coatings glass testing agency and sealant testing agency.

B. Product Certificates: For glass and glazing products, from manufacturer.

C. Product Test Reports: Based on evaluation of comprehensive tests performed by a qualified testing agency, for tinted glass coated glass insulating glass glazing sealants and glazing gaskets.

1. For glazing sealants, provide test reports based on testing current sealant formulations within previous 36-month period.

D. Preconstruction adhesion and compatibility test report.

E. Warranties: Sample of special warranties.

1.8 QUALITY ASSURANCE

A. Manufacturer Qualifications for Insulating-Glass Units with Sputter-Coated, Low-E Coatings: A qualified insulating-glass manufacturer who is approved and certified by coated-glass manufacturer.

B. Installer Qualifications: A qualified installer who employs glass installers for this Project who are certified under the National Glass Association's Certified Glass Installer Program.

C. Glass Testing Agency Qualifications: A qualified independent testing agency accredited according to the NFRC CAP 1 Certification Agency Program.

D. Sealant Testing Agency Qualifications: An independent testing agency qualified according to ASTM C 1021 to conduct the testing indicated.

E. Source Limitations for Glass: Obtain tinted float glass coated float glass laminated glass and insulating glass from single source from single manufacturer for each glass type.

F. Source Limitations for Glazing Accessories: Obtain from single source from single manufacturer for each product and installation method.

G. Glazing Publications: Comply with published recommendations of glass product manufacturers and organizations below, unless more stringent requirements are indicated. Refer to these publications for glazing terms not otherwise defined in this Section or in referenced standards.

1. GANA Publications: GANA's "Laminated Glazing Reference Manual" and GANA's "Glazing Manual."
2. AAMA Publications: AAMA GDSG-1, "Glass Design for Sloped Glazing," and AAMA TIR-A7, "Sloped Glazing Guidelines."
3. IGMA Publication for Sloped Glazing: IGMA TB-3001, "Guidelines for Sloped Glazing."
4. IGMA Publication for Insulating Glass: SIGMA TM-3000, "North American Glazing Guidelines for Sealed Insulating Glass Units for Commercial and Residential Use."

H. Safety Glazing Labeling: Where safety glazing labeling is indicated, permanently mark glazing with certification label of the SGCC or another certification agency acceptable to authorities having jurisdiction. Label shall indicate manufacturer's name, type of glass, thickness, and safety glazing standard with which glass complies.

I. Insulating-Glass Certification Program: Permanently marked either on spacers or on at least one component lite of units with appropriate certification label of IGCC.

J. Mockups: Build mockups to verify selections made under sample submittals and to demonstrate aesthetic effects and set quality standards for materials and execution.

1. Install glazing in mockups specified in Division 08 Section "Aluminum-Framed Entrances and Storefronts, Aluminum Windows and Glazed Aluminum Curtain Walls" to match glazing systems required for Project, including glazing methods.
2. Approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.

K. Pre-installation Conference: Conduct conference at Project site.

1. Review and finalize construction schedule and verify availability of materials, Installer's personnel, equipment, and facilities needed to make progress and avoid delays.

2. Review temporary protection requirements for glazing during and after installation.

1.9 DELIVERY, STORAGE, AND HANDLING

A. Protect glazing materials according to manufacturer's written instructions. Prevent damage to glass and glazing materials from condensation, temperature changes, direct exposure to sun, or other causes.

B. Comply with insulating-glass manufacturer's written recommendations for venting and sealing units to avoid hermetic seal ruptures due to altitude change.

1.10 PROJECT CONDITIONS

A. Environmental Limitations: Do not proceed with glazing when ambient and substrate temperature conditions are outside limits permitted by glazing material manufacturers and when glazing channel substrates are wet from rain, frost, condensation, or other causes.

1. Do not install glazing sealants when ambient and substrate temperature conditions are outside limits permitted by sealant manufacturer or below 40 deg F.

1.11 WARRANTY

A. Manufacturer's Special Warranty for Coated-Glass Products: Manufacturer's standard form in which coated-glass manufacturer agrees to replace coated-glass units that deteriorate within specified warranty period. Deterioration of coated glass is defined as defects developed from normal use that are not attributed to glass breakage or to maintaining and cleaning coated glass contrary to manufacturer's written instructions. Defects include peeling, cracking, and other indications of deterioration in coating.

1. Warranty Period: 10 years from date of Substantial Completion.

B. Manufacturer's Special Warranty on Laminated Glass: Manufacturer's standard form in which laminated-glass manufacturer agrees to replace laminated-glass units that deteriorate within specified warranty period. Deterioration of laminated glass is defined as defects developed from normal use that are not attributed to glass breakage or to maintaining and cleaning laminated glass contrary to manufacturer's written instructions. Defects include edge separation, delamination materially obstructing vision through glass, and blemishes exceeding those allowed by referenced laminated-glass standard.

1. Warranty Period: Five years from date of Substantial Completion.

C. Manufacturer's Special Warranty on Insulating Glass: Manufacturer's standard form in which insulating-glass manufacturer agrees to replace insulating-glass units that deteriorate within specified warranty period. Deterioration of insulating glass is defined as failure of hermetic seal under normal use that is not attributed to glass breakage or to maintaining and cleaning

insulating glass contrary to manufacturer's written instructions. Evidence of failure is the obstruction of vision by dust, moisture, or film on interior surfaces of glass.

1. Warranty Period: 10 years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 GLASS PRODUCTS, GENERAL

A. Thickness: Where glass thickness is indicated, it is a minimum. Provide glass lites in thicknesses as needed to comply with requirements indicated.

1. Minimum Glass Thickness for Exterior Lites: Not less than 6.0 mm.
2. Thickness of Tinted Glass: Provide same thickness for each tint color indicated throughout Project.

B. Strength: Where float glass is indicated, provide annealed float glass, Kind HS heat-treated float glass, or Kind FT heat-treated float glass as needed to comply with "Performance Requirements" Article. Where heat-strengthened glass is indicated, provide Kind HS heat-treated float glass or Kind FT heat-treated float glass as needed to comply with "Performance Requirements" Article. Where fully tempered glass is indicated, provide Kind FT heat-treated float glass.

C. Thermal and Optical Performance Properties: Provide glass with performance properties specified, as indicated in manufacturer's published test data, based on procedures indicated below:

1. For monolithic-glass lites, properties are based on units with lites of thickness indicated.
2. For laminated-glass lites, properties are based on products of construction indicated.
3. For insulating-glass units, properties are based on units of thickness indicated for overall unit and for each lite.
4. U-Factors: Center-of-glazing values, according to NFRC 100 and based on LBL's WINDOW 5.2 computer program, expressed as Btu/sq. ft. x h x deg F.
5. Solar Heat-Gain Coefficient and Visible Transmittance: Center-of-glazing values, according to NFRC 200 and based on LBL's WINDOW 5.2 computer program.
6. Visible Reflectance: Center-of-glazing values, according to NFRC 300.

2.2 MANUFACTURERS

A. In other Part 2 Articles where titles below introduce lists, the following requirements apply to product selection:

1. Basis-of-Design Product: The design for each glazing product is based on the product named. Subject to compliance with requirements, provide either the named product or equal by a preapproved manufacturer.

2.3 GLASS PRODUCTS

A. Heat-Treated Float Glass: ASTM C 1048; Type I; Quality-Q3; Class I (clear) unless otherwise indicated; of kind and condition indicated.

1. Fabrication Process: By horizontal (roller-hearth) process with roll-wave distortion parallel to bottom edge of glass as installed unless otherwise indicated.
2. For uncoated glass, comply with requirements for Condition A.
3. For coated vision glass, comply with requirements for Condition C (other coated glass).

2.4 LAMINATED GLASS

A. Laminated Glass (clear): ASTM C 1172, and complying with testing requirements in 16 CFR 1201 for Category II materials, and with other requirements specified. Use materials that have a proven record of no tendency to bubble, discolor, or lose physical and mechanical properties after fabrication and installation.

1. Construction: Kind FT (fully tempered)
   Clear polyvinyl butyral interlayer
   Kind FT (fully tempered)
2. Interlayer Thickness: As needed to comply with requirements.
3. Interlayer Color: Clear/Cool White unless otherwise indicated.

B. Laminated Glass (security): ASTM C 1172, and complying with testing requirements in 16 CFR 1201 for Category II materials, and with other requirements specified. Use materials that have a proven record of no tendency to bubble, discolor, or lose physical and mechanical properties after fabrication and installation.

1. Construction: Kind FT (fully tempered)
   Clear polyvinyl butyral interlayer
   Reflective film interlayer (for visibility in one direction only)
   Kind FT (fully tempered)
2. Interlayer Thickness: As needed to comply with requirements.
3. Interlayer Color: Clear/Reflective unless otherwise indicated.
4. Basis-of-Design Product: Viracon VS 1-08 for reflective laminated glass.

2.5 INSULATING GLASS

A. Solar-Control Low-E Insulating-Glass Units:

1. Basis-of-Design Product: Viracon Radiant Low-E: VRE 6-59.
2. Overall Unit Thickness: 1 inch.
3. Thickness of Each Lite: 6.0 mm.
4. Outdoor Lite: Blue Green VRE 6-59; Fully Tempered.
5. Interspace Content: Argon.
6. Indoor Lite: Clear Float Glass; Fully Tempered.
7. Low-e Coating: Sputtered on second surface.

8. Visible Light Transmittance: 43 percent minimum.
9. Reflectance: Visible Light-Exterior: 20 percent minimum.
10. Winter U-Value: 0.29 maximum.
11. Summer U-Value: 0.27 maximum.
12. Shading Coefficient: 0.31 maximum.
13. Solar Heat Gain Coefficient: 0.27 maximum.

B. Ceramic-Coated Spandrel Insulating-Glass Units:

1. Construction: Provide units that comply with requirements specified for insulating-glass units designated above.

a. Kind HS (heat strengthened) Insulating Glass
b. Ceramic Coating Location Fourth Surface
c. Color: As selected from manufacturer's full range.

2.6 GLAZING GASKETS

A. Dense Compression Gaskets: Molded or extruded gaskets of profile and hardness required to maintain watertight seal, made from the following:

1. Neoprene complying with ASTM C 864.
2. EPDM complying with ASTM C 864.
3. Silicone complying with ASTM C 1115.
4. Thermoplastic polyolefin rubber complying with ASTM C 1115.

B. Soft Compression Gaskets: Extruded or molded, closed-cell, integral-skinned EPDM, silicone or thermoplastic polyolefin rubber gaskets complying with ASTM C 509, Type II, black; of profile and hardness required to maintain watertight seal.

1. Application: Use where soft compression gaskets will be compressed by inserting dense compression gaskets on opposite side of glazing or pressure applied by means of pressure-glazing stops on opposite side of glazing.

C. Lock-Strip Gaskets: Neoprene extrusions in size and shape indicated, fabricated into frames with molded corner units and zipper lock-strips, complying with ASTM C 542, black.

2.7 GLAZING SEALANTS

A. General:

1. Compatibility: Provide glazing sealants that are compatible with one another and with other materials they will contact, including glass products, seals of insulating-glass units, and glazing channel substrates, under conditions of service and application, as demonstrated by sealant manufacturer based on testing and field experience.

2. Suitability: Comply with sealant and glass manufacturers' written instructions for selecting glazing sealants suitable for applications indicated and for conditions existing at time of installation.
3. Sealants used inside the weatherproofing system, shall have a VOC content of not more than 250 g/L when calculated according to 40 CFR 59, Subpart D (EPA Method 24).
4. Sealants used inside the weatherproofing system shall comply with the testing and product requirements of the California Department of Health Services' "Standard Practice for the Testing of Volatile Organic Emissions from Various Sources Using Small-Scale Environmental Chambers."
5. Colors of Exposed Glazing Sealants: As selected by Architect from manufacturer's full range.

B. Glazing Sealant: Neutral-curing silicone glazing sealant complying with ASTM C 920, Type S, Grade NS, Class 50, Use NT.

1. Uses related to glazing substrates: M, G, A and as applicable to glazing substrates indicated, O.
   a. Use O Glazing Substartes: Coated Glass.

C. Glazing Sealants for Fire-Rated Glazing Products: Products that are approved by testing agencies that listed and labeled fire-resistant glazing products with which they are used for applications and fire-protection ratings indicated.

2.8 GLAZING TAPES

A. Back-Bedding Mastic Glazing Tapes: Preformed, butyl-based, 100 percent solids elastomeric tape; non-staining and non-migrating in contact with nonporous surfaces; with or without spacer rod as recommended in writing by tape and glass manufacturers for application indicated; and complying with ASTM C 1281 and AAMA 800 for products indicated below:

1. AAMA 804.3 tape, where indicated.
2. AAMA 806.3 tape, for glazing applications in which tape is subject to continuous pressure.
3. AAMA 807.3 tape, for glazing applications in which tape is not subject to continuous pressure.

B. Expanded Cellular Glazing Tapes: Closed-cell, PVC foam tapes; factory coated with adhesive on both surfaces; and complying with AAMA 800 for the following types:

1. AAMA 810.1, Type 1, for glazing applications in which tape acts as the primary sealant.
2. AAMA 810.1, Type 2, for glazing applications in which tape is used in combination with a full bead of liquid sealant.

2.9 MISCELLANEOUS GLAZING MATERIALS

A. General: Provide products of material, size, and shape complying with referenced glazing standard, requirements of manufacturers of glass and other glazing materials for application indicated, and with a proven record of compatibility with surfaces contacted in installation.

B. Cleaners, Primers, and Sealers: Types recommended by sealant or gasket manufacturer.

C. Setting Blocks: Elastomeric material with a Shore, Type A durometer hardness of 85, plus or minus 5.

D. Spacers: Elastomeric blocks or continuous extrusions of hardness required by glass manufacturer to maintain glass lites in place for installation indicated.

E. Edge Blocks: Elastomeric material of hardness needed to limit glass lateral movement (side walking).

F. Cylindrical Glazing Sealant Backing: ASTM C 1330, Type O (open-cell material), of size and density to control glazing sealant depth and otherwise produce optimum glazing sealant performance.

G. Perimeter Insulation for Fire-Resistive Glazing: Product that is approved by testing agency that listed and labeled fire-resistant glazing product with which it is used for application and fire-protection rating indicated.

2.10 FABRICATION OF GLAZING UNITS

A. Fabricate glazing units in sizes required to fit openings indicated for Project, with edge and face clearances, edge and surface conditions, and bite complying with written instructions of product manufacturer and referenced glazing publications, to comply with system performance requirements.

B. Clean-cut or flat-grind vertical edges of butt-glazed monolithic lites to produce square edges with slight chamfers at junctions of edges and faces.

C. Grind smooth and polish exposed glass edges and corners.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine framing, glazing channels, and stops, with Installer present, for compliance with the following:

1. Manufacturing and installation tolerances, including those for size, squareness, and offsets at corners.

2. Presence and functioning of weep systems.
3. Minimum required face and edge clearances.
4. Effective sealing between joints of glass-framing members.

B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

A. Clean glazing channels and other framing members receiving glass immediately before glazing. Remove coatings not firmly bonded to substrates.

B. Examine glazing units to locate exterior and interior surfaces. Label or mark units as needed so that exterior and interior surfaces are readily identifiable. Do not use materials that will leave visible marks in the completed work.

3.3 GLAZING, GENERAL

A. Comply with combined written instructions of manufacturers of glass, sealants, gaskets, and other glazing materials, unless more stringent requirements are indicated, including those in referenced glazing publications.

B. Adjust glazing channel dimensions as required by Project conditions during installation to provide necessary bite on glass, minimum edge and face clearances, and adequate sealant thicknesses, with reasonable tolerances.

C. Protect glass edges from damage during handling and installation. Remove damaged glass from Project site and legally dispose of off Project site. Damaged glass is glass with edge damage or other imperfections that, when installed, could weaken glass and impair performance and appearance.

D. Apply primers to joint surfaces where required for adhesion of sealants, as determined by preconstruction testing.

E. Install setting blocks in sill rabbets, sized and located to comply with referenced glazing publications, unless otherwise required by glass manufacturer. Set blocks in thin course of compatible sealant suitable for heel bead.

F. Do not exceed edge pressures stipulated by glass manufacturers for installing glass lites.

G. Provide spacers for glass lites where length plus width is larger than 50 inches.

1. Locate spacers directly opposite each other on both inside and outside faces of glass. Install correct size and spacing to preserve required face clearances, unless gaskets and glazing tapes are used that have demonstrated ability to maintain required face clearances and to comply with system performance requirements.

2. Provide 1/8-inch minimum bite of spacers on glass and use thickness equal to sealant width. With glazing tape, use thickness slightly less than final compressed thickness of tape.

H. Provide edge blocking where indicated or needed to prevent glass lites from moving sideways in glazing channel, as recommended in writing by glass manufacturer and according to requirements in referenced glazing publications.

I. Set glass lites in each series with uniform pattern, draw, bow, and similar characteristics.

J. Set glass lites with proper orientation so that coatings face exterior or interior as specified.

K. Where wedge-shaped gaskets are driven into one side of channel to pressurize sealant or gasket on opposite side, provide adequate anchorage so gasket cannot walk out when installation is subjected to movement.

L. Square cut wedge-shaped gaskets at corners and install gaskets in a manner recommended by gasket manufacturer to prevent corners from pulling away; seal corner joints and butt joints with sealant recommended by gasket manufacturer.

3.4 TAPE GLAZING

A. Position tapes on fixed stops so that, when compressed by glass, their exposed edges are flush with or protrude slightly above sightline of stops.

B. Install tapes continuously, but not necessarily in one continuous length. Do not stretch tapes to make them fit opening.

C. Cover vertical framing joints by applying tapes to heads and sills first and then to jambs. Cover horizontal framing joints by applying tapes to jambs and then to heads and sills.

D. Place joints in tapes at corners of opening with adjoining lengths butted together, not lapped. Seal joints in tapes with compatible sealant approved by tape manufacturer.

E. Do not remove release paper from tape until right before each glazing unit is installed.

F. Apply heel bead of elastomeric sealant.

G. Center glass lites in openings on setting blocks and press firmly against tape by inserting dense compression gaskets formed and installed to lock in place against faces of removable stops. Start gasket applications at corners and work toward centers of openings.

H. Apply cap bead of elastomeric sealant over exposed edge of tape.

3.5 GASKET GLAZING (DRY)

A. Cut compression gaskets to lengths recommended by gasket manufacturer to fit openings exactly, with allowance for stretch during installation.

B. Insert soft compression gasket between glass and frame or fixed stop so it is securely in place with joints miter cut and bonded together at corners.

C. Installation with Drive-in Wedge Gaskets: Center glass lites in openings on setting blocks and press firmly against soft compression gasket by inserting dense compression gaskets formed and installed to lock in place against faces of removable stops. Start gasket applications at corners and work toward centers of openings. Compress gaskets to produce a weathertight seal without developing bending stresses in glass. Seal gasket joints with sealant recommended by gasket manufacturer.

D. Installation with Pressure-Glazing Stops: Center glass lites in openings on setting blocks and press firmly against soft compression gasket. Install dense compression gaskets and pressure-glazing stops, applying pressure uniformly to compression gaskets. Compress gaskets to produce a weathertight seal without developing bending stresses in glass. Seal gasket joints with sealant recommended by gasket manufacturer.

E. Install gaskets so they protrude past face of glazing stops.

3.6 SEALANT GLAZING (WET)

A. Install continuous spacers, or spacers combined with cylindrical sealant backing, between glass lites and glazing stops to maintain glass face clearances and to prevent sealant from extruding into glass channel and blocking weep systems until sealants cure. Secure spacers or spacers and backings in place and in position to control depth of installed sealant relative to edge clearance for optimum sealant performance.

B. Force sealants into glazing channels to eliminate voids and to ensure complete wetting or bond of sealant to glass and channel surfaces.

C. Tool exposed surfaces of sealants to provide a substantial wash away from glass.

3.7 LOCK-STRIP GASKET GLAZING

A. Comply with ASTM C 716 and gasket manufacturer's written instructions. Provide supplementary wet seal and weep system unless otherwise indicated.

3.8 CLEANING AND PROTECTION

A. Protect exterior glass from damage immediately after installation by attaching crossed streamers to framing held away from glass. Do not apply markers to glass surface. Remove nonpermanent labels and clean surfaces.

B. Protect glass from contact with contaminating substances resulting from construction operations. If, despite such protection, contaminating substances do come into contact with glass, remove substances immediately as recommended in writing by glass manufacturer.

C. Examine glass surfaces adjacent to or below exterior concrete and other masonry surfaces at frequent intervals during construction, but not less than once a month, for buildup of dirt, scum, alkaline deposits, or stains; remove as recommended in writing by glass manufacturer.

D. Remove and replace glass that is broken, chipped, cracked, or abraded or that is damaged from natural causes, accidents, and vandalism, during construction period.

E. Wash glass on both exposed surfaces in each area of Project not more than four days before date scheduled for inspections that establish date of Substantial Completion. Wash glass as recommended in writing by glass manufacturer.

END OF SECTION 08 8000