

# CONSTRUCTION DOCUMENTS PROJECT MANUAL

DANE COUNTY DEPARTMENT OF ADMINISTRATION

PUBLIC WORKS ENGINEERING DIVISION 1919 ALLIANT ENERGY CENTER WAY MADISON, WISCONSIN 53713

# REQUEST FOR BIDS NO. 322030 FIRE PROTECTION UPGRADES ALLIANT ENERGY CENTER PAVILIONS 1 & 2 1919 ALLIANT ENERGY CENTER WAY MADISON, WISCONSIN

Due Date / Time: TUESDAY, AUGUST 16<sup>TH</sup>, 2022 / 2:00 P.M. Location: PUBLIC WORKS OFFICE

Performance / Payment Bond: 100% OF CONTRACT AMOUNT

Bid Deposit: 5% OF BID AMOUNT

FOR INFORMATION ON THIS REQUEST FOR BIDS, PLEASE CONTACT:

ERIC URTES, AIA, PROJECT MANAGER
TELEPHONE NO.: 608/266-4798
E-MAIL: urtes.eric@countyofdane.com

#### **SECTION 00 01 10**

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END OF SECTION

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#### **SECTION 01 11 16**

#### **INVITATION TO BID**

#### LEGAL NOTICE

Dane County Public Works Engr. Division, 1919 Alliant Energy Center Way, Madison, WI 53713, will receive sealed Bids until:

# 2:00 P.M., TUESDAY, AUGUST 16<sup>TH</sup>, 2022 RFB NO. 322030 FIRE PROTECTION UPGRADES ALLIANT ENERGY CENTER PAVILIONS 1 & 2 1919 ALLIANT ENERGY CENTER WAY MADISON, WI

Dane County is inviting Bids for construction services. The Alliant Energy Center is looking to upgrade the current fire protection for Pavilions 1 & 2 by adding a dry fire protection system above the exterior canopies. Only firms with capabilities, experience & expertise with similar projects should obtain this Request for Bids (RFB) document & submit Bids.

RFB document may be obtained after 2:00 p.m., Thursday, July 14<sup>th</sup>, 2022 from bids-pwht.countyofdane.com. Contact Eric Urtes, AIA, Public Works Project Mgr., 608/266-4798, or urtes.eric@countyofdane.com with any questions.

Bidders must be qualified as Best Value Contractor before Bid Due Date / Time. Complete Application at <u>publicworks.countyofdane.com/bvc</u> or call 608/267-0119.

Pre-bid site tour will be Tuesday, July 26<sup>th</sup>, 2022 at 1:00 p.m. at the Main Entrance to Pavilion 1, 1919 Alliant Energy Center Way, Madison. Bidders are strongly encouraged to attend.

PUBLISH: JULY  $12^{TH}$  & JULY  $19^{TH}$ , 2022 - WISCONSIN STATE JOURNAL JULY  $11^{TH}$  & JULY  $18^{TH}$ , 2022 - THE DAILY REPORTER

END OF SECTION

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**END OF SECTION** 

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#### INSTRUCTIONS TO BIDDERS

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#### 1. GENERAL

- A. Before submitting Bid, bidder shall thoroughly examine all Construction Documents. Successful Bidder shall be required to provide all the Work that is shown on Drawings, set forth in Specifications, or reasonably implied as necessary to complete Contract for this project.
- B. Bidder shall visit site to become acquainted with adjacent areas, means of approach to site, conditions of actual site and facilities for delivering, storing, placing, and handling of materials and equipment.
- C. Pre-bid meeting is scheduled on Tuesday July 26<sup>th</sup>, 2022 at 10:00 a.m. at the Alliant Energy Center Pavilions 1 & 2, 1919 Alliant Energy Center Way, Madison. Attendance by all bidders is optional, however bidders and subcontractors are strongly encouraged to attend.
- D. Failure to visit site or failure to examine any and all Construction Documents will in no way relieve successful Bidder from necessity of furnishing any necessary materials or equipment, or performing any work, that may be required to complete the Work in accordance with Drawings and Specifications. Neglect of above requirements will not be accepted as reason for delay in the Work or additional compensation.

#### 2. DRAWINGS AND SPECIFICATIONS

- A. Drawings and Specifications that form part of this Contract, as stated in Article 1 of General Conditions of Contact are enumerated in Document Index of these Construction Documents.
- B. Complete sets of Drawings and Specifications for all trades will be available to all Bidders, irrespective of category of work to be bid on, in order that all Bidders may be familiar with work of other trades as they affect their bid.
- C. For deposit refund, return complete sets of Drawings and Specifications to same location they were picked up within ninety (90) calendar days after Bid Due Date. After that time, deposit will be forfeited.

#### 3. INTERPRETATION

- A. No verbal explanation or instructions will be given in regard to meaning of Drawings or Specifications before Bid Due Date. Bidders shall bring inadequacies, omissions or conflicts to Owner or Architect / Engineer's attention at least ten (10) calendar days before Bid Due Date. Prompt clarification will be available to all bidders by Addendum.
- B. Failure to so request clarification or interpretation of Drawings and Specifications will not relieve successful Bidder of responsibility. Signing of Contract will be considered as implicitly denoting that Contractor has thorough understanding of scope of the Work and comprehension of Construction Documents.
- C. Owner or Engineer will not be responsible for verbal instructions.

#### 4. QUALIFICATIONS OF BIDDER (CONTRACTOR AND SUBCONTRACTOR)

- A. Before award of Contract can be approved, Owner shall be satisfied that Bidder involved meets following requirements:
  - 1. Has completed at least one (1) project of at least fifty percent (50%) of size or value of Division of work being bid and type of work completed is similar to that being bid. If greater magnitude of experience is deemed necessary, other than size or value of work, such requirements will be described in appropriate section of Specifications.
  - 2. Maintains permanent place of business.
  - 3. Can be bonded for terms of proposed Contract.
  - 4. Contractor and subcontractors shall meet all applicable Best Value Contractor requirements.
  - 5. Has record of satisfactorily completing past projects and supplies list of no more than five (5) most recent, similar projects, with architect or engineer's and owner's names, addresses and telephone numbers for each project. Submit to Public Works Project Manager with Bid. Criteria which will be considered in determining satisfactory completion of projects by bidder will include:
    - a. Completed contracts in accordance with drawings and specifications.
    - b. Diligently pursued execution of work and completed contracts according to established time schedule unless Owner grants extensions.
    - c. Fulfilled guarantee requirements of construction documents.

- d. Is not presently on ineligible list maintained by County's Department of Administration for noncompliance with equal employment opportunities and affirmative action requirements.
- e. Authorized to conduct business in Wisconsin. By submitting Bid, bidder warrants that it has: complied with all necessary requirements to do business in State of Wisconsin; that persons executing contract on its behalf are authorized to do so; and, if corporation, that name and address of bidder's registered agent are as set forth in Contract. Bidder shall notify Owner immediately, in writing, of any change in its registered agent, their address, and bidder's legal status. For partnership, term "registered agent" shall mean general partner.
- B. County's Public Works Project Manager will make such investigations as are deemed necessary to determine ability of bidder to perform the Work, and bidder shall furnish to County's Public Works Project Manager or designee all such information and data for this purpose as County's Public Works Project Manager may request. Owner reserves right to reject Bid if evidence submitted by, or investigation of, bidder fails to satisfy Owner that bidder is responsible and qualified to carry out obligations of Contract and to complete the Work contemplated therein.

#### 5. BID GUARANTEE

- A. Bank certified check, cashier's check or Bid Bond, payable to County in amount not less than five percent (5%) of maximum bid, shall accompany each Bid as guarantee that if Bid is accepted, Bidder will execute and return proposed Contract and Performance and Payment Bonds within ten (10) business days after being notified of acceptance of Bid. Company issuing bonds must be licensed to do business in Wisconsin.
- B. Any bid, which is not accompanied by bid guarantee, will be considered "No Bid" and will not be read at Bid Due Date.
- C. If successful Bidder so delivers Contract, Certificate of Insurance, and Performance and Payment Bonds, check will be returned to Bidder. In case Bidder fails to deliver such Contract, insurance, and bond, amount of bid guarantee will be forfeited to County as liquidated damages.
- D. All checks tendered as bid guarantee, except those of three (3) lowest qualified, responsible bidders, will be returned to their makers within three (3) business days after Bid Due Date. All such retained checks will be returned immediately upon signing of Contract and Performance and Payment Bonds by successful Bidder.

#### 6. WITHDRAWAL OF BIDS

- A. Bids may be withdrawn by written request received from bidder or authorized representative thereof prior to time fixed for Bid Due Date, without prejudice to right of bidder to file new Bid. Withdrawn Bids will be returned unopened. Negligence on part of bidder in preparing their Bid confers no right for withdrawal of Bid after it has been opened.
- B. No Bid may be withdrawn for period of sixty (60) calendar days after Bid Due Date.
- C. If Bid contains error, omission or mistake, bidder may limit liability to amount of bidder's guarantee by giving written Notice of Intent not to execute Contract to Owner within seventy-two (72) hours of Bid Due Date.

#### 7. CONTRACT FORM

A. Sample copy of contract that successful Bidder will be required to enter into is included in these Construction Documents and bidders are required to familiarize themselves with all conditions contained therein.

#### 8. CONTRACT INTERESTS BY COUNTY PUBLIC OFFICIALS

A. In accordance with Wisconsin Statute 946.13, county official may not bid for or enter into any contract involving receipts or disbursements of more than \$15,000.00 in a year, in which they have private pecuniary interest, direct or indirect if at same time they are authorized to take official action with respect to making of this Contract. Any contract entered into in violation of this Statute is void and County incurs no liability thereon. This subsection does not affect application and enforcement of Wisconsin Statute 946.13 by state prosecutors in criminal courts of this state.

#### 9. EMERGING SMALL BUSINESS PROVISIONS

- A. Emerging Small Business Definition. For purposes of this section, ESB is defined as:
  - 1. Independent business concern that has been in business minimum of one year;
  - 2. Business located in State of Wisconsin;
  - 3. Business comprised of less than twenty-five (25) employees;
  - 4. Business must not have gross sales in excess of three million dollars (\$3,000,000.00) over past three years; and
  - 5. Business does not have history of failing to complete projects.
- B. Emerging Small Business (ESB) Involvement. Bidder shall make good faith effort to award minimum of ten percent (10%) of the Work to ESBs. Bidder shall submit report to Dane County Contract Compliance Specialist within ten (10) business days of Bid Due Date demonstrating such efforts. Good faith efforts means significant contact with ESBs for purposes of soliciting bids from them. Failure to make or demonstrate good faith efforts will be grounds for disqualification.
- C. **Emerging Small Business Report.** Emerging Small Business Enterprise Report is to be submitted by Bidder in separate envelope marked "Emerging Small Business Report". This report is due by 2:00 p.m. following specified ten (10) business days after Bid Due Date. Bidder who fails to submit Emerging Small Business Report shall be deemed not responsive.
- D. **ESB Goal.** Goal of this project is ten percent (10%) ESB participation. ESB utilizations are shown as percentage of total Bid. If Bidder meets or exceeds specified goal, Bidder is only required to submit Form A Certification, and Form B Involvement. Goal shall be met if Bidder qualifies as ESB.
- E. **Report Contents.** Following award of Contract, Bidder shall submit copies of executed contracts for all Emerging Small Businesses. Emerging Small Business Report shall consist of these:
  - 1. Form A Certification;

- 2. Form B Involvement;
- 3. Form C Contacts:
- 4. Form D Certification Statement (if appropriate); and
- 5. Supportive documentation (i.e., copies of correspondence, telephone logs, copies of advertisements).
- F. **ESB Listing.** Bidders may solicit bids from *Dane County Targeted Business Directory* by going to this website. <u>Do not click as a link; copy & paste address into a web browser.</u> https://equity.countyofdane.com/documents/PDFs/Targeted-Business-Directory.xlsx
- G. **DBE Listing.** Bidders may also solicit bids from *State of Wisconsin DOT Disadvantaged Business Enterprise Unified Certification Program (DBE / UCP) Directory* by going to this website. These are not only transportation-related designers & contractors. <u>Do not</u> click as a link; copy & paste address into a web browser.

https://wisconsindot.gov/Documents/doing-bus/civil-rights/dbe/dbe-ucp-directory.xlsx

- H. **ESB Certification.** All contractors, subcontractors and suppliers seeking ESB certification must complete and submit Emerging Small Business Report to Dane County Contract Compliance Program.
- I. **Certification Statement.** If ESB firm has not been certified by County as ESB prior to submittal of this Bid, ESB Report cannot be used to fulfill ESB goal for this project unless firm provides "Form D Certification Statement". Certification statement must be completed and signed by ESB firm.
- J. Questions. Questions concerning Emerging Small Business provisions shall be directed to:

#### OEI@countyofdane.com

or

Dane County Contract Compliance Specialist City-County Building, Room 356 210 Martin Luther King, Jr. Blvd. Madison, WI 53703 608/266-4192

- K. Substituting ESBs. In event of any significant changes in subcontract arrangements or if need arises to substitute ESBs, Bidder shall report such proposed changes to Contract Compliance Specialist to making any official changes and request authorization to substitute ESB firm. Bidder further agrees to make every possible effort to replace ESB firm with another qualified ESB firm.
- L. **Good Faith Efforts.** Good faith efforts can be demonstrated by meeting all of these obligations:
  - 1. Selecting portions of the Work to be performed by ESBs in order to increase likelihood of meeting ESB goal including, where appropriate, breaking down Contract into smaller units to facilitate ESB participation.
  - 2. Advertising in general circulation, trade associations and women / minority focus media concerning subcontracting opportunities.

- 3. Providing written notices to reasonable number of specific ESBs that their interest in Contract was being solicited in sufficient time to allow ESBs to participate effectively.
- 4. Following up on initial solicitations of interest by contacting ESBs within five (5) business days prior to Bid Due Date to determine with certainty whether ESB were interested, to allow ESBs to prepare bids.
- 5. Providing interested ESB with adequate information about Drawings, Specifications and requirements of Contract.
- 6. Using services of available minority, women and small business organizations and other organizations that provide assistance in recruitment of MBEs / WBEs / ESBs.
- 7. Negotiating in good faith with interested ESBs, not rejecting ESBs as unqualified without sound reason based on thorough investigation of their capabilities.
- 8. Submitting required project reports and accompanying documents to County's Contract Compliance Specialist within twenty-four (24) hours after Bid Due Date.
- M. **Appeals Disqualification of Bid.** Bidder who is disqualified may appeal to Public Works & Transportation Committee and Equal Opportunity Commission.

#### 10. METHOD OF AWARD - RESERVATIONS

- A. Following will be basis of award of Contract, providing cost does not exceed amount of funds then estimated by County as available to finance Contract(s):
  - 1. Lowest dollar amount submitted by qualified responsible bidder on Base Bid for all work comprising project, combined with such additive Owner accepted alternates.
  - 2. Owner reserves right to reject all bids or any bid, to waive any informality in any bid, and to accept any bid that will best serve interests of County.
  - 3. Unit Prices and Informational Bids will not be considered in establishing low bidder.

#### 11. SECURITY FOR PERFORMANCE AND PAYMENTS

- A. Simultaneous with delivery of signed Contract, Bidder shall be required to furnish Performance and Payment Bonds as specified in Article 29 of General Conditions of Contract, "Contract Security". Surety Company shall be licensed to do business in Wisconsin. Performance and Payment Bonds must be dated same date or subsequent to date of Contract. Performance and Payment Bonds must emulate information in Sample Performance and Payment Bonds in Construction Documents.
- B. Provide certified copy of power of attorney from Surety Company showing that agent who signs Bond has power of attorney to sign for Surety Company. Secretary or Assistant Secretary of company must sign this certification, not attorney-in-fact. Certification must bear same or later date as Bond. Power of Attorney must emulate model power of attorney information detailed in Sample Performance and Payment Bonds.
- C. If Bidder is partnership or joint venture, State certified list, providing names of individuals constituting partnership or joint venture must be furnished. Contract itself may be signed by one partner of partnership, or one partner of each firm comprising joint venture, but Performance and Payment Bonds must be signed by all partners.

D. If Bidder is corporation, it is necessary that current certified copy of resolution or other official act of directors of corporation be submitted showing that person who signs Contract is authorized to sign contracts for corporation. It is also necessary that corporate seal be affixed to resolution, contract, and performance and payment bonds. If your corporation has no seal, it is required that above documents include statement or notation to effect that corporation has no seal.

#### 12. TAXES

- A. Wisconsin Statute 77.54 (9m) allows building materials that become part of local unit government facilities to be exempt from sales & use tax. Vendors & materials suppliers may not charge Bidders sales & use tax on these purchases. This does not include highways, streets or roads. Any other Sales, Consumer, Use & other similar taxes or fees required by law shall be included in Bid.
- B. In accordance with Wisconsin Statute 71.80(16)(a), successful nonresident bidder, whether incorporated or not, and not otherwise regularly engaged in business in this state, shall file surety bond with State of Wisconsin Department of Revenue payable to Department of Revenue, to guarantee payment of income taxes, required unemployment compensation contributions, sales and use taxes and income taxes withheld from wages of employees, together with any penalties and interest thereon. Amount of bond shall be three percent (3%) of Contract or subcontract price on all contracts of \$50,000 or more.

#### 13. SUBMISSION OF BIDS

- A. All Bids shall be submitted on standard Bid Form bound herein and only Bids that are made on this Bid Form will be considered. Entire Bid Form and other supporting documents, if any, shall be removed or copied from Construction Documents, filled out, and submitted in manner specified hereinafter. Submit completed Bid Bond with Bid as well.
- B. No bids for any subdivision or any sub-classification of the Work, except as indicated, will be accepted. Any conditional Bid, amendment to Bid Form or appended item thereto, or inclusion of any correspondence, written or printed matter, or details of any nature other than that specifically called for, which would alter any essential provision of Construction Documents, or require consideration of unsolicited material or data in determining award of Contract, will disqualify Bid. Telecommunication alterations to Bid will not be accepted.
- C. Bidders must submit single Bid for all the Work.
- D. Bid amounts shall be inserted in words and in figures in spaces provided on Bid Form; in case of conflict, written word amounts will govern.
- E. Addenda issued after Bid Letting shall become part of Construction Documents. Bidders shall acknowledge receipt of such addenda in appropriate space provided on Bid Form. Bid may be rejected if receipt of any particular addendum applicable to award of Contract has not been acknowledged on Bid Form.
- F. Bids shall be signed, placed in envelope, sealed and delivered before due time to place designated in Invitation to Bid, and identified with project name, bid number, location, category of work being bid upon, Bid Due Date, name and address of bidder.
- G. Bidder shall be responsible for sealed Bid being delivered to place designated for Bid Due Date on or before date and time specified. Bids received after time of closing will be rejected and returned to bidder unopened.

- H. Bid will be opened on listed due date & time & results should be available within 24 hours at bids-pwht.countyofdane.com.
- I. Bid will be considered invalid and will be rejected if bidder has not signed it.
- J. Faxed or emailed Bids will not be accepted.
- K. Bidder's organization shall submit completed with Bid, Fair Labor Practices Certification form, included in these Construction Documents.

#### 14. SUBCONTRACTOR LISTING

A. Bidders are required to submit Section 00 43 36, Proposed Subcontractors Form listing all subcontractors for this project including committed prices for each subcontractor. Project Manager must receive Form no later than when successful Bidder submits their signed Contract. Failure to submit may delay progress payments.

#### 15. ALTERNATE BIDS

- A. Bidder shall carefully read requests for Alternate Bids (if they are included in project, and thoroughly examine Drawings and Specifications to determine extent various changes and conditions will affect Bid.
- B. Space is provided in Bid Form for requested Alternate Bids (when they are included in project). Failure to submit bid for any requested Alternate Bids may result in rejection of entire Bid.
- C. Bidder shall state amount to be added / subtracted to Base Bid for providing alternates, including all incidentals, omissions, additions, and adjustments as may be necessary or required by such changes. If there is no difference in price, Bidder shall state, "No Change".
- D. Descriptions of requested Alternate Bids are as set forth in Construction Documents.

#### 16. INFORMATIONAL BIDS

- A. Bidder shall state amount that is included in Base Bid for all equipment, materials and labor required to complete the Work described. Informational bids are amounts requested for accounting purposes and for allocation of funds only. It is not intended to omit any of the Work described or related items from this project.
- B. Description of requested Informational Bids, if any, is as set forth in Construction Documents.

#### 17. UNIT PRICES

- A. Provide unit prices where requested on Bid Form. Unit prices will include all costs for materials, labor, insurance, taxes, overhead and profit necessary to perform specified work. Estimated quantities are approximate only. Payment will be based upon actual quantities placed, provided or installed. Failure to provide requested unit prices may result in rejection of entire Bid.
- B. Owner reserves right to accept or reject any unit prices as given in Bid.

C. Bidder shall refer to Bid Form and applicable specification section to determine basis of unit measure and detailed information related to each unit price item requested.

#### 18. COMMENCEMENT AND COMPLETION

- A. Successful Bidder shall commence work when schedule and weather permit, but no later than stated in Bid Form. Contractor shall pursue the Work regularly and continuously at reasonable rate to insure completion of the Work within time stated in Bid.
- B. Should it be found impossible to complete the Work on or before time specified for completion, written request may be submitted for extension of time setting forth reasons believed to justify granting of such request. Refer to Article 20 of General Conditions of Contract, titled "Time for Completion".

#### 19. WORK BY OWNER

A. Not Applicable.

#### 20. SPECIAL HAZARDS COVERAGE

A. Not Applicable.

#### FORM A

# DANE COUNTY EMERGING SMALL BUSINESS REPORT - CERTIFICATION

In accordance with General Conditions of Contract, submit this Emerging Small Business Report within ten (10) days after Bid Due Date.

PROJECT NAME:	
BID NO.:	BID DUE DATE:
BIDDER INFORMATION	
COMPANY NAME:	
ADDRESS:	
CONTACT PERSON:	
EMAIL ADDRESS:	

FORM B	Doo	ge of
DANE COUNTY EMERGING SMALL BUSINESS REPORT -	(Copy this Form as necessary to provide complet	
COMPANY NAME:		
PROJECT NAME:		
BID NO.:	BID DUE DATE:	
ESB NAME:		
CONTACT PERSON:		
ADDRESS:		
PHONE NO & EMAIL.:		
Indicate percentage of financial commitment to the		
ESB NAME:		
CONTACT PERSON:		
ADDRESS:		
DHONE NO & EMAIL .		

Indicate percentage of financial commitment to this ESB: \_\_\_\_\_\_ % Amount: \$

#### **FORM C**

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## DANE COUNTY

(Copy this Form as necessary to provide complete information)

## EMERGING SMALL BUSINESS REPORT - CONTACTS

COMPANY NAME:					<u> </u>
PROJECT NAME: _					
BID NO.:	BID DUE DATE:				
ESB FIRM NAME CONTACTED	DATE	PERSON CONTACTED	ESB	ACC- EPT BID?	REASON FOR REJECTION
)					
)					

#### FORM D

# DANE COUNTY EMERGING SMALL BUSINESS REPORT - CERTIFICATION STATEMENT

I,	,	of
Name	Title	
Company	certify to best of	my knowledge and
belief that this business meets Emerging S	Small Business definition as indicated	in Article 9 and
that information contained in this Emergi	ing Small Business Report is true and	correct.
Bidder's Signature	Date	

Name of Bidding Firm:	
· ·	<del></del>

#### **SECTION 00 41 13**

#### BID FORM

BID NO. 322030

PROJECT: FIRE PROTECTION UPGRADES

**ALLIANT ENERGY CENTER PAVILIONS 1 & 2** 

TO: DANE COUNTY PUBLIC WORKS ENGINEERING DIVISION

PROJECT MANAGER

1919 ALLIANT ENERGY CENTER WAY

MADISON, WISCONSIN 53713

# NOTE: WISCONSIN STATUTE 77.54 (9M) ALLOWS FOR NO SALES & USE TAX ON THE PURCHASE OF MATERIALS FOR COUNTY PUBLIC WORKS PROJECTS.

#### **BASE BID - LUMP SUM:**

Dane County is inviting Bids for construction services. The Alliant Energy Center is looking to upgrade the current fire protection for Pavilions 1 & 2 by adding a dry fire protection system above the exterior canopies. The undersigned, having examined the site where the Work is to be executed and having become familiar with local conditions affecting the cost of the Work and having carefully examined the Drawings and Specifications, all other Construction Documents and Addenda thereto prepared by Dane County Public Works Engineering Division hereby agrees to provide all construction expertise, labor, materials, equipment and services necessary for the complete and satisfactory execution of the entire Work, as specified in the Construction Documents, for the Base Bid stipulated sum of:

and/100 Dollars
Written Price
\$ Numeric Price
Receipt of the following addenda and inclusion of their provisions in this Bid is hereby acknowledged:
Addendum No(s) through
Dated
Dane County Alliant Energy Center must have this project completed by April 11, 2022. Assuming this Work is authorized to start by September 21, 2022, what dates can you commence and complete this job?
Commencement Date: Completion Date: (final, not substantial)

Bid No. 322030 Bid Form rev. 03/22 00 41 13 - 1

	ini Din
(Name of Corporation, Partnership or Person subm	utting Bid)
Select one of the following:  1. A corporation organized and existing	ng under the laws of the State of, or
2. A partnership consisting of	
3. A person conducting business as	;
Of the City, Village, or Town of	of the State of
have checked the same in detail befor statements and submit this Bid in (its) and correct. In signing this Bid, we all entered into any agreement or particip restraint of free competition; that no a submit or not to submit a Bid; that thi with any other bidder, competitor, or disclosed prior to the Bids Due Date to accurate under penalty of perjury.  The undersigned is qualified as a Best Qualification or exemption shall be contained to the property of the Bids Due Date to accurate under penalty of perjury.	nor the Base Bid and the Alternate Bid(s) for sixty (60)
SIGNATURE:	
	(Bid is invalid without signature)
Print Name:	Date:
Title:	
Address:	
Telephone No.:	Fax No.:
Email Address:	
Contact Person:	

I hereby certify that all statements herein are made on behalf of:

END OF SECTION

RFB No. 322030 Bid Form rev. 03/22 00 41 13 - 2

# THIS PAGE IS FOR BIDDERS' REFERENCE **DO NOT SUBMIT WITH BID FORM.**

BID CHECK LIST:		
These items <b>must</b> be included with Bid:		
☐ Bid Form	☐ Bid Bond	
☐ Fair Labor Practices Certification		

#### DANE COUNTY BEST VALUE CONTRACTING QUALIFICATION

General Contractors & all Subcontractors must be qualified as a Best Value Contractor with the Dane County Public Works Engineering Division. Qualification & listing is not permanent. Renewal is required every 36 months. Complete a *Best Value Contracting Application* online at:

publicworks.countyofdane.com/bvc

#### DANE COUNTY VENDOR REGISTRATION PROGRAM

All bidders are strongly encouraged to be a registered vendor with Dane County. Registering allows vendors an opportunity to receive notifications for RFBs & RFPs issued by the County and provides the County with up-to-date company contact information. Complete a new form or renewal online at:

danepurchasing.com/Account/Login?

RFB No. 322030 Bid Form rev. 03/22 00 41 13 - 3

### SECTION 00 43 36

## PROPOSED SUBCONTRACTORS FORM

General Contractor N	ame:	B:	id No:	
<ol> <li>Include this Form</li> <li>General contractor</li> <li>Contractor (Dane &amp; registered before perform work with</li> <li>Sample Best Value</li> </ol>	ormation in table below.  In with signed Construction Coors & subcontractors must be of County Ordinances, Chapter are bids are due. Subcontractor orming any work related to Coordinate the Coordinate of Contracting Application is poses; fill out form online (purposes)	qualified & registered at 40.07). General controls must be qualified & nstruction Contract. Nered. included in this RFB p	as Best Vactors must registere No contractors ackage for	st be qualified d 10 working etor can
SUBCONTRACTOR NAME	ADDRESS & PHONE NO.	DIVISION OF WORK	ESB (Y or N)	\$\$ AMOUNT OF CONTRACT
THE	INDICASO WINONDINO.	WORL	011()	CONTRICT
Check box if there is	another form page attached to	include additional sub	ocontracto	ors. $\square$
The undersigned, for information on this Fo	and on behalf of the General orm is accurate.	Contractor named here	in, certifi	es the
Officer or Authorized Agent S	Signature	Date		

Bid No. 322030 rev. 05/22

Printed or Typed Name and Title

SUBCONTRACTOR NAME	ADDRESS & PHONE NO.	DIVISION OF WORK	\$\$ AMOUNT OF CONTRACT

#### **COUNTY OF DANE**

# PUBLIC WORKS CONSTRUCTION CONTRACT

Contract No	Bid No. <u>322030</u>	
Authority: 2021 RES	<u></u>	
	d entered into as of the date by which au signatures, by and between the County o	
	WITNESSETH:	
Center Way, Madison, WI 53	se address is c/o Public Works Director, 713, desires to have CONTRACTOR progy Center Pavilions 1 & 2 ("the Project")	ovide Fire Protection
WHEREAS, CONTRACTO		ng to construct the Project,
parties hereinafter set forth, the for itself, COUNTY and CONTRACTOR agrees to CONTRACTOR'S own proper equipment, tools, superintend to complete the Project in accordance of Contractor	asideration of the above premises and the e receipt and sufficiency of which is acknown TRACTOR do agree as follows:  construct, for the price of \$	the Project and at the s, supplies, machinery, less and services necessary ated in the Bid Form, plats, plans, and other ecifications therefore as
Table of Contents, all of whic the Contract.	n are made a part hereof and collectively	evidence and constitute
CONTRACTOR shall comme completion date shall be completion dates on the Work	hall commence when fully executed by the neet the Work by The second for the work by Failure to meet commental as set forth herein is grounds for terminating the General Conditions of Contract incorporation.	he Work's substantial ace work or substantial attion of the Contract and
Contract subject to additions a	e CONTRACTOR in current funds for the nd deductions, as provided in the General punt thereof as provided in Article entitle anditions of Contract.	al Conditions of Contract,

Bid No. 322030 rev. 01/22

- 4. During the term of this Contract, CONTRACTOR agrees to take affirmative action to ensure equal employment opportunities. The CONTRACTOR agrees in accordance with Wisconsin Statute 111.321 and Chapter 19 of the Dane County Code of Ordinances not to discriminate on the basis of age, race, ethnicity, religion, color, gender, disability, marital status, sexual orientation, national origin, cultural differences, ancestry, physical appearance, arrest record or conviction record, military participation or membership in the national guard, state defense force or any other reserve component of the military forces of the United States, or political beliefs. Such equal opportunity shall include, but not be limited to, the following: employment, upgrading, demotion, transfer, recruitment, advertising, layoff, termination, training, rates of pay, and any other form of compensation. CONTRACTOR agrees to post in conspicuous places, available to all employees and applicants for employment, notices setting forth the provisions of this paragraph.
- **5.** CONTRACTOR shall file an Affirmative Action Plan with the Dane County Contract Compliance Specialist in accord with Chapter 19 of the Dane County Code of Ordinances. CONTRACTOR must file such plan within fifteen (15) business days of the effective date of this Contract. During the term of this Contract CONTRACTOR shall also provide copies of all announcements of employment opportunities to COUNTY'S Office of Equity & Inclusion, and shall report annually the number of persons, by race, ethnicity, gender, and disability status, which apply for employment and, similarly classified, the number hired and number rejected. **6.** During the term of this Contract, all solicitations for employment placed on CONTRACTOR'S behalf shall include a statement to the effect that CONTRACTOR is an "Equal Opportunity Employer".
- 7. CONTRACTOR agrees to furnish all information and reports required by COUNTY'S Contract Compliance Specialist as the same relate to affirmative action and nondiscrimination, which may include any books, records, or accounts deemed appropriate to determine compliance with Chapter 19, Dane County Code of Ordinances, and the provisions of this Contract.
- 8. The intent of this Contract is to be a Contract solely between the parties hereto and for their benefit only. Do not construe any part of this Contract to add to, supplement, amend, abridge or repeal existing rights, benefits or privileges of any third party or parties including, but not limited to, employees of the parties.
- **9.** The entire agreement of the parties is contained herein and this Contract supersedes any and all oral agreements and negotiations between the parties relating to the subject matter hereof. The parties expressly agree that the express terms of this Contract shall not be amended in any fashion except in writing, executed by both parties.
- **10.** CONTRACTOR must be qualified as a Best Value Contractor or have proven their exemption with Dane County Public Works Engineering Division before Bid Due Date / Time. All contractors and subcontractors must be qualified as a Best Value Contractor or have proven their exemption to perform any work under this Contract.
- 11. This Contract, and any amendment or addendum relating to it, may be executed and transmitted to any other party by legible facsimile reproduction or by scanned legible electronic PDF copy, and utilized in all respects as, an original, wet-inked manually executed document. Further, this Contract and any amendment or addendum thereto, may be stored and reproduced by each party electronically, photographically, by photocopy or other similar process, and each party may at its option destroy any original document so reproduced. All parties hereto stipulate that any such legible reproduction shall be admissible in evidence as the original itself in any judicial, arbitration or administrative proceeding whether or not the original is in existence and whether or not each party made such reproduction in the regular course of business. This term does not apply to the service of notices under this Contract.

**IN WITNESS WHEREOF**, COUNTY and CONTRACTOR, by their respective authorized agents, have caused this Contract and its Schedules to be executed, effective as of the date by which all parties hereto have affixed their respective signatures, as indicated below.

\* \* \* \* \* \* \*

#### **FOR CONTRACTOR:**

Signature	Date
Printed or Typed Name and Title	
Signature	Date
Printed or Typed Name and Title	
NOTE: If CONTRACTOR is a corporation, Secret Regulations, unincorporated entities are required to Employer Number in order to receive payment for the Employer Number in order	provide either their Social Security or services rendered.  ***  ose until approved by the appropriate authority the CONTRACTOR has been given notice to
Joseph T. Parisi, County Executive	Date
Scott McDonell, County Clerk	Date

END OF SECTION

#### **Bid Bond**

CONTRACTOR: (Name, legal status and address)	SURETY: (Name, legal status and principal place of business)

This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

Any singular reference to Contractor, Surety, Owner or other party shall be considered plural where applicable.

#### OWNER:

(Name, legal status and address)

#### BOND AMOUNT:

#### PROJECT:

(Name, location or address, and Project number, if any)

The Contractor and Surety are bound to the Owner in the amount set forth above, for the payment of which the Contractor and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, as provided herein. The conditions of this Bond are such that if the Owner accepts the bid of the Contractor within the time specified in the bid documents, or within such time period as may be agreed to by the Owner and Contractor, and the Contractor either (1) enters into a contract with the Owner in accordance with the terms of such bid, and gives such bond or bonds as may be specified in the bidding or Contract Documents, with a surety admitted in the jurisdiction of the Project and otherwise acceptable to the Owner, for the faithful performance of such Contract and for the prompt payment of labor and material furnished in the prosecution thereof, or (2) pays to the Owner the difference, not to exceed the amount of this Bond, between the amount specified in said bid and such larger amount for which the Owner may in good faith contract with another party to perform the work covered by said bid, then this obligation shall be null and void, otherwise to remain in full force and effect. The Surety hereby waives any notice of an agreement between the Owner and Contractor to extend the time in which the Owner may accept the bid. Waiver of notice by the Surety shall not apply to any extension exceeding sixty (60) days in the aggregate beyond the time for acceptance of bids specified in the bid documents, and the Owner and Contractor shall obtain the Surety's consent for an extension beyond sixty (60) days.

If this Bond is issued in connection with a subcontractor's bid to a Contractor, the term Contractor in this Bond shall be deemed to be Subcontractor and the term Owner shall be deemed to be Contractor.

When this Bond has been furnished to comply with a statutory or other legal requirement in the location of the Project, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. When so furnished, the intent is that this Bond shall be construed as a statutory bond and not as a common law bond.

Signed and sealed this day of		
	(Contractor as Principal)	(Seal)
(Witness)		
	(Title)	
	(Surety)	(Seal)
(Witness)		
	(Title)	

CAUTION: You should sign an original AIA Contract Document, on which this text appears in RED. An original assures that changes will not be obscured.



### Performance Bond

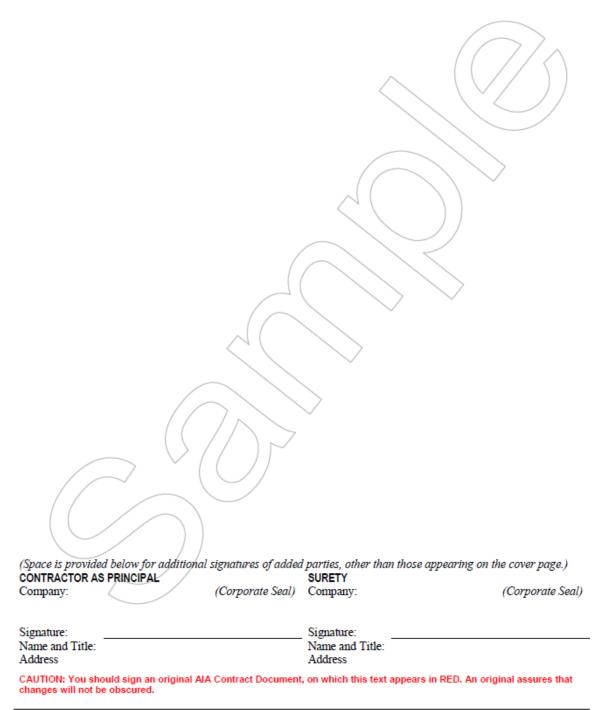
CONTRACTOR: (Name, legal status and address)	SURETY: (Name, legal status and principal place of business)	
OWNER: (Name, legal status and address)		This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.
		Any singular reference to Contractor, Surety, Owner or other party shall be considered plural where applicable.
CONSTRUCTION CONTRACT Date:		AIA Document A312–2010 combines two separate bonds, a
Amount:		Performance Bond and a Payment Bond, into one form.
Description: (Name and location)		This is not a single combined Performance and Payment Bond.
BOND Date: (Not earlier than Construction Contract Date)		
Amount:		
Modifications to this Bond: None	☐ See Section 16	
CONTRACTOR AS PRINCIPAL	SURETY	
Company: (Corporate Seal)	Company: (Corporate Seal)	
Signature:	Signature:	
Name Nam	e	
and Title: (Any additional signatures appear on the last	and Title: t page of this Performance Bond.)	
(FOR INFORMATION ONLY—Name, addr AGENT or BROKER:	OWNER'S REPRESENTATIVE:	
	(Architect, Engineer or other party:)	

- § 1 The Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors and assigns to the Owner for the performance of the Construction Contract, which is incorporated herein by reference.
- § 2 If the Contractor performs the Construction Contract, the Surety and the Contractor shall have no obligation under this Bond, except when applicable to participate in a conference as provided in Section 3.
- § 3 If there is no Owner Default under the Construction Contract, the Surety's obligation under this Bond shall arise after
  - .1 the Owner first provides notice to the Contractor and the Surety that the Owner is considering declaring a Contractor Default. Such notice shall indicate whether the Owner is requesting a conference among the Owner, Contractor and Surety to discuss the Contractor's performance. If the Owner does not request a conference, the Surety may, within five (5) business days after receipt of the Owner's notice, request such a conference. If the Surety timely requests a conference, the Owner shall attend. Unless the Owner agrees otherwise, any conference requested under this Section 3.1 shall be held within ten (10) business days of the Surety's receipt of the Owner's notice. If the Owner, the Contractor and the Surety agree, the Contractor shall be allowed a reasonable time to perform the Construction Contract, but such an agreement shall not waive the Owner's right, if any, subsequently to declare a Contractor Default:
  - .2 the Owner declares a Contractor Default, terminates the Construction Contract and notifies the Surety; and
  - .3 the Owner has agreed to pay the Balance of the Contract/Price in accordance with the terms of the Construction Contract to the Surety or to a contractor selected to perform the Construction Contract.
- § 4 Failure on the part of the Owner to comply with the notice requirement in Section 3.1 shall not constitute a failure to comply with a condition precedent to the Surety's obligations, or release the Surety from its obligations, except to the extent the Surety demonstrates actual prejudice.
- § 5 When the Owner has satisfied the conditions of Section 3, the Surety shall promptly and at the Surety's expense take one of the following actions:
- § 5.1 Arrange for the Contractor, with the consent of the Owner, to perform and complete the Construction Contract;
- § 5.2 Undertake to perform and complete the Construction Contract itself, through its agents or independent contractors:
- § 5.3 Obtain bids or negotiated proposals from qualified contractors acceptable to the Owner for a contract for performance and completion of the Construction Contract, arrange for a contract to be prepared for execution by the Owner and a contractor selected with the Owner's concurrence, to be secured with performance and payment bonds executed by a qualified surety equivalent to the bonds issued on the Construction Contract, and pay to the Owner the amount of damages as described in Section 7 in excess of the Balance of the Contract Price incurred by the Owner as a result of the Contractor Default; or
- § 5.4 Waive its right to perform and complete, arrange for completion, or obtain a new contractor and with reasonable promptness under the circumstances:
  - After investigation, determine the amount for which it may be liable to the Owner and, as soon as practicable after the amount is determined, make payment to the Owner; or
  - .2 Deny liability in whole or in part and notify the Owner, citing the reasons for denial.
- § 6 If the Surety does not proceed as provided in Section 5 with reasonable promptness, the Surety shall be deemed to be in default on this Bond seven days after receipt of an additional written notice from the Owner to the Surety demanding that the Surety perform its obligations under this Bond, and the Owner shall be entitled to enforce any remedy available to the Owner. If the Surety proceeds as provided in Section 5.4, and the Owner refuses the payment or the Surety has denied liability, in whole or in part, without further notice the Owner shall be entitled to enforce any remedy available to the Owner.

- § 7 If the Surety elects to act under Section 5.1, 5.2 or 5.3, then the responsibilities of the Surety to the Owner shall not be greater than those of the Contractor under the Construction Contract, and the responsibilities of the Owner to the Surety shall not be greater than those of the Owner under the Construction Contract. Subject to the commitment by the Owner to pay the Balance of the Contract Price, the Surety is obligated, without duplication, for
  - .1 the responsibilities of the Contractor for correction of defective work and completion of the Construction Contract:
  - .2 additional legal, design professional and delay costs resulting from the Contractor's Default, and resulting from the actions or failure to act of the Surety under Section 5; and
  - .3 liquidated damages, or if no liquidated damages are specified in the Construction Contract, actual damages caused by delayed performance or non-performance of the Contractor.
- § 8 If the Surety elects to act under Section 5.1, 5.3 or 5.4, the Surety's liability is limited to the amount of this Bond.
- § 9 The Surety shall not be liable to the Owner or others for obligations of the Contractor that are unrelated to the Construction Contract, and the Balance of the Contract Price shall not be reduced or set off on account of any such unrelated obligations. No right of action shall accrue on this Bond to any person or entity other than the Owner or its heirs, executors, administrators, successors and assigns.
- § 10 The Surety hereby waives notice of any change, including changes of time, to the Construction Contract or to related subcontracts, purchase orders and other obligations.
- § 11 Any proceeding, legal or equitable, under this Bond may be instituted in any court of competent jurisdiction in the location in which the work or part of the work is located and shall be instituted within two years after a declaration of Contractor Default or within two years after the Contractor ceased working or within two years after the Surety refuses or fails to perform its obligations under this Bond, whichever occurs first. If the provisions of this Paragraph are void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suit shall be applicable.
- § 12 Notice to the Surety, the Owner or the Contractor shall be mailed or delivered to the address shown on the page on which their signature appears.
- § 13 When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the construction was to be performed, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. When so furnished, the intent is that this Bond shall be construed as a statutory bond and not as a common law bond.

#### § 14 Definitions

- § 14.1 Balance of the Contract Price. The total amount payable by the Owner to the Contractor under the Construction Contract after all proper adjustments have been made, including allowance to the Contractor of any amounts received or to be received by the Owner in settlement of insurance or other claims for damages to which the Contractor is entitled, reduced by all valid and proper payments made to or on behalf of the Contractor under the Construction Contract.
- § 14.2 Construction Contract. The agreement between the Owner and Contractor identified on the cover page, including all Contract Documents and changes made to the agreement and the Contract Documents.
- § 14.3 Contractor Default. Failure of the Contractor, which has not been remedied or waived, to perform or otherwise to comply with a material term of the Construction Contract.
- § 14.4 Owner Default. Failure of the Owner, which has not been remedied or waived, to pay the Contractor as required under the Construction Contract or to perform and complete or comply with the other material terms of the Construction Contract.
- § 14.5 Contract Documents. All the documents that comprise the agreement between the Owner and Contractor.
- § 15 If this Bond is issued for an agreement between a Contractor and subcontractor, the term Contractor in this Bond shall be deemed to be Subcontractor and the term Owner shall be deemed to be Contractor.





# Payment Bond

CONTRACTOR: (Name, legal status and address)	SURETY: (Name, legal status and principal place of business)	
OWNER: (Name, legal status and address)		This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.
		Any singular reference to Contractor, Surety, Owner or other party shall be considered plural where applicable.
CONSTRUCTION CONTRACT Date:		AIA Document A312–2010 combines two separate bonds, a
Amount:		Performance Bond and a Payment Bond, into one form.
Description: (Name and location)		This is not a single combined Performance and Payment Bond.
BOND Date: (Not earlier than Construction Contract Date)		
Amount:		
Modifications to this Bond: None	☐ See Section 18	
CONTRACTOR AS PRINCIPAL	SURETY	
Company: (Corporate Seal)	Company: (Corporate Seal)	
Signature:	Signature:	
Name Nam	е	
and Title: (Any additional signatures appear on the last	and Title: t page of this Payment Bond.)	
(FOR INFORMATION ONLY—Name, addr AGENT or BROKER:	ress and telephone) OWNER'S REPRESENTATIVE: (Architect, Engineer or other party:)	

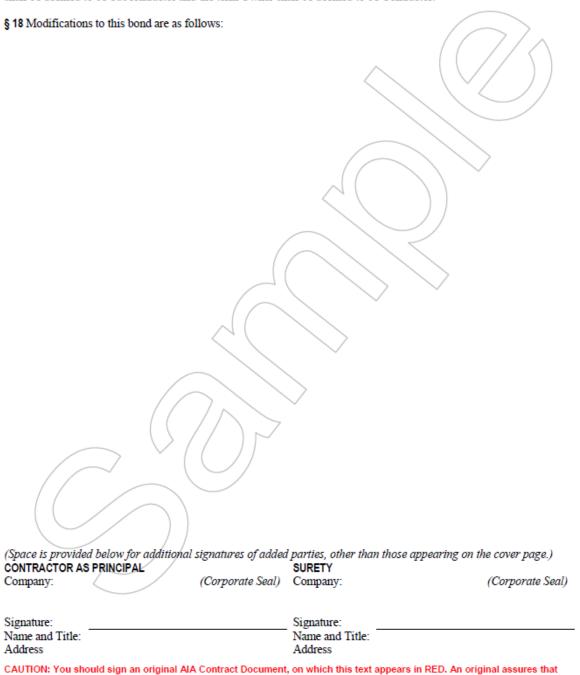
- § 1 The Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors and assigns to the Owner to pay for labor, materials and equipment furnished for use in the performance of the Construction Contract, which is incorporated herein by reference, subject to the following terms.
- § 2 If the Contractor promptly makes payment of all sums due to Claimants, and defends, indemnifies and holds harmless the Owner from claims, demands, liens or suits by any person or entity seeking payment for labor, materials or equipment furnished for use in the performance of the Construction Contract, then the Surety and the Contractor shall have no obligation under this Bond.
- § 3 If there is no Owner Default under the Construction Contract, the Surety's obligation to the Owner under this Bond shall arise after the Owner has promptly notified the Contractor and the Surety (at the address described in Section 13) of claims, demands, liens or suits against the Owner or the Owner's property by any person or entity seeking payment for labor, materials or equipment furnished for use in the performance of the Construction Contract and tendered defense of such claims, demands, liens or suits to the Contractor and the Surety.
- § 4 When the Owner has satisfied the conditions in Section 3, the Surety shall promptly and at the Surety's expense defend, indemnify and hold harmless the Owner against a duly tendered claim, demand, lien or suit.
- § 5 The Surety's obligations to a Claimant under this Bond shall arise after the following:
- § 5.1 Claimants, who do not have a direct contract with the Contractor,
  - .1 have furnished a written notice of non-payment to the Contractor, stating with substantial accuracy the amount claimed and the name of the party to whom the materials were, or equipment was, furnished or supplied or for whom the labor was done or performed, within ninety (90) days after having last performed labor or last furnished materials or equipment included in the Claim; and
  - .2 have sent a Claim to the Surety (at the address described in Section 13).
- § 5.2 Claimants, who are employed by or have a direct contract with the Contractor, have sent a Claim to the Surety (at the address described in Section 13).
- § 6 If a notice of non-payment required by Section 5.1.1 is given by the Owner to the Contractor, that is sufficient to satisfy a Claimant's obligation to furnish a written notice of non-payment under Section 5.1.1.
- § 7 When a Claimant has satisfied the conditions of Sections 5.1 or 5.2, whichever is applicable, the Surety shall promptly and at the Surety's expense take the following actions:
- § 7.1 Send an answer to the Claimant, with a copy to the Owner, within sixty (60) days after receipt of the Claim, stating the amounts that are undisputed and the basis for challenging any amounts that are disputed; and
- § 7.2 Pay or arrange for payment of any undisputed amounts.
- § 7.3 The Surety's failure to discharge its obligations under Section 7.1 or Section 7.2 shall not be deemed to constitute a waiver of defenses the Surety or Contractor may have or acquire as to a Claim, except as to undisputed amounts for which the Surety and Claimant have reached agreement. If, however, the Surety fails to discharge its obligations under Section 7.1 or Section 7.2, the Surety shall indemnify the Claimant for the reasonable attorney's fees the Claimant incurs thereafter to recover any sums found to be due and owing to the Claimant.
- § 8 The Surety's total obligation shall not exceed the amount of this Bond, plus the amount of reasonable attorney's fees provided under Section 7.3, and the amount of this Bond shall be credited for any payments made in good faith by the Surety.
- § 9 Amounts owed by the Owner to the Contractor under the Construction Contract shall be used for the performance of the Construction Contract and to satisfy claims, if any, under any construction performance bond. By the Contractor furnishing and the Owner accepting this Bond, they agree that all funds earned by the Contractor in the performance of the Construction Contract are dedicated to satisfy obligations of the Contractor and Surety under this Bond, subject to the Owner's priority to use the funds for the completion of the work.

- § 10 The Surety shall not be liable to the Owner, Claimants or others for obligations of the Contractor that are unrelated to the Construction Contract. The Owner shall not be liable for the payment of any costs or expenses of any Claimant under this Bond, and shall have under this Bond no obligation to make payments to, or give notice on behalf of, Claimants or otherwise have any obligations to Claimants under this Bond.
- § 11 The Surety hereby waives notice of any change, including changes of time, to the Construction Contract or to related subcontracts, purchase orders and other obligations.
- § 12 No suit or action shall be commenced by a Claimant under this Bond other than in a court of competent jurisdiction in the state in which the project that is the subject of the Construction Contract is located or after the expiration of one year from the date (1) on which the Claimant sent a Claim to the Surety pursuant to Section 5.1.2 or 5.2, or (2) on which the last labor or service was performed by anyone or the last materials or equipment were furnished by anyone under the Construction Contract, whichever of (1) or (2) first occurs. If the provisions of this Paragraph are void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suit shall be applicable.
- § 13 Notice and Claims to the Surety, the Owner or the Contractor shall be mailed or delivered to the address shown on the page on which their signature appears. Actual receipt of notice or Claims, however accomplished, shall be sufficient compliance as of the date received.
- § 14 When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the construction was to be performed, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. When so furnished, the intent is that this Bond shall be construed as a statutory bond and not as a common law bond.
- § 15 Upon request by any person or entity appearing to be a potential beneficiary of this Bond, the Contractor and Owner shall promptly furnish a copy of this Bond or shall permit a copy to be made.

#### § 16 Definitions

- § 16.1 Claim. A written statement by the Claimant including at a minimum:
  - .1 the name of the Claimant;
  - .2 the name of the person for whom the labor was done, or materials or equipment furnished;
  - .3 a copy of the agreement or purchase order pursuant to which labor, materials or equipment was furnished for use in the performance of the Construction Contract;
  - .4 a brief description of the labor, materials or equipment furnished;
  - .5 the date on which the Claimant last performed labor or last furnished materials or equipment for use in the performance of the Construction Contract;
  - .6 the total amount earned by the Claimant for labor, materials or equipment furnished as of the date of the Claim:
  - .7 the total amount of previous payments received by the Claimant; and
  - .8 the total amount due and unpaid to the Claimant for labor, materials or equipment furnished as of the date of the Claim.
- § 16.2 Claimant. An individual or entity having a direct contract with the Contractor or with a subcontractor of the Contractor to furnish labor, materials or equipment for use in the performance of the Construction Contract. The term Claimant also includes any individual or entity that has rightfully asserted a claim under an applicable mechanic's lien or similar statute against the real property upon which the Project is located. The intent of this Bond shall be to include without limitation in the terms "labor, materials or equipment" that part of water, gas, power, light, heat, oil, gasoline, telephone service or rental equipment used in the Construction Contract, architectural and engineering services required for performance of the work of the Contractor and the Contractor's subcontractors, and all other items for which a mechanic's lien may be asserted in the jurisdiction where the labor, materials or equipment were furnished.
- § 16.3 Construction Contract. The agreement between the Owner and Contractor identified on the cover page, including all Contract Documents and all changes made to the agreement and the Contract Documents.

- § 16.4 Owner Default. Failure of the Owner, which has not been remedied or waived, to pay the Contractor as required under the Construction Contract or to perform and complete or comply with the other material terms of the Construction Contract.
- § 16.5 Contract Documents, All the documents that comprise the agreement between the Owner and Contractor.
- § 17 If this Bond is issued for an agreement between a Contractor and subcontractor, the term Contractor in this Bond shall be deemed to be Subcontractor and the term Owner shall be deemed to be Contractor.



changes will not be obscured.

#### SECTION 00 72 12

## GENERAL CONDITIONS OF CONTRACT

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#### 1. CONSTRUCTION DOCUMENTS

- A. Construction Documents, listed in Table of Contents of this Specification volume shall form part of this Contract and provisions of Construction Documents shall be as binding upon parties as if they were fully set forth in Contract itself.
- B. These shall also be considered as part of Construction Documents: Addenda, including additions and modifications incorporated in such addenda before execution of Contract; requests for information; construction bulletins; change orders; and written interpretations by Engineer or Public Works Project Manager that are made after execution of Contract.
- C. Construction Documents are complementary, and what is required by one shall be as binding as if required by all. Intent of Construction Documents is to include all labor, materials and equipment necessary for proper execution of the Work.

#### 2. DEFINITIONS

- A. These terms as used in this Contract are respectively defined as follows:
  - 1. All uses of term "County" in Construction Documents shall mean Dane County.
  - 2. All uses of term "Department" in Construction Documents shall mean Department of Administration Public Works Engineering Division, which is a unit of Dane County government. Department is County agency overseeing Contract with Contractor.
  - 3. Public Works Project Manager is appointed by and responsible to Department. Public Works Project Manager has authority to act on behalf of Department and will sign change orders, payment requests and other administrative matters related to projects.
  - 4. Public Works Project Manager is responsible for supervision, administration and management of field operations involved in construction phase of this Work.
  - 5. Term "Work" includes all labor, equipment and materials necessary to produce project required by Construction Documents.
  - 6. Term "Substantial Completion" is date when project or specified area of project is certified by Architect / Engineer that construction is sufficiently completed, in accordance with Construction Documents, and as modified by any subsequent changes agreed to by parties, so that County may occupy project or specified area of project for use for which it was intended subject to permit approval for occupancy.
  - 7. Contractor is person, firm, or corporation with whom County makes Contract. Though multiple contracts may be involved, Construction Documents treat them throughout as if each were of singular number.

#### 3. ADDITIONAL INSTRUCTIONS AND DRAWINGS

A. Contractor may be furnished additional instructions and detail drawings as necessary to carry out the Work included in Contract. Additional drawings and instructions thus supplied to Contractor will coordinate with Construction Documents and will be so prepared that they can be reasonably interpreted as part thereof. Contractor shall carry out the Work in accordance with additional detail drawings and instructions.

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## 4. SHOP DRAWINGS, PRODUCT DATA AND SAMPLES

- A. Unless otherwise specified, Contractor shall submit electronic copies of all Shop Drawings for each submission, until receiving final approval.
- B. Contractor shall submit, on an on-going basis and as directed, Product Data such as brochures that shall contain catalog cuts and specifications of all furnished mechanical and electrical equipment. After Engineer's final approval, keep one (1) copy at job site by Contractor for reference purposes.
- C. Samples shall consist of physical examples furnished by Contractor in sufficient size and quantity to illustrate materials, equipment or workmanship, and to establish standards to compare the Work.
  - 1. Submit Samples to Engineer & Public Works Project Manager. Submit Samples in sufficient quantity (minimum of one (1)) to permit Engineer to make all necessary tests and of adequate size showing quality, type, color range, finish, and texture. Label each Sample stating material, type, color, thickness, size, project name, and Contractor's name.
  - 2. Submit transmittal letter requesting approval, and prepay transportation charges to Engineer's office on samples forwarded.
  - 3. Materials installed shall match approved Samples.
- D. Contractor shall review Shop Drawings and place their dated stamp thereon to evidence their review and approval and shall submit with reasonable promptness and in orderly sequence to cause no delay in the Work or in work of any other contractor. At time of submission, Contractor shall inform Engineer in writing of any deviation in Shop Drawings or Samples from requirements of Construction Documents. Architect / Engineer will not consider partial lists.
- E. Engineer will review and approve or reject Shop Drawings with reasonable promptness to cause no delay. Engineer's approval shall not relieve Contractor from responsibility for errors or omissions in Shop Drawings.
- F. Contractor shall not commence any work requiring Shop Drawing, Product Data or Sample submission until Engineer has approved submission. All such work shall be in accordance with approved Shop Drawings, Product Data and Samples.
- G. Contractor shall keep on site of the Work, approved or conformed copy of Shop Drawings and shall at all times give Department access thereto.
- H. By stamping and submitting Shop Drawings, Product Data and Samples, Contractor thereby represents that he or she has or will determine and verify all field measurements, field construction criteria, materials, catalog numbers, and similar data and that he or she has checked and coordinated each Shop Drawing, Product Data and Sample with requirements of the Work and of Construction Documents. Architect / Engineer shall return without examination, Shop Drawings, Product Data and Samples not so noted.
- I. All Shop Drawings from any one Contractor should be numbered consecutively and on cover sheet shall bear name and location of project, name of Contractor, date of submittal and date of each correction or revision and associated Specification section and page number.

## 5. CUTTING AND PATCHING

- A. Contractor shall be responsible for all cutting, fitting or patching required to make its parts fit together properly in the Work.
- B. Contractor shall not damage or endanger portion of the Work or fully or partially completed construction of County or separate contractors by cutting, patching or otherwise altering such construction, or by excavation. Contractor shall not cut or otherwise alter such construction by County or separate contractor except with written consent of County and of such separate contractor; such consent shall not be unreasonably withheld. Contractor shall not withhold unreasonably from County or separate contractor, Contractor's consent to cutting or otherwise altering the Work.

#### 6. CLEANING UP

- A. Contractor shall keep premises and surrounding area free from accumulation of waste materials or rubbish caused by operations under Contract. Contractor shall remove from and about the Work waste materials, rubbish, Contractor's tools, construction equipment, machinery, and surplus materials at completion of the Work. Contractor shall maintain walkways around the Work site in clean condition. Contractor shall remove all spillage and prevent tracking of spillage arising from performance of the Work, into, out of, and within the Work site.
- B. If Contractor fails to clean up as directed in Construction Documents, County may do so and shall charge Contractor cost thereof.
- D. In addition to general cleaning (sweeping, vacuuming and / or hosing, as is appropriate to work surface), Contractor shall perform following final cleaning for all trades at completion of the Work:
  - 1. Remove temporary protections;
  - 2. Remove marks, stains, fingerprints and other soil or dirt from painted, and finished woodwork and wall surfaces;
  - 3. Clean fixtures, equipment, removing stains, paint, dirt and dust, and leave same in undamaged, new condition;

#### 7. USE OF SITE

- A. Contractor shall provide County and Architect / Engineer access to the Work under all circumstances.
- B. Contractor shall confine operations at site to areas permitted by County, law, ordinance, permits and Construction Documents and shall not unreasonably encumber site with materials or equipment. Contractor shall assure free, convenient, unencumbered, direct and safe access to all properties adjacent to the Work for County, its employees, invitees and guests.

#### 8. MATERIALS AND WORKMANSHIP

A. Contractor shall perform all work and furnish all supplies and materials, machinery, equipment, facilities and means, necessary to complete the Work required by this Contract, within time specified, in accordance with provisions of Construction Documents.

- B. All equipment and materials incorporated in the Work covered by this Contract are to be new; use recycled and / or recovered materials to extent that such use is technically and economically feasible. Recovered materials are products recovered from solid waste in form identical to original form for use that is same as, or similar to original use. Recycled materials are products manufactured from solid waste.
- C. If requested, Contractor shall furnish satisfactory evidence as to kind and quality of construction materials proposed or used. Contractor shall furnish to Architect / Engineer, for approval, manufacturer name and model, performance capacities and other pertinent information of machinery, mechanical, electrical or other types of equipment, which Contractor plans to install.
- D. If not otherwise provided, materials and labor called for in this Contract shall be provided and performed in accordance with established practice and standards recognized by Architects, Engineers, Department, and construction industry.
- E. Reference to "Standard" specifications of any association or manufacturer, or codes of County authorities, intends most recent printed edition or catalog in effect on date that corresponds with date of Construction Documents.
- F. Whenever reference is made in Specifications that work shall be "performed", "applied", in accordance with "manufacturer's directions or instructions", Contractor to whom those instructions are directed shall furnish three (3) printed copies of such instructions to Architect / Engineer before execution of the Work.

#### 9. CONTRACTOR'S TITLE TO MATERIALS

A. Contractor or any subcontractor shall not purchase materials or supplies for the Work subject to any chattel mortgage or under conditional sale contract or other agreement by which seller retains interest. Contractor warrants that all materials and supplies used in the Work are free from all liens, claims or encumbrances and Contractor has good title to them.

## 10. "OR EQUAL" CLAUSE

- A. Whenever equipment or materials are identified on Drawings or in Specifications by reference to manufacturer's or vendor's name, trade name, catalog number, and other identifying information, it is intended to establish standards; and any equipment or material of other manufacturers and vendors which will perform adequately duties imposed by general design will be considered equally accepted provided equipment or material so proposed is, in opinion of Engineer, of equal substance and function. Engineer and Department shall provide written approval before Contractor may purchase or install it.
- B. Equipment or materials of manufacturers, other than those named, may be used only upon following conditions:
  - 1. That, in opinion of Engineer and Department, proposed material or equipment item is fully equal or superior (in design, materials, construction, workmanship, performance, finish, etc.) to named item. No compromise in quality level, however small, is acceptable.
  - 2. That, in substituting materials or equipment, Contractor assumes responsibility for any changes in system or for modifications required in adjacent or related work to accommodate such substitution despite Engineer's and Department's approval, and all costs growing out of approval of "or equal" items shall be responsibility of Contractor.

- No extra costs resulting from such approval shall become responsibility of Department, Engineer or any other separate Contractor.
- 3. It shall be understood that use of materials or equipment other than those specified, or approved equal by Engineer and Department, shall constitute violation of Contract, and that Engineer and Department shall have right to require removal of such materials or equipment and their replacement with specified materials or equipment at Contractor's expense.
- 4. Product and manufacturer named first in Specifications or on information shown on Drawings is basis of selection of manufactured items and equipment, particularly mechanical equipment. In using other than first named products or manufacturers, including those specified as additionally approved or acceptable, Contractor assumes responsibility for any changes in system and for modifications in any work required to accommodate them. Engineer's approval of such additionally acceptable products or manufacturers, either in Specifications or in Addendum, does not relieve Contractor from obligation to coordinate such optional products with other Contractors, whose work may be affected by them, and to pay all additional costs resulting from their inclusion into the Work. Contractor's liability shall include payment of Architect / Engineer's fees for any additional services made necessary by or directly connected to such product changes. No extra costs resulting from such changes shall become responsibility of Department, Engineer or any other separate Contractor.
- C. No request for approval of "or equal" materials will be entertained except from Contractor. Identify any request for substitution as substitution on Contractor's letter of transmittal and give reasons for substitution. Department may in its sole discretion allow substitutions of materials.

#### 11. PATENTS AND ROYALTIES

- A. If Contractor uses any design, device or material covered by letters, patent or copyright, it is mutually agreed and understood, that, without exception, contract prices shall include all royalties or costs arising from use of such design, device or materials, in any way involved in the Work.
- B. Contractor shall indemnify and save harmless County from any and all claims for infringement by reason of use of such patent or copyright in connection with the Work agreed to be performed under this Contract, and shall indemnify County for any cost, expense or damage which it may be obliged to pay by reason of such infringement at any time during prosecution of the Work or after completion of the Work.

#### 12. SURVEYS, PERMITS, REGULATIONS AND TAXES

- A. Department will furnish to Contractor all site, topography and property surveys necessary for execution of the Work.
- B. Contractor shall procure all permits, licenses and approvals necessary for execution of this Contract.
- C. Contractor shall give all notices and comply with all State of Wisconsin, Federal and local laws, codes, rules and regulations relating to performance of the Work.
- D. Contractor does not need to pay State and local sales & use taxes on building materials that become part of local unit government facilities. See Wisconsin Statute 77.54 (9m). This

- does not include materials for highways, streets or roads. Contractor shall pay any other Sales, Consumer, Use & other similar taxes or fees required by law.
- E. Contractor shall promptly notify Engineer of any variances of Drawings or Specifications with that of any State of Wisconsin, federal or local law, code, rule or regulation. Upon such notification, Engineer will require correction of variance to comply with applicable law, code, rule or regulation at no additional cost to Contractor.
- F. Work under this Contract shall comply with all applicable State of Wisconsin, Federal and local laws, codes and regulations.
- G. Contractor shall pay charges for water, sewer and other utility connections made by municipalities where required by Specifications.

#### 13. CONTRACTOR'S OBLIGATIONS AND SUPERINTENDENCE

- A. Contractor shall provide and pay for all materials, labor, tools, equipment, transportation and superintendence necessary to execute, complete and deliver the Work within specified time. Contractor agrees to secure at their own expense all personnel necessary to carry out the Work. Such personnel shall not be deemed County employees nor shall they have or be deemed to have any direct contractual relationship with County.
- B. Performance of any work necessary after regular working hours, on Sundays or Legal Holidays shall be without additional expense to County. Performance of any work at site at other than normal working hours must be coordinated with Public Works Project Manager.
- C. Contractor shall furnish, erect, maintain and remove such temporary works as may be required.
- D. Contractor shall observe, comply with, and be subject to all terms, conditions, requirements and limitations of Construction Documents.
- E. At the Work site, Contractor shall give personal superintendence to the Work or shall employ construction superintendent or foreman, experienced in character of work covered by Contract, who shall have full authority to act for Contractor. Understand that such superintendent or foreman shall be acceptable to Architect / Engineer and Department.
- F. Remove from project or take other corrective action upon notice from Architect / Engineer or Department for Contractor's employees whose work is considered by Architect / Engineer or Department to be unsatisfactory, careless, incompetent, unskilled or otherwise objectionable.
- G. Contractor and subcontractors shall be required to conform to Labor Laws of State of Wisconsin and various acts amendatory and supplementary thereto and to other laws, ordinances and legal requirements applicable to the Work.
- H. Presence and observation of the Work by Engineer or Public Works Project Manager shall not relieve Contractor of any obligations.

#### 14. WEATHER CONDITIONS

A. In event of temporary suspension of work, or during inclement weather, or whenever Engineer shall direct, Contractor shall, and shall cause subcontractors to protect carefully all work and materials against damage or injury from weather. If, in opinion of Architect /

Engineer or Department, any work or materials that have been damaged or injured due to failure on part of Contractor or any subcontractors so to protect the Work, such materials shall be removed and replaced at expense of Contractor.

#### 15. PROTECTION OF WORK AND PROPERTY

- A. Contractor shall at all times safely guard County's property from injury or loss in connection with this Contract. Contractor shall at all times safely guard and protect the Work, and adjacent property, from damage. Contractor shall replace or make good any such damage, loss or injury unless such is caused directly by errors contained in Contract, or by County, or County's duly authorized representative.
- B. Contractor may act diligently, without previous instructions from Architect / Engineer and / or Department, in emergency that threatens loss or injury of property, or safety of life. Contractor shall notify Engineer and / or Department immediately thereafter. Promptly submit any claim for compensation by Contractor due to such extra work to Engineer and / or Department for approval as provided for in Article 18 herein.

#### 16. INSPECTION AND TESTING OF MATERIALS

- A. Authorized representatives and agents of County government shall have access at all times to the Work wherever it is in preparation or progress and Contractor shall provide facilities for such access and for inspection.
- B. Should it be considered necessary or advisable at any time before final acceptance of the Work to make examination of work already completed, by removing or tearing out same, Contractor shall upon request, promptly furnish all necessary facilities, labor and materials. If such work is found to be defective in any aspect, due to fault of Contractor or subcontractors thereof, Contractor shall assume all expenses of such examination and of satisfactory reconstruction. Contractor will be reimbursed for such examination and replacement in accordance with Article 18 A.3., of these General Conditions of Contract if such work is found to meet requirements of Contract.
- C. If Specifications, Engineer's, or Public Works Project Manager's instructions require any work to be specially tested or approved, Contractor shall give Architect / Engineer and Public Works Project Manager timely notice of its readiness for testing or inspection. Test all materials and equipment requiring testing in accordance with accepted or specified standards, as applicable. Engineer shall recommend laboratory or inspection agency and Department will select and pay for all initial laboratory inspection services. Should retesting be required, due to failure of initial testing, cost of such retesting shall be borne by Contractor.
- D. Cost of any testing performed by manufacturers or Contractor for substantiating acceptability of proposed substitution of materials and equipment, or necessary conformance testing in conjunction with manufacturing processes or factory assemblage, shall be borne by Contractor or manufacturer responsible.

## 17. REPORTS, RECORDS AND DATA

A. Contractor shall submit to Architect / Engineer and Public Works Project Manager such schedule of quantities and costs, progress schedules, payrolls, reports, estimates, invoices, records and other data as either may request concerning work performed or to be performed under this Contract.

#### 18. CHANGES IN THE WORK

- A. Make no changes, except in cases of emergency, in the Work covered by approved Construction Documents without having prior written approval of Department. Charges or credits for the Work covered by approved change shall be determined by one of these methods:
  - 1. Unit bid prices previously approved.
  - 2. Agreed lump sum based on actual cost of:
    - a) Labor, including foremen, and all fringe benefits that are associated with their wages.
    - b) Materials entering permanently into the Work.
    - c) Ownership or rental cost of construction tools and equipment during time of use on extra work.
    - d) Power and consumable supplies for operation of power equipment.
    - e) Workmen's Compensation Insurance, Contractor's Public Liability and Property Damage Insurance, and Comprehensive Automobile Liability Insurance.
    - f) Social Security and old age and unemployment contributions.
    - g) Add to cost under (2), fixed fee to be agreed upon, but not to exceed fifteen percent (15%) of actual cost of work performed with their own labor force. Fee shall be compensation to cover cost of supervision, overhead, bond, profit and any other general expense.
    - h) On that portion of the Work under (2) done under subcontract, Contractor may include not over seven and one-half percent (7½%) for supervision, overhead, bond, profit and any other general expense.
    - i) Department may require correct amount of costs with supporting vouchers; Contractor shall keep and present in such form as directed.
  - 3. Cost-plus work, with not-to-exceed dollar limit, based on actual cost of:
    - a) Labor, including foremen, and all fringe benefits that are associated with their wages.
    - b) Materials entering permanently into the Work.
    - c) Ownership or rental cost of construction tools and equipment during time of use on extra work. Rental cost cannot exceed fifty percent (50%) replacement value of rented equipment.
    - d) Power and consumable supplies for operation of power equipment.
    - e) Workmen's Compensation Insurance, Contractor's Public Liability and Property Damage Insurance, and Comprehensive Automobile Liability Insurance.
    - f) Social Security and old age and unemployment contributions.
    - g) To cost under (3), there shall be added fixed fee to be agreed upon but not to exceed fifteen percent (15%) of actual cost of work performed with their own labor force. Fee shall be compensation to cover cost of supervision, overhead, bond, profit, and any other general expense.
    - h) On that portion of the Work under (3) done under subcontract, Contractor may include not over seven and one-half percent (7½%) for supervision, overhead, bond, profit, and any other general expense.
    - i) Contractor shall keep and present, in such form as directed, correct amount of cost together with such supporting vouchers as may be required by Department.
- B. If Contractor claims that by any instructions given by Architect / Engineer, Department, by drawings or otherwise, regarding performance of the Work or furnishing of material under Contract, involves extra cost, Contractor shall give Department written notice of cost thereof within two (2) weeks after receipt of such instructions and in any event before proceeding to execute work, unless delay in executing work would endanger life or property.

- C. No claim for extra work or cost shall be allowed unless it was done in pursuance of written Change Order from Architect / Engineer and approved by Department, as previously mentioned, and claim presented with payment request submitted after changed or extra work is completed.
- D. Negotiation of cost for change in the Work shall not be cause for Contractor to delay prosecution of the Work when authorized in writing by Public Works Project Manager to proceed.

#### 19. EXTRAS

A. Without invalidating Contract, Department may order extra work or make changes by altering, adding to or deducting from the Work, contract sum being adjusted in accordance with Article 18 herein.

## **20. TIME FOR COMPLETION**

A. Contractor agrees that the Work shall be prosecuted regularly and diligently and complete the Work as stated in Construction Documents.

#### 21. CORRECTION OF WORK

- A. All work, all materials whether incorporated in the Work or not, and all processes of manufacture shall at all times and places be subject to inspection of Architect / Engineer and Public Works Project Manager who shall be judge of quality and suitability of the Work, materials, and processes of manufacture for purposes for which they are used. If they fail to meet Engineer's and Public Works Project Manager's approval, they shall be reconstructed, made good, replaced or corrected, by Contractor at Contractor's expense. Immediately remove all rejected material from site.
- B. If Contractor defaults or neglects to carry out the Work in accordance with Construction Documents or fails to perform any provision of Contract, Department may, after ten (10) business days' written notice to Contractor and without prejudice to any other remedy County may have, make good such deficiencies. In such case, appropriate Change Order shall be issued deducting from Contractor's payments then or thereafter, cost of correcting such deficiencies, including cost of Engineer's additional services made necessary by such default, neglect or failure.

#### 22. SUBSURFACE CONDITIONS FOUND DIFFERENT

A. Not Applicable

## 23. RIGHT OF DEPARTMENT TO TERMINATE CONTRACT

A. In event that any provisions of this Contract are violated by Contractor or by any subcontractors, County may serve written notice upon Contractor and Surety of its intention to terminate Contract, such notice to contain reasons for such intention to terminate Contract, and unless within ten (10) business days after serving of such notice upon Contractor, such violation or delay shall cease and satisfactory arrangement or correction be made, Contract shall, upon expiration of said ten (10) business days, cease and terminate.

B. In event of any such termination, County shall immediately serve notice thereof upon Surety and Contractor, and Surety shall have right to take over and perform Contract subject to County's approval; provided, however, that if Surety does not commence performance thereof within ten (10) business days from date of mailing to such Surety of notice of termination, County may take over the Work and prosecute same to completion by contract, or by force account, at expense of Contractor; Contractor and Surety shall be liable to County for any excess cost occasioned County thereby, and in such event County may take possession of and utilize in completing the Work, such materials and equipment as may be on the Work site and therefore necessary.

#### 24. CONSTRUCTION SCHEDULE AND PERIODIC ESTIMATES

- A. Contractor shall be responsible for Construction Schedule and coordination. Immediately after execution and delivery of Contract and before making first payment, Contractor shall notify all subcontractors to furnish all required information to develop Construction Schedule. Contractor and all subcontractors associated with the Work shall furnish following information from each Division of Specifications:
  - 1. List of construction activities;
  - 2. Start, finish and time required for completion of each activity;
  - 3. Sequential relationships between activities;
  - 4. Identify all long lead-time items, key events, meetings or activities such as required submittals, fabrication and delivery, procurement of materials, installation and testing;
  - Weekly definition of extent of work and areas of activity for each trade or Subcontract;
  - 6. Other information as determined by Public Works Project Manager.
- B. In addition to above requested items, Contractor shall request delivery dates for all County-furnished equipment, materials or labor. This shall include any work handled by Department under separate contracts such as asbestos abatement, air and water balancing, etc. Indicate on Construction Schedule these associated delivery and installation dates.

#### C. Progress Reporting:

- Contractor shall update and publish Construction Schedule on monthly basis. Revisions
  to Schedule shall be by Contractor and made in same detail as original Schedule and
  accompanied by explanation of reasons for revision; and shall be subject to approval by
  Department.
- 2. Failure of Contractor to keep Schedule in updated format shall result in County hiring firm specializing in construction schedule development and deducting those costs associated with updating process from payments due Contractor.
- 3. Contractor shall submit show actual percentage of each activity completed, estimated future progress, and anticipated completion time.

## D. Responsibility for timely completion requires:

- 1. Contractor and subcontractors understand that performance of each is interdependent upon performance of others.
- 2. Whenever it becomes apparent from current schedule, that phasing or progress completion dates will not be met, Contractor must take some or all following actions at no additional cost to County:
  - a) Increase construction labor in such quantities and crafts as will eliminate backlog of
  - b) Increase number of working hours per shift, shifts per working day, working days per week, amount of construction equipment, or any combination of foregoing to eliminate backlog of work.

- c) Reschedule work (yet remain in conformance with Drawings and Specifications).
- 3. Prior to proceeding with any of above actions, Contractor shall notify Public Works Project Manager.
- E. Maintain current Construction Schedule at all times. Revise Construction Schedule in same detail as original and accompany with explanation of reasons for revision. Schedule shall be subject to approval by Engineer and Public Works Project Manager.

## 25. PAYMENTS TO CONTRACTOR

- A. Contractor shall provide:
  - 1. Detailed estimate giving complete breakdown of contract price by Specification Division; and
  - 2. Periodic itemized estimates of work done for purpose of making partial payments thereon.
- B. Submit these estimates for approval first to Engineer, then to Public Works Project Manager. Costs employed in making up any of these schedules are for determining basis of partial payments and not considered as fixing basis for additions to or deductions from Contract price.
- C. County will make partial payments to Contractor for value, proportionate to amount of Contract, of all labor and material incorporated in the Work during preceding calendar month upon receipt of Application and Certificate for Payment form from Engineer and approval of Department.
- D. Contractor shall submit for approval first to Engineer, and then to Public Works Project Manager all Application and Certificate for Payment forms. If requested, support Application and Certificate for Payment with such additional evidence as may be required, showing Contractor's right to payment claimed.
- E. Application and Certificate for Payment for preparatory work and materials delivered and suitably stored at site to be incorporated into the Work at some future period, will be given due consideration. Requesting payment for materials stored off site, may be rejected, however, if deemed essential for reasons of job progress, protection, or other sufficient cause, requests will be considered, conditional upon submission by Contractor of bills of sale, photographs and such other procedures as will adequately protect County's interest such as storage in bonded warehouse with adequate coverage. If there is any error in payment, Contractor is obligated to notify Department immediately, but no longer than ten (10) business days from receipt of payment.
- F. Payments by County will be due within forty-five (45) business days after receipt by Department of Application and Certificate for Payment.
- G. County will retain five percent (5%) of each Application and Certificate for Payment until final completion and acceptance of all the Work covered by Contract. However, any time after fifty percent (50%) of the Work has been furnished and installed at site, County will make remaining payments in full if Engineer and Public Works Project Manager find that progress of the Work corresponds with Construction Schedule. If Architect / Engineer and Public Works Project Manager find that progress of the Work does not correspond with Construction Schedule, County may retain up to ten percent (10%) of each Application and Certificate for Payment for the Work completed.

- H. All material and work covered by partial payments made shall become sole property of County, but this provision shall not be construed as relieving Contractor from sole responsibility for care and protection of materials and work upon which payments have been made, or restoration of any damaged work, or as waiver of right of County to require fulfillment of all of terms of Contract.
- I. County will make final payment within sixty (60) calendar days after final completion of the Work, and will constitute acceptance thereof.
- J. County may make payment in full, including retained percentages and less authorized deductions, upon completion and acceptance of each Division where price is stated separately in Contract.
- K. Every contractor engaged in performance of any contract for Department of Administration Public Works Engineering Division shall submit to this Department, as requested and with final application for payment for work under said contract, affidavit(s) as required to prove that all debts and claims against this Work are paid in full or otherwise satisfied, and give final evidence of release of all liens against the Work and County.

#### 26. WITHHOLDING OF PAYMENTS

- A. County, after having served written notice on said Contractor, may either pay directly any unpaid bills of which Department has written notice, or withhold from Contractor's unpaid compensation sum of money deemed reasonably sufficient to pay any and all such lawful claims until satisfactory evidence is furnished that all liabilities have been fully discharged; whereupon, payment to Contractor shall be resumed in accordance with terms of this Contract, but in no event shall these provisions be construed to impose any obligations upon County to either Contractor or Contractor's Surety.
- B. In paying any unpaid bills of Contractor, County shall be deemed agent of Contractor, and any payment so made by County, shall be considered as payment made under Contract by County to Contractor and County shall not be liable to Contractor for any such payment made in good faith.
- C. Contractor shall indemnify, hold harmless and defend Dane County, its boards, commissions, agencies, officers, employees and representatives from all claims growing out of lawful demands of subcontractors, laborers, workers, mechanics, material men, and furnishers of machinery and parts thereof, equipment, power tools, and all supplies, including commissary, incurred in performance of this Contract.
- D. At Department's request, Contractor shall furnish satisfactory evidence that all obligations of nature designated above have been paid, discharged or waived.

## 27. ACCEPTANCE OF FINAL PAYMENT AS RELEASE

- A. Making of final payment shall constitute waiver of all claims by County except those arising from:
  - 1. Unsettled lien:
  - 2. Faulty or defective work appearing after substantial completion;
  - 3. Failure of the Work to comply with requirements of Construction Documents; or
  - 4. Terms of any special guarantees required by Construction Documents.
- B. Acceptance of final payment shall constitute waiver of all claims by Contractor.

#### 28. PAYMENTS BY CONTRACTOR

- A. Contractor shall pay following not later than fifth (5<sup>th</sup>) business day following each payment received from County:
  - 1. All transportation and utility services rendered;
  - 2. All materials, tools, and other expendable equipment that have been delivered at site of the Work to extent of ninety percent (90%) of cost thereof, and balance of cost thereof when said balance is paid to Contractor; and
  - 3. Each subcontractor, respective amount allowed Contractor because of work performed by subcontractor to extent of subcontractor's interest therein.

#### 29. CONTRACT SECURITY

- A. Contractor shall furnish Performance and Payment Bonds in amount at least equal to one hundred percent (100%) of Contract price as security for faithful performance of this Contract and payment of all persons performing labor on project under this Contract and furnishing materials in connection with this Contract.
- B. Sample Performance and Payment Bonds that Contractor will be required to execute is bound into these Construction Documents. Before construction Contract is consummated, completed Performance and Payment Bonds must be approved by Department.

## **30. ASSIGNMENTS**

A. Contractor shall not assign whole or any part of this Contract or any moneys due or to become due hereunder without written consent of Department. In case Contractor assigns all or any part of any moneys due or to become due under this Contract, instrument of assignment shall contain clause substantially to effect that it is agreed that right of assignee in and to any moneys due or to become due to Contractor shall be subject to prior claims of all persons, firms and corporations for services rendered or materials supplied for performance of the Work called for in this Contract.

#### 31. MUTUAL RESPONSIBILITY OF CONTRACTORS

A. If, through acts of neglect on part of Contractor or any subcontractor shall suffer loss or damage on the Work, Contractor agrees to settle with such subcontractor by agreement or arbitration if such other subcontractor will so settle. If such subcontractor shall assert any claim against County on account of any damage alleged to have been sustained, Department shall notify Contractor, who shall indemnify, hold harmless and defend Dane County, its boards, commissions, agencies, officers, employees and representatives against any such claim.

#### 32. SEPARATE CONTRACTS

A. Department may award other contracts for the Work and all Contractors shall fully cooperate with each other and carefully adjust their work to that provided under other contracts as may be directed by Department. No Contractor shall commit or permit any act that will interfere with performance of the Work by any other Contractor.

B. Contractor shall coordinate the Work with those of other Contractors. Cooperation will be required in arrangement for storage of materials and in detailed execution of the Work. Contractor, including subcontractors, shall keep informed of progress and detail work of others and shall notify Architect / Engineer or Department immediately of lack of progress or defective workmanship on part of others. Failure of Contractor to keep informed of the Work progressing on site and failure to give notice of lack of progress or defective workmanship by others shall be construed as acceptance by Contractor of status of the Work as being satisfactory for proper coordination with Contractor's own work.

#### 33. SUBCONTRACTS

- A. Contractor may use services of specialty subcontractors on those parts of the Work that, under normal contracting practices, are performed by specialty subcontractors.
- B. Contractor shall not award any work to any subcontractor without prior approval of Department. Qualifications of subcontractors shall be same as qualifications of Contractor. Request for subcontractor approval shall be submitted to Department fifteen (15) business days before start of subcontractor's work. If subcontractors are changed or added, Contractor shall notify Department in writing.
- C. Contractor shall be as fully responsible to County for acts and omissions of subcontractors, and of persons either directly or indirectly employed by them, as Contractor is for acts and omissions of persons directly employed by Contractor.
- D. Contractor shall cause appropriate provisions to be inserted in all subcontracts relative to the Work to bind subcontractors to Contractor by terms of General Conditions of Contract and other Construction Documents insofar as applicable to work of subcontractors and to give Contractor same power as regards terminating any subcontract that Department may exercise over Contractor under any provision of Construction Documents.
- E. Nothing contained in this Contract shall create any contractual relation between any subcontractor and County.
- F. Contractor shall insert in all subcontracts, Articles 26, 33, 43 and 45, respectively entitled: "Withholding of Payments", "Subcontracts", "Affirmative Action Provision and Minority / Women / Disadvantaged Business Enterprises", and "Minimum Wages", and shall further require all subcontractors to incorporate physically these same Articles in all subcontracts.

## 34. PUBLIC WORKS PROJECT MANAGER'S AUTHORITY

- A. Public Works Project Manager shall:
  - 1. Administer and ensure compliance with Construction Documents;
  - 2. Provide responsible on-site observations of construction and have authority to request work and to stop work whenever necessary to insure proper enforcement of Construction Documents:
  - 3. Convene and chair project meetings and foreman's coordination meetings when necessary to coordinate resolution of conflicts between Contractors, Architects, Engineers, Consultants, and Department; and
  - 4. Check and inspect material, equipment and installation procedures of all trades for proper workmanship and for compliance with Drawings, Specifications and Shop Drawings, permit no material on project site that is not satisfactory and reject work not in compliance with Construction Documents.

#### 35. CONSULTANT'S AUTHORITY

- A. Engineer is retained by, and is responsible to Department acting for County.
- B. Engineer shall determine amount, quality, acceptability, and fitness of several kinds of work and materials that are provided under this Contract and shall decide all questions that may arise in relation to said work and construction thereof.
- C. Engineer shall decide meaning and intent of any portion of Specifications and of any Drawings where they may be found obscure or be in dispute.
- D. Engineer shall provide responsible observation of construction. Engineer has authority to stop the Work whenever such stoppage may be necessary to insure proper execution of Construction Documents.
- E. Engineer shall be interpreter of conditions of Construction Documents and judge of its performance.
- F. Within reasonable time, Engineer shall make decisions on all matters relating to progress of the Work or interpretation of Construction Documents.
- G. Engineer's decisions are subject to review by Public Works Project Manager.

## **36. STATED ALLOWANCES**

- A. Stated allowances enumerated in Instructions to Bidders shall cover net cost of materials or equipment, and all applicable taxes. Contractor's cost of delivery and unloading at site, handling costs on site, labor, installation costs, overhead, profit and any other incidental costs shall be included in Contractor's bid, but not as part of cash allowance.
- B. Department will solicit at least two (2) bids on materials or equipment for which allowance is stated and select on basis of lowest qualified responsible bid. Contractor will then be instructed to purchase "Allowed Materials". If actual price for purchasing "Allowed Materials", including taxes, is more or less than "Cash Allowance", Contract price shall be adjusted accordingly. Adjustment in Contract price shall not contain any cost items excluded from cash allowance.

## 37. ESTIMATES OF QUANTITIES

A. Whenever estimated quantities of work to be done and materials to be furnished under this Contract are shown in any of Construction Documents, they are given for use in comparing bids and right is especially reserved to increase or diminish them as they may be deemed reasonably necessary or desirable by Department to complete the Work included in this Contract, and cost for such increase or diminution shall be adjusted in manner provided for in General Conditions of Contract Article 18 entitled "Changes in the Work".

## 38. LANDS AND RIGHTS-OF-WAY

A. Prior to start of construction, County shall furnish all land and rights-of-way necessary for carrying out and completion of the Work to be performed under this Contract.

## 39. GENERAL GUARANTEE

- A. Neither final certificate of payment nor any provision in Construction Documents nor partial or entire occupancy of premises by County shall constitute acceptance of work not done in accordance with Construction Documents or relieve Contractor of liability in respect to any expressed warranties or responsibility for faulty materials or workmanship.
  - 1. In no event shall making of any payment required by Contract constitute or be construed as waiver by County of any breach of covenants of Contract or waiver of any default of Contractor and making of any such payment by County while any such default or breach shall exist shall in no way impair or prejudice right of County with respect to recovery of damages or other remedy as result of such breach or default.
- B. Contractor shall remedy and make good all defective workmanship and materials and pay for any damage to other work resulting there from, which appear within period of one (1) year from date of substantial completion, providing such defects are not clearly due to abuse or misuse by County. Department will give notice of observed defects with reasonable promptness.
- C. Guarantee on work executed after certified date of substantial completion will begin on date when such work is inspected and approved by Engineer's and Public Works Project Manager.
- D. Where guarantees or warrantees are required in sections of Specifications for periods in excess of one (1) year, such longer terms shall apply; however, Contractor's Performance and Payment Bonds shall not apply to any guarantee or warranty period in excess of one (1) year.

#### 40. CONFLICTING CONDITIONS

- A. Any provision in any of Construction Documents which may be in conflict or inconsistent with any Articles in these General Conditions of Contract or Supplementary Conditions shall be void to extent of such conflict or inconsistency.
- B. In case of ambiguity or conflict between Drawings and Specifications, Specifications shall govern.
- C. Printed dimensions shall be followed in preference to measurements by scale. Large-scale drawings take precedence over small-scale drawings. Dimensions on Drawings and details are subject to field measurements of adjacent work.

## 41. NOTICE AND SERVICE THEREOF

A. Any notice to Contractor from Department relative to any part of this Contract shall be in writing and considered delivered and service thereof completed, when said notice is posted, by certified or registered mail, to Contractor at Contractor's last given address, or delivered in person to said Contractor, or Contractor's authorized representative on the Work.

## 42. PROTECTION OF LIVES AND HEALTH

A. In order to protect lives and health of Contractor's employees under Contract, Contractor shall comply with all pertinent provisions of Wisconsin Administrative Code, Rules of Department of Commerce, relating to Safety and Health.

B. Contractor alone shall be responsible for safety, efficiency and adequacy of Contractor's tools, equipment and methods, and for any damage that may result from their failure or their improper construction, maintenance or operation.

# 43. AFFIRMATIVE ACTION PROVISION AND MINORITY / WOMEN / DISADVANTAGED BUSINESS ENTERPRISES

#### A. Affirmative Action Provisions.

- 1. During term of their Contract, Contractor agrees not to discriminate on basis of race, religion, color, sex, handicap, age, sexual preference, marital status, physical appearance, or national origin against any person, whether recipient of services (actual or potential), employee, or applicant for employment. Such equal opportunity shall include but not be limited to following: employment, upgrading, demotion, transfer, recruitment, advertising, layoff, termination, training, rates of pay, and any other form of compensation or level of service(s). Contractor agrees to post in conspicuous places, these affirmative action standards to be visible to all employees, service recipients and applicants for this paragraph. Listing of prohibited bases for discrimination shall not be construed to amend in any fashion state or federal law setting forth additional bases and exceptions shall be permitted only to extent allowable in state or federal law.
- 2. Contractor is subject to this Article only if Contractor has twenty (20) or more employees and receives \$20,000.00 or more in annual aggregate contracts with County. Contractor shall file and Affirmative Action Plan with Dane County Contract Compliance Specialist in accord with Chapter 19 of Dane County Code of Ordinances. Such plan must be filed within fifteen (15) business days of effective date of this Contract and failure to do so by said date shall constitute ground for immediate termination of Contract by County. Contractor shall also, during term of this Contract, provide copies of all announcements of employment opportunities to County's Office of Equity & Inclusion, and shall report annually number of persons, by race, sex and handicap status, who apply for employment, and, similarly classified, number hired and number rejected.
- Contact Dane County Contract Compliance Specialist at Dane County Office of Equity & Inclusion, 210 Martin Luther King, Jr. Blvd., Room 356, Madison, WI 53703, 608/266-4192.
- 4. In all solicitations for employment placed on Contractor's behalf during term of this Contract, Contractor shall include statement to affect Contractor is "Equal Opportunity Employer". Contractor agrees to furnish all information and reports required by County's Contract Compliance Specialist as same relate to affirmative action and nondiscrimination, which may include any books, records, or accounts deemed appropriate to determine compliance with Chapter 19, Dane County Code of Ordinances, and provision of this Contract.

## B. Minority / Women / Disadvantaged / Emerging Small Business Enterprises.

- 1. Chapter 19.508 of Dane County Code of Ordinances is official policy of Dane County regarding utilization of, to fullest extent of, Minority Business Enterprises (MBEs), Women Business Enterprises (WBEs) Disadvantage Business Enterprises (DBEs) and Emerging Small Business Enterprises (ESBEs).
- 2. Contractor may utilize MBEs / WBEs / DBEs / ESBEs as subcontractors or suppliers. List of subcontractors will be required of low bidder as stated in this Contract. List shall indicate which are MBEs / WBEs / DBEs / ESBEs and percentage of subcontract awarded, shown as percentage of total dollar amount of bid.

## 44. COMPLIANCE WITH FAIR LABOR STANDARDS

- A. During term of this Contract, Contractor shall report to County Contract Compliance Specialist, within ten (10) business days, any allegations to, or findings by National Labor Relations Board (NLRB) or Wisconsin Employment Relations Commission (WERC) that Contractor has violated statute or regulation regarding labor standards or relations. If investigation by Contract Compliance Specialist results in final determination that matter adversely affects Contractor's responsibilities under this Contract, and which recommends termination, suspension or cancellation of this Contract, County may take such action.
- B. Contractor may appeal any adverse finding by Contract Compliance Specialist as set forth in Dane County Ordinance 25.015(11)(c) through (e).
- C. Contractor shall post this statement in prominent place visible to employees: "As condition of receiving and maintaining contract with Dane County, this employer shall comply with federal, state and all other applicable laws prohibiting retaliation or union organizing."

#### 45. USE AND OCCUPANCY PRIOR TO ACCEPTANCE

- A. Contractor agrees to use and occupancy of portion or unit of the Work before formal acceptance by Department, provided Department:
  - 1. Secures written consent of Contractor; except when in opinion of Public Works Project Manager, Contractor is chargeable with unwarranted delay in final cleanup of punch list items or other Contract requirements.
  - 2. Secures endorsement from insurance carrier and consent of Surety permitting occupancy of building or use of the Work during remaining period of construction, or, secures consent of Surety.
  - 3. Assumes all costs and maintenance of heat, electricity and water.
  - 4. Accepts all work completed within that portion or unit of the Work to be occupied, at time of occupancy.

#### 46. CLAIMS

A. No claim may be made until Department's Public Works Director has reviewed Engineer's decision as provided for in Article 35 of General Conditions of Contract. If any claim remains unresolved after such review by Department's Public Works Director, the claim may be filed under Wisconsin Statute 893.80. Work shall progress during period of any dispute or claim. Unless specifically agreed between parties, venue will be in Dane County, Wisconsin.

#### 47. ANTITRUST AGREEMENT

A. Contractor and County recognize that in actual economic practice, overcharges resulting from antitrust violations are in fact usually borne by County. Therefore, Contractor hereby assigns to County any and all claims for such overcharges as to goods and materials purchased in connection with this Contract, except as to overcharges which result from antitrust violations commencing after price is established under this Contract and any change order thereto.

#### 48. INSURANCE

- A. Contractor Carried Insurance:
  - Contractor shall not commence work under this Contract until Contractor has obtained all
    insurance required under this Article and has provided evidence of such insurance to Risk
    Manager, 425 City-County Building, 210 Martin Luther King Jr. Blvd., Madison, WI
    53703. Contractor shall not allow any subcontractor to commence work until insurance

required of subcontractor has been so obtained and approved. Company providing insurance must be licensed to do business in Wisconsin.

- 2. Worker's Compensation Insurance:
  - a) Contractor shall procure and shall maintain during life of this Contract, Worker's Compensation Insurance as required by statute for all of Contractor's employees engaged in work at site of project under this Contract and, in case of any such work sublet, Contractor shall require subcontractor similarly to provide Worker's Compensation Insurance for all of latter's employees to be engaged in such work unless such employees are covered by protection afforded by Contractor's Worker's Compensation Insurance.
  - b) If any claim of employees engaged in hazardous work on project under this Contract is not protected under Worker's Compensation Statute, Contractor shall provide and shall cause each subcontractor to provide adequate Employer's Liability Insurance for protection of such of Contractor's employees as are not otherwise protected.
- 3. Contractor's Public Liability and Property Damage Insurance:
  - a) Contractor shall procure and maintain during life of this Contract, Contractor's Public Liability Insurance and Contractor's Property Damage Insurance in amount not less than \$1,000,000 bodily injury, including accidental death, to any one person, and subject to same limit for each person, in amount not less than \$1,000,000 on account of one accident, and Contractor's Property Damage Insurance in amount not less then \$1,000,000 or combined single limit of at least \$1,000,000 with excess coverage over and above general liability in amount not less than \$5,000,000. Contractor shall add "Dane County" as additional insured for each project.
  - b) Contractor's Public Liability and Property Damage Insurance shall include Products, Completed Operation, and Contractual Liability under Insurance Contract. "Contractor shall in all instances save, defend, indemnify and hold harmless County and Architect / Engineer against all claims, demands, liabilities, damages or any other costs which may accrue in prosecution of the Work and that Contractor will save, defend, indemnify and hold harmless County and Architect / Engineer from all damages caused by or as result of Contractor's operations" and each shall be listed as additional insured on Contractor's and subcontractors' insurance policies.
  - c) Obligations of Contractor under Article 50.A.2.b) shall not extend to liability of Architect / Engineer, agents or employees thereof, arising out of:
    - 1) Preparation or approval of maps, drawings, opinions, reports, surveys, change orders, designs or specifications; or
    - 2) Giving of or failure to give directions or instructions by Architect / Engineer, agents or employees thereof provided such giving or failure to give is primary cause of injury or damage.
  - d) Contractor shall procure and shall maintain during life of this Contract, Comprehensive Automobile Liability Insurance covering owned, non-owned and hired automobiles for limits of not less than \$1,000,000 each accident single limit, bodily injury and property damage combined with excess coverage over and above general liability in amount not less than \$5,000,000.
  - e) Contractor shall either:
    - Require each subcontractor to procure and to maintain during life of subcontract, subcontractor's Public Liability Property Damage Insurance, and Comprehensive Automobile Liability Insurance of type and in same amount specified in preceding paragraphs; or
    - 2) Insure activities of subcontractors in Contractor's own policy.
- 4. Scope of Insurance and Special Hazards: Insurance required under Article 50.A.2 & 50.A.3. hereof shall provide adequate protection for Contractor and subcontractors, respectively, against damage claims which may arise from operations under this Contract, whether such operation be by insured or by anyone directly or indirectly employed by

- insured and also against any of special hazards which may be encountered in performance of this Contract as enumerated in Supplementary Conditions.
- 5. Proof of Carriage of Insurance: Contractor shall furnish Risk Manager with certificates showing type, amount, class of operations covered, effective dates, dates of expiration of policies and "Dane County" listed as additional insured. Such certificates shall also contain (substantially) following statement: "Insurance covered by this certificate will not be canceled or materially altered, except after ten (10) business days written notice has been received by Risk Manager."

#### B. Builder's Risk:

1. County shall provide Builder's Risk insurance coverage for its insurable interests in construction or renovation projects with completed value of \$1,000,000 or less. Therefore, if project completed value is more than \$1,000,000, Contractor shall obtain and maintain in force, at its own expense, Builder's Risk Insurance on all risks for amount equal to full completed value of covered structure or replacement value of alterations or additions. Any deductible shall not exceed \$25,000 for each loss. Policy shall include occupancy clause and list Dane County as loss payee.

#### C. Indemnification / Hold Harmless:

- 1. Contractor shall indemnify, hold harmless and defend Dane County, its boards, commissions, agencies, officers, employees and representatives from and against all claims, damages, losses and expenses including attorneys' fees arising out of or resulting from performance of the Work, provided that any such claim, damage, loss or expense is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the Work itself) including loss of use resulting therefrom, and is caused in whole or in part by any 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, regardless of whether or not it is caused in part by part indemnified hereunder.
- 2. In any and all claims against Dane County, its boards, commissions, agencies, officers, employees and representatives or by any employee of Contractor, any subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, indemnification obligation under this Contract shall not be limited in any way by any limitation on amount or type of damages, compensation or benefits payable by or for Contractor or any subcontractor under worker's compensation acts, disability benefits or other employee benefit acts.
- 3. Obligations of Contractor under this Contract shall not extend to liability of Architect / Engineer, its agents or employees arising out of:
  - a) Preparation or approval of maps, drawings, opinion, reports, surveys, change orders, designs or specifications; or
  - b) Giving of or failure to give directions or instruction by Engineer, its agents or employees provided such giving or failure to give is primary cause of injury or damage.
- 4. Dane County shall not be liable to Contractor for damages or delays resulting from work by third parties or by injunctions or other restraining orders obtained by third parties.

#### 49. WISCONSIN LAW CONTROLLING

A. It is expressly understood and agreed to by parties hereto that in event of any disagreement or controversy between parties, Wisconsin law shall be controlling.

END OF SECTION

## **SECTION 00 73 00**

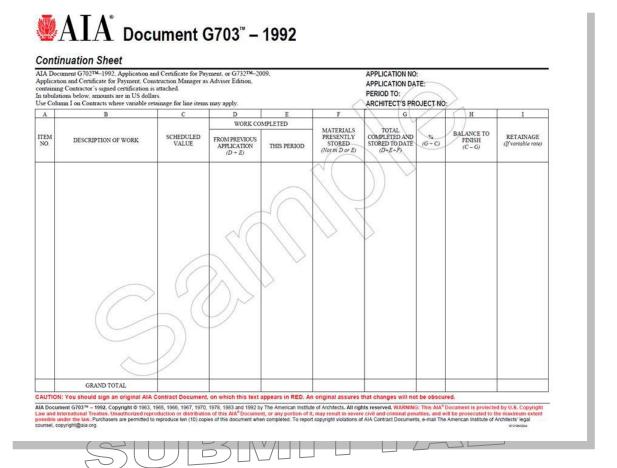
## SUPPLEMENTARY CONDITIONS

## 1. APPLICATION & CERTIFICATE FOR PAYMENT

A. Every contractor engaged in performance of any contract for Public Works Engineering Division shall submit partial and final Application & Certificate for Payment for work under said contract. Form shall provide similar information as shown on AIA G702<sup>TM</sup> and G703<sup>TM</sup> forms (samples shown below). Forms shall be submitted to Public Works Project Manager for approval.

Application and Certificate for I		)2™ – 199	2	
O OWNER:	PROJECT:		APPLICATION NO: Distributio	n to
O OWNER.	PROJECT.		PERIOD TO: OWNER	
	104 100107		CONTRACT FOR: ARCHITECT	П
ROM CONTRACTOR:	VIA ARCHIT	ECT:	CONTRACT DATE: CONTRACTOR	
			PROJECT NOS: FIELD	
			OTHER	П
CONTRACT SUM TO DATE (Line I = 2) TOTAL COMPLETED & STORED TO DATE (Column C RETAINAGE:  a. % of Completed Work  b. % of Stored Material (Column F on G703)  Total Retainage (Lines Sa + Sb, or Total in Column TOTAL EARNED LESS RETAINAGE (Line # minus Line 5 Total) LESS PREVIOUS CERTIFICATES FOR PAYMENT (Line 6 from prior Certificate)  CURRENT PAYMENT DUE  CURRENT PAYMENT DUE	\$ s s s s s s s s s s s s s s s s s s s		By:  County of  Subscribed and sworn to before me this  My commission expires:  ARCHITECT'S CERTIFICATE FOR PAYMENT  In accordance with the Contract Documents, based on on-site observations and the data compr this application, the Architect certifies to the Owner that to the best of the Architect's knowle information and belief the Work has progressed as indicated, the quality of the Work accordance with the Contract Documents, and the Contractor is entitled to payment of AMOUNT CERTIFIED.	ising edge, is in
BALANCE TO FINISH, INCLUDING RETAINAGE	Juni 13	/-	AMOUNT CERTIFIED	
(Line 3 minus Line 6)	s		AMOUNT CERTIFIED  (Attach explanation if amount certified differs from the amount applied. Initial all figures on th Application and on the Continuation Sheet that are changed to conform with the amount certifi	
HANGE ORDER SUMMARY	ADDITIONS	DEDUCTIONS	ARCHITECT:	
otal changes approved in previous months by Owner	s	\$	By: Date:	
otal approved this month	s	\$	This Certificate is not negotiable. The AMOUNT CERTIFIED is payable only to the Contractor	
TOTAL	S	\$	named herein. Issuance, payment and acceptance of payment are without prejudice to any right the Owner or Contractor under this Contract.	s of
ET CHANGES by Change Order	\$		the Owner of Contractor throet this Contract.	

RFB No. 322030 rev. 01/22



END OF SECTION

#### **SECTION 00 73 00**

#### BEST VALUE CONTRACTING

#### 1. CONTRACTORS / LICENSURE APPLICANTS

The Dane County Public Works Engineering Division requires contractors & subcontractors to be a Best Value Contractor (BVC) before being hired. Contractor & subcontractor application documents should be turned in immediately. Contractor approval or exemption must be complete prior to Bid Due Date / Time. All subcontractors must also be approved or prove their exemption ten (10) business or more days before performing any work under a County contract. Complete & properly execute this document, along with the necessary attachments and additional information that the County requires for the protection and welfare of the public in the performance of a County contract.

Contractors or subcontractors of any tier who attain qualification status will retain that status for a period of three (3) years from the date of qualification. Contractors shall notify the Dane County Public Works Engineering Division within fifteen (15) days of any changes to its business or operations that are relevant to the application or status. Failure to do so could result in suspension, revocation of the contractor's qualification, debarment from County contracts for up to three (3) years and / or other sanctions available under the law.

No contracts will be awarded for construction work performed on Dane County projects unless the contractor is currently approved as a Wisconsin Trade Trainer or has applied for approval as an Apprenticeship Trade Trainer to the Wisconsin Department of Workforce Development and agrees to an acceptable apprenticeship program. If you are not currently approved as a Wisconsin Trade Trainer, or have not applied for approval as an Apprenticeship Trade Trainer, please contact the Department of Workforce Development - Bureau of Apprenticeship Standards at 608/266-3133 or visit their web site at: <a href="https://dwd.wisconsin.gov/apprenticeship/">https://dwd.wisconsin.gov/apprenticeship/</a>.

Fill out the BVC Application at the Public Works Engineering Division web site (<u>publicworks.countyofdane.com/bvc</u>). This document is in the RFB for reference only. The following page shows what the questions are on the application.

## 2. EXEMPTIONS TO QUALIFICATION

Contractors performing work that does not apply to an apprenticeable trade, as outlined in Item 4. Apprenticeable Trades, is the only reason for claiming an exemption if not an active Wisconsin Trades Trainer. See Question 18A.

## 3. APPLICATION QUESTIONS

NO.	PROOF OF RESPONSIBILITY	CHECK IF APPLICABLE
1	Does your firm acknowledge that in doing work under any County Public Works Contract, it will be required to use as subcontractors only those contractors that are also qualified with the County or become so ten (10) or more days before beginning any work?	Yes: No:
2	Does your firm possesses all technical qualifications and resources, including equipment, personnel and financial resources, necessary to perform the work required for any project or obtain the same through the use of responsible, qualified subcontractors?	Yes: No:
3	Will your firm possess all valid, effective licenses, registrations or certificates required by federal, state, county, or local law, which are necessary for the type of work to be performed including, but not limited to, those for any type of trade work or specialty work?	Yes: No:

4	Will your firm meet all bonding requirements as required by applicable law or contract specifications?	Yes: No:
5	Will your firm meet all insurance requirements as required by applicable law or specifications, including general liability insurance, workers compensation insurance and unemployment insurance requirements?	Yes: No: No:
6	Will your firm maintain a substance abuse policy for employees hired for Public Works contracts that comply with Wis. Stats. Sec. 103.503?	Yes: No: No:
7	Will your employees who will perform work on a Public Works project all be covered under a current workers compensation policy and be properly classified under such policy?	Yes: No:
8	Will your employees who will perform work on a Public Works project have the opportunity to enroll in minimum essential coverage and not be subject to an enrollment period of more than 60 days per the federal Affordable Care Act, Sec. 1513?	Yes: No: No:
9	Will your firm fully abide by the equal opportunity and affirmative action requirements of all applicable laws, including County ordinances?	Yes: No:
10	Has your firm been the subject of any order or judgement from any State or Federal Agency or court concerning employment practice, including but not limited to: classification of employees under state unemployment or workers compensation laws; minimum wage, overtime pay, recordkeeping, and child labor standards imposed by federal or state law; and employment discrimination or unfair labor practices prohibited by federal or state law. (Attach copies of any order or judgement)	Yes: No: If Yes, attach details.
11	Is your firm authorized or registered to transact business in the state by the Department of Financial Institutions in compliance with Wis. Stat. Chaps. 178, 179, 180, 181, or 183?	Yes: No: If Yes, attach details.
12	In the past three (3) years, has your firm had control or has another corporation, partnership or other business entity operating in the construction industry controlled it? If so, attach a statement explaining the nature of the firm relationship.	Yes: No: If Yes, attach details.
13	In the past three (3) years, has your firm had any type of business, contracting or trade license, certification or registration revoked or suspended?	Yes: No: If Yes, attach details.
14	In the past three (3) years, has your firm been debarred by any federal, state or local government agency?	Yes: No: If Yes, attach details.
15	In the past three (3) years, has your firm defaulted or failed to complete any contract?	Yes: No: If Yes, attach details.
16	In the past three (3) years, has your firm committed a willful violation of federal, state or local government safety laws as determined by a final decision of a court or government agency authority.	
17	In the past three (3) years, has your firm been in violation of any law relating to your contracting business where the penalty for such violation resulted in the imposition of a penalty greater than \$10,000?	Yes: No: If Yes, attach details.
18	Does the Wisconsin Bureau of Apprenticeship Standards determine your firm an active Wisconsin Trade Trainer as?	Yes: No: If Yes, attach details.

18A	Is your firm claiming an exemption to qualification?	Yes: If Yes, att	No: ach details.	
19	Has Contractor been in business less than one year?	Yes:	No:	

## 4. APPRENTICEABLE TRADES:

- Bricklayer
- Boilermaker
- Carpenter
- Cement Mason (Concrete Finisher)
- Cement Mason (Heavy Highway)
- Construction Craft Laborer
- Data Communications Installer
- Electrician
- Elevator Mechanic / Technician
- Environmental Systems Technician / HVAC Service Technician / HVAC Install & Service
- Glazier
- Heavy Equipment Operator / Operating Engineer
- Insulation Worker (Heat & Frost)
- Iron Worker (Assembler, Metal Buildings)
- Painter / Decorator
- Plasterer
- Plumber
- Roofer / Waterproofer
- Sheet Metal Worker
- Sprinkler Fitter
- Steamfitter (Service & Refrigeration)
- Taper & Finisher
- Telecommunications (Voice, Data & Video) Installer / Technician
- Tile Setter

END OF SECTION

#### **SECTION 00 73 11**

#### FAIR LABOR PRACTICES CERTIFICATION

The undersigned, for and on behalf of the BIDDER, APPLICANT or PROPOSER named herein, certifies as follows:

A. That he or she is an officer or duly authorized agent of the above-referenced BIDDER, APPLICANT or PROPOSER, which has a submitted a bid, application or proposal for a contract or agreement with the county of Dane.

B. That BIDDER, APPLICANT or PROPOSER has (check one):

\_\_\_\_\_\_ not been found by the National Labor Relations Board ("NLRB") or the Wisconsin Employment Relations Commission ("WERC") to have violated any statute or regulation regarding labor standards or relations in the seven years prior to the signature date of this Certification.

\_\_\_\_\_\_ been found by the National Labor Relations Board ("NLRB") or the Wisconsin Employment Relations Commission ("WERC") to have violated any statute or regulation regarding labor standards or relations in the seven years prior to the signature date of this Certification.

Officer or Authorized Agent Signature

Date

**NOTE:** You can find information regarding the violations described above at: <a href="www.nlrb.gov">www.nlrb.gov</a> and <a href="www.nlrb.gov">www.nlrb.gov</a>

For reference, Dane County Ordinance 25.09 is as follows:

Printed or Typed Name and Title

Printed or Typed Business Name

(1) BIDDER RESPONSIBILITY. (a) Any bid, application or proposal for any contract with the county, including public works contracts regulated under chapter 40, shall include a certification indicating whether the bidder has been found by the National Labor Relations Board (NLRB) or the Wisconsin Employment Relations Committee (WERC) to have violated any statute or regulation regarding labor standards or relations within the last seven years. The Controller shall investigate any such finding and make a recommendation to the committee, which shall determine whether the conduct resulting in the finding affects the bidder's responsibility to perform the contract.

If you indicated that the NLRB or WERC have found you to have such a violation, you must include copies of any relevant information regarding such violation with your proposal, bid or application.

Include this completed Certification with your bid, application or proposal.

END OF SECTION

Bid No. 322030 Fair Labor Practices Certification rev. 10/19 00 73 11 - 1

#### **SECTION 01 00 00**

## GENERAL REQUIREMENTS

## PART 1 GENERAL

## 1.1 SUMMARY

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Α.	Section	Inc	ludes

- 1. Summary
- 2. Summary of the Work
- 3. Contractor Use of Premises
- 4. Applications for Payment
- 5. Change Procedures
- 6. Alternates
- 7. Coordination
- 8. Cutting and Patching
- 9. Conferences
- 10. Progress Meetings
- 11. Job Site Administration
- 12. Submittal Procedures
- 13. Proposed Products List
- 14. Shop Drawings
- 15. Product Data
- 16. Samples
- 17. Manufacturers' Instructions
- 18. Manufacturers' Certificates
- 19. Quality Assurance / Quality Control of Installation
- 20. References
- 21. Interior Enclosures
- 22. Protection of Installed Work
- 23. Parking
- 24. Staging Areas
- 25. Occupancy During Construction and Conduct of Work
- 26. Protection
- 27. Progress Cleaning
- 28. Products
- 29. Transportation, Handling, Storage and Protection
- 30. Product Options
- 31. Substitutions
- 32. Starting Systems
- 33. Demonstration and Instructions
- 34. Contract Closeout Procedures
- 35. Final Cleaning
- 36. Adjusting
- 37. Operation and Maintenance Data
- 38. Spare Parts and Maintenance Materials
- 39. As-Built and Record Drawings and Specifications

#### 1.2 SUMMARY OF THE WORK

- A. Project Description: Perform the Work as specified and detailed in Construction Documents package. Contractor to provide and install upgrades to the current fire protection system for Pavilions 1 & 2 by adding a dry fire protection system above the exterior canopies.
- B. Work by Owner: Not applicable.
- C. Permits: Permits as needed to be obtained by the Contractor.

#### 1.3 CONTRACTOR USE OF PREMISES

- A. Limit use of premises to allow work and event usage (when needed) by others and work by Owner.
- B. Coordinate utility outages and shutdowns with Owner.
- C. Contractors or Subcontractors shall not visit the site if they are or have recently been ill.

## 1.4 APPLICATIONS FOR PAYMENT

- A. Submit each Application for Payment on AIA G702<sup>TM</sup> and G703<sup>TM</sup> forms or approved contractors invoice form. Contractor shall have these forms notarized and signed.
- B. Content and Format: Utilize Schedule of Values for listing items in Application for Payment.
- C. Payment Period: Monthly
- D. Submit Applications for Payment to Public Works Project Manager for approval & processing for payment.

#### 1.5 CHANGE PROCEDURES

A. Contractor's costs for Products, delivery, installation, labor, insurance, payroll, taxes, bonding, equipment rental, overhead and profit will be included in Change Orders Requests (to be reviewed/approved by the Public Works Project Manager) authorizing expenditure of funds from contingency allowance.

#### 1.6 ALTERNATES

- A. Owner shall review and accept or reject alternates quoted on Bid Form.
- B. Coordinate related work and modify surrounding work as required.
- C. Schedule of Alternates: there are no alternates proposed for this project.

#### 1.7 COORDINATION

- A. Coordinate scheduling, submittals, and work of various sections of Specifications to assure efficient and orderly sequence of installation of interdependent construction elements. Coordinate with Engineer, Alliant Energy Center Staff, and Public Works Project Manager prior to undertaking any work.
- B. Verify utility requirement characteristics of operating equipment are compatible with building utilities.
- C. Coordinate space requirements and installation of mechanical and electrical work indicated diagrammatically on Drawings.
- D. Refer to Drawings for recommended work sequence and duration.
- E. Contractor shall provide Public Works Project Manager with work plan that ensures the Work's completion within required time & schedule.
- F. Public Works Project Manager may choose to photograph or videotape site or workers as the Work progresses.

#### 1.8 CUTTING AND PATCHING

- A. Employ skilled and experienced installer to perform cutting and patching new work; restore work with new Products.
- B. Submit written request in advance of cutting or altering structural or building enclosure elements.
- C. Fit work tight to adjacent elements. Maintain integrity of wall, ceiling, or floor construction; completely seal voids.
- D. Refinish surfaces to match adjacent finishes.

#### 1.9 CONFERENCES

- A. Project shall have pre-bid conference; see Instructions to Bidders.
- B. Owner will schedule preconstruction conference after Award of Contract for all affected parties.
- C. Contractor shall submit Construction Schedule at pre-construction meeting.
- D. When required in individual Specification section, convene pre-installation conference at project site prior to commencing work of Section.

#### 1.10 PROGRESS MEETINGS

A. Day & time of progress meetings to be determined at pre-construction meeting.

- B. General Contractor shall schedule and administer on-site meetings throughout progress of the work at a minimum of one (1) per week (unless occasional bi-weekly meetings are agreed to ahead of time). Contractor shall schedule and administer meetings throughout progress of the Work.
- C. General Contractor shall preside at meetings, record minutes, and distribute copies within two (2) business days to those affected by decisions made.
- D. Attendance at progress meetings by General Contractor and when needed subcontractors, or their authorized representative, is mandatory.
- E. Contractors shall give verbal reports of progress on the Work, discuss schedule for upcoming period and present all conflicts, discrepancies or other difficulties for resolution by Engineer.

## 1.11 JOB SITE ADMINISTRATION

- A. Contractor shall have project superintendent on site minimum of four (4) hours per week during progress of the Work.
- B. Contractor shall not change their project superintendent or project manager for duration of the Work without written permission of Public Works Project Manager.
- C. Engineer shall have representative on site regularly during progress of the Work.

#### 1.12 SUBMITTAL PROCEDURES

- A. Submittal form to identify Project, Contractor, Subcontractor or supplier and pertinent Construction Documents references.
- B. Apply Contractor's stamp, signed or initialed, certifying that review, verification of Products required, field dimensions, adjacent construction work, and coordination of information is in accordance with requirements of the Work and Construction Documents.
- C. Identify variations from Construction Documents and Product or system limitations that may be detrimental to successful performance of completing the Work.
- D. Revise and resubmit submittals as required; identify all changes made since previous submittal.

#### 1.13 PROPOSED PRODUCTS LIST

A. Within fifteen (15) business days after date of Award of Contract, submit complete list of major Products proposed for use, with name of manufacturer, trade name, and model number of each Product.

#### 1.14 SHOP DRAWINGS

A. Submit number of copies that Contractor & Engineer requires, plus one (1) copy for Public Works Project Manager to retain.

## 1.15 PRODUCT DATA

- A. Submit number of copies that Contractor requires, plus one (1) copy for Public Works Project Manager to retain.
- B. Mark each copy to identify applicable products, models, options, and other data. Supplement manufacturer's standard data to provide information unique to this Project.

#### 1.16 SAMPLES

- A. Submit samples to illustrate functional and visual characteristics of Product.
- B. Submit samples of finishes from full range of manufacturers' standard colors, textures, and patterns for Public Works Project Manager's & Engineer's selection.

## 1.17 MANUFACTURERS' INSTRUCTIONS

A. When specified in individual Specification sections, submit manufacturers' printed instructions for delivery, storage, assembly, installation, start-up, adjusting, and finishing, in quantities specified for Product Data.

#### 1.18 MANUFACTURERS' CERTIFICATES

- A. When specified in individual Specification sections, submit manufacturers' certificate to Public Works Project Manager for review, in quantities specified for Product Data.
- B. Indicate material or Product conforms to or exceeds specified requirements. Submit supporting reference data, affidavits, and certifications as appropriate.

## 1.19 QUALITY ASSURANCE / QUALITY CONTROL OF INSTALLATION

- A. Monitor quality control over suppliers, manufacturers, Products, services, site conditions, and workmanship, to produce work of specified quality.
- B. Comply fully with manufacturers' instructions.
- C. Comply with specified standards as minimum quality for the Work except when more stringent tolerances, codes, or specified requirements indicate higher standards or more precise workmanship.

#### 1.20 REFERENCES

A. Conform to reference standard by date of issue current as of date for receiving bids.

B. Should specified reference standard conflict with Construction Documents, request clarification from Public Works Project Manager before proceeding.

#### 1.21 INTERIOR ENCLOSURES

A. Not Applicable

#### 1.22 PROTECTION OF INSTALLED WORK

A. Protect installed work and provide special protection where specified in individual Specification sections.

#### 1.23 PARKING

- A. Arrange for temporary parking areas to accommodate construction personnel. Parking shall be available at the Work site.
- B. All Contractors and their employees shall cooperate with General Contractor and others in parking of vehicles to avoid interference with normal operations and construction activities.
- C. Do not obstruct existing service drives and parking lots with equipment, materials and / or vehicles. Keep accessible for Owner's use at all times.

#### 1.24 STAGING AREAS

- A. Coordinate staging areas with Public Works Project Manager prior to starting the Work.
- B. On-site space for use as staging areas and storage of materials is available at the site and will be apportioned among various Contractors as their needs dictate with due regard for storage requirements of each Contractor. Each Contractor shall be responsible for safety of equipment and materials that are stored on site.

## 1.25 OCCUPANCY DURING CONSTRUCTION AND CONDUCT OF WORK

- A. At all times Contractor shall provide approved safe walkway zones for use by Owner, employees and public.
- B. Contractor shall provide adequate protection for all parts of facility, its contents and occupants wherever the Work under this Contract is to be performed.
- C. Each Contractor shall arrange with Owner to make necessary alterations, do new work, make connections to all utilities, etc., and at such times as will not cause interruption of utility services to facility. Contractor doing this work shall protect, cap, cut off and / or replace and relocate existing pipes, electrical work and other active utilities encountered which may interfere with new construction work.
- D. New work in extension of existing work shall correspond in all respects with that to which it connects or similar existing work unless otherwise indicated or specified.

- 1. Existing work shall be cut, altered, removed or replaced as necessary for performance of Contract obligations.
- 2. Work remaining in place, damaged or defaced by reason of work done under this Contract shall be restored equal to its condition at time of Award of Contract.
- 3. If removal of work exposes discolored or unfinished surfaces or work out of alignment, such surfaces shall be refinished or materials replaced as necessary to make continuous work uniform and harmonious.
- E. Contractor is not responsible for providing & maintaining temporary toilet facilities and may use toilet facilities at the Pavilions.
- F. Owner reserves right at any time to dismiss from premises any Contractor or construction personnel that do not uphold requirements of this Section.
- G. Owner shall not be held liable for any lost time, wages, or impacts to construction schedule by any Contractor or construction personnel dismissed for failure to uphold requirements of this Section.

#### 1.26 PROTECTION

- A. Contractor shall provide and maintain barricades & signage to prohibit public access to construction zone where installations are occurring.
- B. Contractor shall provide and maintain barricades & railings trenches adjacent to public walks or roads.

#### 1.27 PROGRESS CLEANING

A. Maintain areas free of waste materials, debris, and rubbish. Maintain site in clean and orderly condition.

## 1.28 PRODUCTS

- A. Products: Means new material, machinery, components, equipment, fixtures, and systems forming the Work, but does not include machinery and equipment used for preparation, fabrication, conveying and erection of the Work. Products may also include existing materials or components specifically identified for reuse.
- B. Do not use materials and equipment removed from existing premises, except as specifically identified or allowed by Construction Documents.

#### 1.29 TRANSPORTATION, HANDLING, STORAGE AND PROTECTION

A. Transport, handle, store and protect Products in accordance with manufacturer's instructions.

#### 1.30 PRODUCT OPTIONS

- A. Where definite material is specified, it is not intentional to discriminate against "equal" product made by another manufacturer. Intention is to set definite standard of material quality.
- B. Requests for material or product substitutions submitted after Bid Due Date may be considered. Owner reserves right to approve or reject substitutions based on Specification requirements and intended use.

#### 1.31 SUBSTITUTIONS

- A. Document each request with complete data substantiating compliance of proposed Substitution with Construction Documents.
- B. Limit each request to one (1) proposed Substitution for Engineer's / Public Works Project Manager's consideration.
- C. Substitutions shall not change contract price established at Bid Due Date.

## 1.32 STARTING SYSTEMS

- A. Provide written notification prior to start-up of each equipment item or system.
- B. Ensure that each piece of equipment or system is ready for operation.
- C. Execute start-up under supervision of responsible persons in accordance with manufacturers' instructions.
- D. Submit written report that equipment or system has been properly installed and is functioning correctly.

## 1.33 DEMONSTRATION AND INSTRUCTIONS

- A. Demonstrate operation and maintenance of Products to Owner's personnel prior to date of final inspection.
- B. Demonstrate start-up, operation, control, adjustment, trouble-shooting, servicing, maintenance, and shutdown of each item of equipment at agreed-upon times, at designated location. Provide certified test of dry system for Madison Fire Department at a time to be coordinated with Alliant Energy Center Staff.
- C. Owner may choose to photograph or videotape demonstration session; demonstration and demonstrator shall be to level of satisfaction of Owner.

## 1.34 CONTRACT CLOSEOUT PROCEDURES

A. Submit written certification that Construction Documents have been reviewed, the Work has been inspected, dry system test has been approved by the Madison Fire Department

- and the Work is complete in accordance with Construction Documents and ready for Public Works Project Manager's and Engineer's inspection.
- B. Submit final Application for Payment identifying total adjusted Contract Sum / Price, previous payments, and amount remaining due.

#### 1.35 FINAL CLEANING

- A. Execute final cleaning prior to final inspection.
- B. Clean interior and exterior surfaces exposed to view.
- C. Remove waste and surplus materials, rubbish, and construction facilities from site.

#### 1.36 ADJUSTING

A. Adjust operating Products and equipment to ensure smooth and unhindered operation.

#### 1.37 OPERATION AND MAINTENANCE MANUAL

A. Provide two (2) bound, hard-copy operation and maintenance manuals that include all systems, materials, products, equipment, mechanical and electrical equipment and systems supplied and installed in the Work. Provide electronic version of operation and maintenance manual also.

#### 1.38 SPARE PARTS AND MAINTENANCE MATERIALS

- A. Provide Products, spare parts, maintenance and extra materials in quantities specified in individual Specification Sections.
- B. Deliver to the Work site and place in location as directed.

## 1.39 AS-BUILT AND RECORD DRAWINGS AND SPECIFICATIONS

- A. Contractor-produced Drawings and Specifications shall remain property of Contractor whether Project for which they are made is executed or not. Contractor shall furnish Engineer with original marked up redlines of Construction Documents' drawings and specifications that shall include all Addendums, Change Orders, Construction Bulletins, Field Directives, on-site changes, field corrections, etc. These are project As-Built Drawings & Specifications. Record Drawings & Specifications shall be created from these As-Builts by Public Works.
- B. Engineer shall update original Construction Documents to include all Addendums & any other changes including those provided by Contractor in As-Built Drawings & Specifications. These updates are project Record Drawings & Specifications.

## PART 2 PRODUCTS

Not Used.

## PART 3 EXECUTION

Not Used.

END OF SECTION

#### **SECTION 01 74 19**

#### CONSTRUCTION WASTE MANAGEMENT, DISPOSAL & RECYCLING

#### PART 1 GENERAL

#### 1.1 SUMMARY

- A. Section Includes:
  - 1. Summary
  - 2. Waste Management Goals
  - 3. Construction and / or Demolition Waste Management
  - 4. Waste Management Plan
  - 5. Reuse
  - 6. Recycling
  - 7. Materials Sorting and Storage On Site
  - 8. Lists of Recycling Facilities Processors and Haulers
  - 9. Waste Management Plan Form

#### B. Related Sections:

1. Section 01 00 00 - General Requirements

#### 1.2 WASTE MANAGEMENT GOALS

A. Dane County requires that as many waste materials as possible produced as result of this project be salvaged, reused or recycled in order to minimize impact of construction waste on landfills and to minimize expenditure of energy and cost in fabricating new materials. Additional information may be found in Dane County Green Building Policy, Resolution 299, 1999-2000.

#### 1.3 CONSTRUCTION AND / OR DEMOLITION WASTE MANAGEMENT

- A. All construction and demolition waste suitable for recycling may go to Dane County Construction & Demolition Recycling Facility located at 7102 US Hwy 12, Madison, located across from Yahara Hills Golf Course. This facility can receive mixed loads of construction and demolition waste. For complete list of acceptable materials, see <a href="mailto:landsuiten">landfill.countyofdane.com/services/construction</a>.
- B. Dane County Landfill, also at 7102 US Hwy 12, Madison, must receive all other waste from this project. <a href="mailto:landfill.countyofdane.com/services/landfill">landfill.countyofdane.com/services/landfill</a>.

#### 1.4 WASTE MANAGEMENT PLAN

- A. Contractor shall develop Waste Management Plan (WMP) for this project. Contact the Dane County Special Projects & Materials Manager with questions. Outlined in RECYCLING section of this specification are examples of materials that can be recycled or reused as well as recommendations for waste sorting methods.
- B. Contractor shall complete WMP and include cost of recycling / reuse in Bid. Submit WMP to Public Works Project Manager within fifteen (15) business days of Bid Due date. Copy of blank WMP form is in this Section. Submittal shall include cover letter and WMP form with:

- 1. Information on:
  - a. Types of waste materials produced as result of work performed on site;
  - b. Estimated quantities of waste produced;
  - c. Identification of materials with potential to be recycled or reused;
  - d. How materials will be recycled or reused;
  - e. On-site storage and separation requirements (on site containers);
  - f. Transportation methods; and
  - g. Destinations.

#### 1.5 REUSE

A. Contractors and subcontractors are encouraged to reuse as many waste materials as possible. Investigate salvage for materials not reusable on site.

#### 1.6 RECYCLING

- A. These materials may be recycled at Dane County Construction & Demolition Recycling Facility:
  - 1. Wood.
  - 2. Wood Pallets.
  - 3. PVC Plastic (pipe, siding, etc.).
  - 4. Cardboard.
  - 5. Metal.
- B. These materials can be recycled elsewhere in Dane County area:
  - 1. Foam Insulation & Packaging (extruded and expanded).
- C. All materials must be recycled at WDNR permitted waste processing facilities that adhere to all State Statutes.

#### 1.7 MATERIALS SORTING AND STORAGE ON SITE

- A. Contractor shall provide separate containers for recyclable materials. Number of containers will be dependent upon project and site conditions.
- B. Contractor shall provide on-site locations for subcontractors supplied recycling containers to help facilitate recycling.
- C. Dane County allows mixed loads of recycled materials only per instructions at landfill.countyofdane.com/services/construction.

#### 1.8 LISTS OF RECYCLING FACILITIES PROCESSORS AND HAULERS

- A. Refer to <u>landfill.countyofdane.com/services/construction</u> for information on Dane County Construction & Demolition Recycling Facility.
- B. Web site <u>landfill.countyofdane.com/recycle-locations</u> lists current information for Dane County Recycling Markets. Contractors can also contact Allison Rathsack, 608/266-4990, or local city, village, town recycling staff listed at site <u>landfill.countyofdane.com/resources/local-contacts</u>. Statewide listings of recycling / reuse markets are available from UW Extension at <u>uwgb.edu/solid-hazardous-waste-education-center/</u>.

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Not Used.

#### PART 3 EXECUTION

Not Used.

END OF SECTION

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#### WASTE MANAGEMENT PLAN FORM

STYOFA	Contractor Name:	
	Address:	
1839 T	Phone No.:	Recycling Coordinator:

MATERIAL	ESTIMATED QUANTITY	DISPOSAL MET (CHECK ON		RECYCLING / REUSE COMPANY OR DISPOSAL SITE
Salvaged &	cu. yds.	Recycled		
reused building materials	tons	•	Other	Name:
	cu. yds.	Recycled	Reused	
Wood	tons	-	Other	Name:
		Recycled	Reused	
Wood Pallets	units	Landfilled	Other	Name:
DVC DI	cu. ft.	Recycled	Reused	
PVC Plastic	lbs.	Landfilled	Other	Name:
Asphalt &	cu. ft.	Recycled	Reused	
Concrete	lbs.	Landfilled	Other	Name:
Bricks &	cu. ft.	Recycled	Reused	
Masonry	lbs.	Landfilled	Other	Name:
V:1 C: 1:	cu. ft.	Recycled	Reused	
Vinyl Siding	lbs.	Landfilled	Other	Name:
Cardboard	cu. ft.	Recycled	Reused	
Cardboard	lbs.	Landfilled	Other	Name:
Metals	cu. yds.	Recycled	Reused	
ivictals	tons	Landfilled	Other	Name:
Unpainted Gypsum /	cu. yds.	Recycled	Reused	
Drywall	tons	Landfilled	Other	Name:
Shingles	cu. yds.	Recycled	Reused	
Sningles	tons	Landfilled	Other	Name:
Fluorescent	cu. ft.	Recycled	Reused	
Lamps	lbs.	Landfilled	Other	Name:
Foam Insulation	cu. ft.	Recycled	Reused	
roam msuration	lbs.	Landfilled	Other	Name:
Carpet Padding	cu. ft.	Recycled	Reused	
Carpor I adding	lbs.	Landfilled	Other	Name:
Barrels & Drums	•.	Recycled	Reused	
Darreis & Druins	sunits	Landfilled	Other	Name:
Glass	cu. yds.	Recycled	Reused	
31033	tons	Landfilled	Other	Name:

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#### WASTE MANAGEMENT PLAN FORM

Other	 Recycled Reused Landfilled Other	Name:
Other	 Recycled Reused Other	Name:
Other	 Recycled Reused Landfilled Other	Name:
Other	 Recycled Reused Landfilled Other	Name:
Other	 Recycled Reused Landfilled Other	Name:

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#### SECTION 21 05 00 COMMON WORK RESULTS FOR FIRE SUPPRESSION

#### PART 1-GENERAL

#### **SCOPE**

This section includes information common to two or more technical fire protection specification sections or items that are of a general nature, not conveniently fitting into other technical sections.

The specifications and drawings are scope documents based on the Owner's requirements for the fire protection systems. It is the intent of the documents to detail and specify the minimum requirements and components. It is the responsibility of the Contractor to design and install a complete fire protection system in compliance with NFPA, State, and the Local Authority Having Jurisdiction codes and requirements. Pipe and equipment sizing shown in the documents is the minimum allowed. If larger size is required, it is to be included in the bid.

Included are the following topics:

PART 1 - GENERAL

Scope

Related Work

Reference

Reference Standards

Quality Assurance

Continuity of Existing Services

Protection of Finished Surfaces

Sleeves and Openings

Sealing

Off Site Storage

Codes

Design Criteria

Certificates and Inspections

Submittals

Operating and Maintenance Instructions

Training of Owner Personnel

**Record Drawings** 

PART 2 - PRODUCTS

Identification

Sealing

PART 3 - EXECUTION

**Building Access** 

**Equipment Access** 

Coordination

Identification

Lubrication

Sealing

Construction Verification Items

#### RELATED WORK

This section applies to all Division 21 sections of fire suppression.

#### REFERENCE

Applicable provisions of Division 1 govern work under this section.

#### REFERENCE STANDARDS

Abbreviations of standards organizations referenced in this and other sections are as follows:

AGA American Gas Association

ANSI American National Standards Institute

ASME American Society of Mechanical Engineers

ASPE American society of Plumbing Engineers

ASTM American Society for Testing and Materials

AWWA American Water Works Association

AWS American Welding Society
CGA Compressed Gas Association

CS Commercial Standards, Products Standards Sections, Office of Engineering Standards Service, NBS

EPA Environmental Protection Agency

FM FM Global

FS Federal Specifications, Superintendent of Documents, U.S. Government Printing Office

IAPMO International Association of Plumbing & Mechanical Officials

IEEE Institute of Electrical and Electronics Engineers

ISA Instrument Society of America

DSPS State of Wisconsin Dept. of Safety and Professional Services

MSS Manufacturer's Standardization Society of the Valve & Fitting Industry, Inc.

NBS National Bureau of Standards

NEC National Electric Code

NEMA National Electrical Manufacturers Association

NFPA National Fire Protection Association

STI Steel Tank Institute

UL Underwriters Laboratories Inc.

#### **OUALITY ASSURANCE**

Substitution of Materials: Refer to Section GC - General Conditions of the Contract, Equals and Substitutions.

All products and materials used are to be new, undamaged, clean and in good condition. Existing products and materials are not to be reused unless specifically indicated.

Where equipment or accessories are used which differ in arrangement, configuration, dimensions, ratings, or engineering parameters from those indicated on the contract documents, the contractor is responsible for all costs involved in integrating the equipment or accessories into the system and for obtaining the intended performance from the system into which these items are placed.

#### CONTINUITY OF EXISTING SERVICES

Do not interrupt or change existing services without prior written approval from the Owner's Project Representative. When interruption is required, coordinate scheduling of down-time with the Owner to minimize disruption to his activities. Unless specifically stated, all work involved in interrupting or changing existing services is to be done during normal working hours.

#### PROTECTION OF FINISHED SURFACES

Refer to Division 1, General Requirements, Protection of Finished Surfaces.

#### **SLEEVES AND OPENINGS**

Refer to Division 1, General Requirements, Sleeves and Openings.

#### SEALING AND FIRESTOPPING

Sealing and firestopping of sleeves/openings between piping, etc. and the sleeve or structural opening shall be the responsibility of the contractor whose work penetrates the opening. The contractor responsible shall hire individuals skilled in such work to do the sealing and fireproofing. Provide all fire stopping of fire rated penetrations and sealing of smoke rated penetrations in compliance with section 07 84 00 Fire Stopping.

#### OFF SITE STORAGE

Prior approval by DFD and the A/E will be needed. The contractor shall submit Storage Agreement Form AD-BDC-74 to DFD for consideration of off site materials storage. Generally, sleeves, pipe/pipe fittings and similar rough-in material will not be accepted for off site storage. No material will be accepted for off site storage unless shop drawings for the material have been approved.

#### **CODES**

Comply with requirements of Wisconsin Administrative Code, Dept. of Safety and Professional Services, NFPA Standards and local Fire Chief or Fire Marshal (AHJ, Authority Having Jurisdiction) regarding design, materials and installation.

#### DESIGN CRITERIA

Design fire protection systems in accordance with codes, standards and regulations noted above.

Hydraulically design system for the most remote area based on the following:

		Area	Density
Location	Occupancy Classification	(SqFt)	(GPM/SqFt)
Exterior Canopy	Ordinary Hazard Group 2	1950 sq.ft.	

Remote area increases for drypipe/pre-action systems and other circumstances i.e. sloped or higher ceilings are to be added to the minimum remote areas noted above as required by code. Remote area reduction for use of quick response sprinkler heads is not allowed without prior approval of the A/E and DFD.

Available water supply data for system design are noted on the design documents.

#### **CERTIFICATES AND INSPECTIONS**

Refer also to Division 1, General Conditions, Permits, Regulations, Utilities and Taxes.

Obtain and pay for all required State or local installation inspections except those provided by the Architect/Engineer. Include copies of the certificates and reports in the Operating and Maintenance Instructions.

#### **SUBMITTALS**

Refer to Section GC - General Conditions of the Contract, Submittals.

Shop drawing submittals are to be bound, labeled, contain the project manual cover page and a material index list page showing item designation, manufacturer and additional items supplied with the installation. Submit for all equipment and systems as indicated in the respective specification sections, marking each submittal with that specification section number. Mark general catalog sheets and drawings to indicate specific items being submitted and proper identification of equipment by name and/or number, as indicated in the contract documents. Include wiring diagrams of electrically powered equipment.

The specific items that will be required for submittals shall be coordinated with the A/E, and the General Prime Contractor for inclusion in the project submittal log.

Submittals shall be sent to the local Fire Chief or Fire Marshal for review prior to the Architect/Engineer. Include a copy of all review/approval letters in submission to Architect/Engineer.

Submit plans indicating water supply location and size, piping layout and size, sprinkler locations and type, hanger locations and type, equipment locations and type, valve locations and type, occupancy classes, hydraulic reference points, design areas and discharge densities.

Submit hydraulic calculations for water supply and sprinkler and standpipe systems. Include summary sheet and detailed work sheets. Describe characteristics of water supply and location of effective point used in calculations.

Include graph illustration of water supply, hose demand, sprinkler demand and in-rack sprinkler demand. Where a fire pump is used, graph primary rating point, secondary rating point and churn pressure of pump and combined water supply.

Submit sufficient quantities of data sheets and shop drawings to allow the following distribution:

Operating and Maintenance Manuals
 Dane County
 Architect/Engineer
 Local Fire Chief or Marshal
 2 copies
 1 copy
 1 copy

#### OPERATING AND MAINTENANCE INSTRUCTIONS

All operations and maintenance data shall comply with the submission and content requirements specified under section GENERAL REQUIREMENTS.

In addition to the general content specified under GENERAL REQUIREMENTS supply the following additional documentation:

- Copies of all approved submittals along with approval letters.
- Manufacturer's wiring diagrams for electrically powered equipment.
- Records of tests performed to certify compliance with system requirements.
- Certificates of inspection by regulatory agencies.
- Parts lists for equipment and specialties.
- Manufacturers installation, operation and maintenance recommendations for equipment and specialties.
- Valve schedules
- Lubrication instructions, including list/frequency of lubrication
- Warranties
- CAD files of the Contractor installation plans compatible with AutoCAD
- Additional information as indicated in the technical specification sections

#### TRAINING OF OWNER PERSONNEL

Instruct Owner's personnel in the proper operation, maintenance and testing of systems and equipment provided as part of this project. Include not less than 4 hours of instruction, using the Operating and Maintenance manuals and record drawings during this instruction. Demonstrate testing, startup and shutdown procedures for all equipment. All training to be during normal working hours. Video record all instructions and provide Owner with copy.

#### RECORD DOCUMENTS

Refer to Division 1, General Requirements, Record Documents.

In addition to the data indicated in the General Requirements, maintain fire protection layout record drawings and hydraulic calculations on originals prepared by the installing contractor/subcontractor. Include copies of these record drawings and calculations with the Operating and Maintenance manuals.

#### PART 2-PRODUCTS

#### **IDENTIFICATION**

STENCILS:

Not less than 1/2" high letters for pipe sizes 1" through 2-1/2" and 1" high letters/numbers for pipe sizes 3" and above for marking pipe and equipment. Apply flow arrows to piping.

#### ADHESIVE LABELS:

Pressure-sensitive, adhesive backed, vinyl pipe markers with applicable labeling, 3/4" min. size for lettering and surrounding tape on both ends. With flow arrows on piping. Conforming to ANSI, ANSI and NFPA standards. Seton Opti-Code, MSI, Brady or approved equal. Clean piping before application.

#### **SNAP-AROUND MARKERS:**

One-piece, pre-formed, vinyl construction, snap-around or strap-around pipe markers with applicable labeling, 3/4" min. size for lettering. Provide nylon ties on each end of pipe marker. Seton Setmark or approved equal.

#### SIGNS:

Metal construction, baked porcelain enamel finish signs, sizes conforming to NFPA no. 13 and 7-1.2, with holes and s-hooks/chains for hanging or securing. With applicable labeling. MSI, Seton, W.H. Brady or equal.

#### ENGRAVED NAME PLATES:

White letters on a black background, 1/16" thick plastic laminate, beveled edges, screw mounting, Setonply Style 2060 by Seton Name Plate Company or Emedolite Style EIP by EMED Co., or equal by W. H. Brady.

#### VALVE TAGS:

Round brass tags with 1/2" numbers, 1/4" system identification abbreviation, 1-1/4" minimum diameter, with brass jack chains with brass "S" hooks or one piece nylon ties around the valve stem, available from EMED Co., Seton Name Plate Company, MSI or W. H. Brady.

#### **SEALING**

#### NON-RATED PENETRATIONS:

Pipe Penetrations:

At pipe penetrations of non-rated interior partitions, floors and exterior walls above grade, use urethane caulk in annular space between pipe insulation and sleeve. For non-rated drywall, plaster or wood partitions where sleeve is not required, use urethane caulk in annular space between pipe insulation and wall material.

#### PART 3-EXECUTION

#### **BUILDING ACCESS**

Arrange for the necessary openings in the building to allow for admittance of all apparatus. When the building access was not previously arranged and must be provided by this contractor, restore any opening to its original condition after the apparatus has been brought into the building.

#### **EOUIPMENT ACCESS**

Install all piping, conduit, and accessories to permit access to equipment for maintenance and service.

#### **COORDINATION**

Coordinate all work with other contractors prior to installation. Any work that is not coordinated and that interferes with other contractor's work shall be removed or relocated at the installing contractor's expense.

Verify that all devices are compatible for the type of construction and surfaces on which they will be used.

#### **IDENTIFICATION**

Identify equipment in mechanical equipment rooms by stenciling equipment number and service with one coat of black enamel against a light background or white enamel against a dark background. Use a primer where necessary for proper paint adhesion.

Where stenciling is not appropriate for equipment identification, engraved name plates may be used.

Identify interior piping mains not less than once every 25 feet, not less than once in each room, adjacent to each access door or panel, and on both sides of the partition where exposed piping passes through walls or floors. Place flow directional arrows at each pipe identification location. Use one coat of black enamel against a light background or white enamel against a dark background, or approved pipe marking label systems, or provide snap-around type pipe markers as specified in Part 2 – Products.

Identify valves with signs per NFPA rulings.

Provide hydraulic design information sign of permanently marked weatherproof metal or engraved nameplate material. Secure to alarm valve with brass chain. Information to include location of the design areas, discharge densities, required flow and residual pressure at the base of riser, hose stream demand and sprinkler demand.

#### LUBRICATION

Lubricate all bearings with lubricant as recommended by the manufacturer before the equipment is operated for any reason. Once the equipment has been run, maintain lubrication in accordance with the manufacturer's instructions until the work is accepted by the Owner. Maintain a log of all lubricants used and frequency of lubrication; include this information in the Operating and Maintenance Manuals at the completion of the project.

#### **SEALING**

#### NON-RATED PARTITIONS:

At all interior partitions and exterior walls, pipe penetrations are required to be sealed. Apply sealant to both sides of the penetration in such a manner that the annular space between the pipe sleeve or cored opening and the pipe or insulation is completely blocked.

END OF SECTION

#### SECTION 21 05 29 HANGERS AND SUPPORTS FOR FIRE SUPPRESSION PIPING AND EQUIPMENT

#### PART 1-GENERAL

#### **SCOPE**

This section includes specifications for support of all fire suppression equipment and materials as well as piping system anchors. Included are the following topics:

PART 1 - GENERAL

Scope

Related Work

Reference

Reference Standards

Quality Assurance

Description

**Shop Drawings** 

Design Criteria

PART 2 - PRODUCTS

Manufacturers

Structural Supports

Pipe Hangers and Supports

Beam Clamps

Anchors

**Equipment Stands** 

PART 3 - EXECUTION

Installation

Hanger and Support Spacing

Riser Clamps

Anchors

#### RELATED WORK

Section 21 10 00 – Water-Based Fire Suppression Systems

#### REFERENCE

Applicable provisions of Division 1 shall govern work under this section.

#### REFERENCE STANDARDS

MSS SP-58

NFPA 13 Installation of Sprinkler Systems (Latest prevailing edition).

UL Underwriters' Laboratories Listed.

FM Factory Mutual Approved

#### **QUALITY ASSURANCE**

Substitution of Materials Refer to Section GC - General Conditions of the Contract, Equals and Substitutions.

#### DESCRIPTION

Provide all supporting devices as required for the installation of fire suppression equipment and materials. All supports and installation procedures are to conform to the latest requirements of the ANSI Code for building piping.

Do not hang any fire suppression system item directly from a metal deck or run piping so it rests on the bottom chord of any truss or joist.

Fasteners depending on soft lead for holding power or requiring explosive powder actuation will not be accepted.

Support apparatus and material under all conditions of operation, variations in installed and operating weight of equipment and piping, to prevent excess stress, and allow for proper expansion and contraction.

#### **SHOP DRAWINGS**

Schedule all hanger and support devices indicating attachment method and type of device for each pipe size and type of service. Provide details on the working drawings submitted for approval with all pertinent information listed.

#### **DESIGN CRITERIA**

Materials and application of pipe hangers and supports shall be in accordance with MSS SP-58 Pipe Hangers and Supports – Materials, Design, Manufacture, Selection, Application and Installation unless noted otherwise. Materials and application of pipe hangers and supports shall be in accordance with NFPA rulings and be UL/FM listed and approved.

Piping connected to compressors, or other rotating or reciprocating equipment is to have vibration isolation supports for a distance of one hundred pipe diameters or three supports away from the equipment, whichever is greater. Standard pipe hangers/supports as specified in this section are required beyond the 100 pipe diameter/3 support distance.

#### PART 2-PRODUCTS

#### **MANUFACTURERS**

B-Line, Anvil, Erico, G-Strut, Tolco, Afcon, or approved equal.

#### STRUCTURAL SUPPORTS

Provide all supporting steel required for the installation of mechanical equipment and materials, including angles, channels, beams, etc. to suspended or floor supported tanks and equipment. All of this steel may not be specifically indicated on the drawings.

#### PIPE HANGERS AND SUPPORTS

HANGERS FOR PIPE SIZES 1/2" THROUGH 4":

Carbon steel, adjustable swivel ring with 3/8" min. UL/FM approved hanger rods. B-Line B3170NF, Anvil 69 or 70.

Carbon steel, adjustable clevis, standard, with UL/FM approved size hanger rods. B-Line B3100, Anvil 260.

#### HANGERS FOR PIPE SIZES 4" THROUGH 8":

Carbon steel adjustable swivel ring with ½" min. UL/FM approved hanger rods. B-Line B3170NF, Anvil 69 or 70. Carbon steel, adjustable clevis, standard with UL/FM approved size hanger rods. B-Line B3100, Anvil 260.

#### MULTIPLE OR TRAPEZE HANGERS:

Manufactured steel channel system with manufacturers slotted interlocking pipe clamps with screw/nut securing and threaded hanger rods or steel channels with welded spacers and threaded hanger rods.

#### WALL SUPPORT:

Carbon steel welded bracket with hanger. B-Line 3060 Series, Anvil 190 Series. Steel channels with pipe clamps.

#### VERTICAL SUPPORT:

Carbon steel riser clamp. B-Line B3373, Anvil 261 for above floor use.

#### FLOOR SUPPORT:

Carbon steel pipe saddle, stand and bolted floor flange. B-Line B3088T/B3093.

#### COPPER PIPE SUPPORTS:

All supports, fasteners, clamps, etc. directly connected to copper piping shall be copper plated or polyvinylchloride coated. Where steel channels are used, provide flexible elastomeric/thermoplastic isolation cushion material to completely encircle the piping and avoid contact with the channel or clamp, equal to B-Line B1999 Vibra Cushion or provide manufacturers clamp and cushion assemblies, B-Line BVT series, Grinnell PS 1400 series.

#### PIPE HANGER RODS

#### STEEL HANGER RODS:

Threaded both ends, threaded one end, or continuous threaded, complete with adjusting and lock nuts.

Size rods for individual hangers and trapeze support as indicated in the following schedule.

Pipe Size	<u>Diam. Of Rod</u>
Up to and	
Including 4"	3/8" or 9.5mm min.
5".6" and 8"	½" or 12.7mm min.

#### **BEAM CLAMPS**

MSS SP-58 Types 19 & 23 malleable black iron clamp for attachment to beam flange to 0.62 inches thick with a retaining ring and threaded rod of 3/8, 1/2, and 5/8 inch diameter. Furnish with a hardened steel cup point set screw. B-Line B3036L/B3034, Anvil 86/92.

MSS SP-58 Type 28 or Type 29 forged steel jaw type clamp with a tie rod to lock clamp in place, suitable for rod sizes to 1-1/2 inch diameter. B-Line B3054, Anvil 228.

#### **ANCHORS**

Use welding steel shapes, plates, and bars to secure piping to the structure.

#### **EOUIPMENT STANDS**

Use structural steel members welded to and supported by pipe supports. Clean, prime and coat with three coat rust inhibiting alkyd paint or one coat epoxy mastic. Where exposed to weather, treat with corrosive atmosphere coatings.

#### PART 3-EXECUTION

#### **INSTALLATION**

Size, apply and install supports and anchors in compliance with manufacturers recommendations.

Install supports to provide for free expansion of the piping system. Support all piping from the structure using concrete inserts, beam clamps, ceiling plates, wall brackets, or floor stands. Fasten ceiling plates and wall brackets securely to the structure and test to demonstrate the adequacy of the fastening.

Coordinate hanger and support installation to properly group piping of all trades.

Trim steel hanger rods to within one inch of the final lock nut position. Hanger and support cutoff burrs shall be removed and sharp edges ground smooth.

Where piping can be conveniently grouped to allow the use of trapeze type supports, use standard structural shapes or continuous insert channels for the supporting steel. Where continuous insert channels are used, pipe supporting devices made specifically for use with the channels may be substituted for the specified supporting devices provided that similar types are used and all data is submitted for prior approval.

Perform welding in accordance with standards of the American Welding Society.

#### HANGER AND SUPPORT SPACING

Use hangers with minimum vertical adjustment.

Where several pipes can be installed in parallel and at the same elevation, provide multiple or trapeze hangers.

Support riser piping independently of connected horizontal piping.

Adjust hangers to obtain the slope specified in the piping section of these specifications.

Space hangers for pipe as follows:

Pipe Material	Pipe Size M	ax. Horiz. Spacing	Max. Vert. Spacing
Copper	3/4" through 1"	8'-0"	10'-0"
Copper	1-1/4" through 1-1/2	2" 10'-0"	10'-0"
Copper	2" through 3"	12'-0"	10'-0"
Copper	3-1/2" through 8"	15'-0"	10'-0"
Steel	1" through 1-1/4"	12'-0"	15'-0"
Steel	1-1/2" through 8"	15'-0"	15'-0"
Steel	8" through 12"	15'-0"	20'-0"

Unsupported length from the last hanger and an end sprinkler for steel piping systems shall be as follows:

1" piping	Not greater than 36"
1-1/4" piping	Not greater than 48"
1-1/2" piping	Not greater than 60"
or larger.	

#### RISER CLAMPS

Support vertical piping with clamps secured to the piping and resting on the building structure or secured to the building structure below at each floor. Use method of securing the vertical risers to the building structure below in stairwell locations.

#### **ANCHORS**

Install where indicated on the drawings and details. Where not specifically indicated, install anchors at ends of principal pipe runs and at intermediate points in pipe runs. Make provisions for preset of anchors as required to accommodate both expansion and contraction of piping.

END OF SECTION

#### SECTION 21 10 00 WATER BASED FIRE SUPPRESSION SYSTEMS

#### PART 1-GENERAL

#### **SCOPE**

This section contains specifications for fire suppression pipe and pipe fittings for this project. Included are the following topics:

#### PART 1 - GENERAL

Scope

Related Work

Reference

Reference Standards

**Shop Drawings** 

Quality Assurance

Delivery, Storage, and Handling

Design Criteria

Welder Qualifications

#### PART 2 - PRODUCTS

Fire suppression Piping

Unions and Flanges

Mechanical Grooved Pipe Connections

Sprinkler Heads

Flow Switches

Pressure Switches

Pressure Gauges

Valves

Specialty Valves

Air Compressor

#### PART 3 – EXECUTION

General

Preparation

Erection

Welded Pipe Joints

Threaded Pipe Joints

Mechanical Grooved Pipe Connections

Unions and Flanges

Piping System Leak Tests

Installation

Construction Verification Items

#### RELATED WORK

Section 21 05 00 – Common Work Results for Fire Suppression

Section 21 05 29 – Hangers and Supports for Fire Suppression Piping and Equipment

#### REFERENCE

Applicable provisions of Division 1 govern work under this section.

#### REFERENCE STANDARDS

ANSI A21.4

ANSI A21.11

ANSI A21.51

ANSI B16.1 Cast Iron Pipe Flanges and Flanged Fittings

ANSI B16.3	Malleable and Ductile Iron Threaded Fittings
ANSI B16.4	Cast Iron Threaded Fittings
ANSI B16.5	Pipe Flanges and Flanged Fittings
ANSI B16.9	Factory Made Wrought Steel Buttweld Fittings
ANSI B16.11	Forged Steel Fittings, Socket Welded and Threaded
ASTM A53	Pipe, Steel, Black and Hot-Dipped, Zinc Coated Welded and Seamless
ASTM A105	Forgings, Carbon Steel, for Piping Components
ASTM A126	Gray Cast Iron Castings for Valves, Flanges, and Pipe Fittings
ASTM A135	Electric Resistance Welded Steel Pipe
ASTM A181	Forgings, Carbon Steel for General Purpose Piping
ASTM A234	Pipe Fittings of Wrought Carbon Steel and Alloy Steel for Moderate and Elevated Temperatures
ASTM A536	Ductile Iron Castings
ASTM A795	Black and Hot Dipped Zinc Coated (Galvanized) Welded and Seamless Steel Pipe for Fire
	Protection Use
AWS D10.9	Qualification of Welding Procedures and Welders for Piping and Tubing, Level AR3
NFPA 13	Installation of Sprinkler Systems. (Latest prevailing edition)
UL	Underwriters' Laboratories Listing
FM	Factory Mutual Approval

#### **SHOP DRAWINGS**

Schedule from the contractor indicating the ANSI/ASTM specification number of the pipe being proposed along with its type and grade, if known at the time of submittal, and sufficient information to indicate the type and rating of fittings for each service.

#### **QUALITY ASSURANCE**

Substitution of Materials: Refer to Section GC – General Conditions of the Contract, Equals and Substitutions. Order steel pipe with each length marked with the name or trademark of the manufacturer and type of pipe; with each shipping unit marked with the purchase order number, metal or alloy designation, temper, size, and name of supplier.

Any installed material not meeting the specification requirements must be replaced with material that meets these specifications without additional cost to the Owner.

#### DELIVERY, STORAGE, AND HANDLING

Promptly inspect shipments to ensure that the material is undamaged and complies with specifications.

Cover pipe to prevent corrosion or deterioration while allowing sufficient ventilation to avoid condensation. Do not store materials directly on grade. Protect pipe, tube, and fitting ends so they are not damaged. Where end caps are provided or specified, take precautions so the caps remain in place. Protect fittings, flanges, and unions by storage inside or by durable, waterproof, above ground packaging.

Offsite storage agreements will not relieve the contractor from using proper storage techniques.

Storage and protection methods must allow inspection to verify products.

#### **DESIGN CRITERIA**

Use only new material, free of defects, rust and scale, and meeting the latest revision of ASTM specifications as listed in this specification.

Construct all piping systems for the highest pressures and temperatures in the respective system but not less than 175 psig.

Where weld fittings are used, use only long radius elbows having a centerline radius of 1.5 pipe diameters.

Where mechanical grooved fittings are used, use only ASTM standard radius fittings, short radius grooved fittings are not allowed.

Where ASTM A53 or A795 type F pipe is specified, grade A type E or S, or grade B type E or S may be substituted at Contractor's option. Where ASTM A135 grade A pipe is specified, grade B pipe may be substituted at Contractor's option. Where the grade or type is not specified, Contractor may choose from those commercially available.

#### WELDER QUALIFICATIONS

Welding procedures, welders, and welding operators for all building service piping to be in accordance with certified welding procedures of the National Certified Pipe Welding Bureau and Section 927.5 of ASME B31.9 Building Services Piping or AWS 10.9 Qualification of Welding Procedures and Welders for Piping and Tubing. Before any metallic welding is performed, Contractor to submit his Standard Welding Procedure Specification together with the Procedure Qualification Record as required by Section 927.6 of ASME B31.9 Building Services Piping.

The Architect or Engineer reserves the right to test the work of any welder employed on the project, at the Owner's expense. If the work of the welder is found to be unsatisfactory, the welder shall be prevented from doing further welding on the project and all defective welds replaced.

#### PART 2-PRODUCTS

#### FIRE SUPPRESSION PIPING

STEEL PIPE:

Black steel pipe welded and seamless, Type F, Grade A, ASTM A53; black welded and seamless steel pipe for fire protection use, Type F, ASTM A795; electric resistance welded steel pipe, Grade A, ASTM A135.

Pipe wall Thickness:

Threaded pipe shall have a minimum wall thickness of schedule 40.

All other pipe shall have a minimum wall thickness of schedule 10.

Piping 2" and under shall be minimum schedule 40 unless stated otherwise herein.

Fittings: Cast iron threaded fittings, Class 125 or 250, ASTM A126/ANSI B16.4. Malleable and ductile iron threaded fittings, Class 150 or 300, ASTM A197/ANSI B16.3. Standard weight seamless carbon steel weld fittings, ASTM A234 grade, ANSI B16.9. Mechanical grooved fittings with EPDM gaskets, ASTM A536 ductile iron, ASTM A47 malleable iron or ASTM A53 fabricated steel. For wet pipe systems mechanical tee fittings with full iron back equal to Grinnell Figure 730 will be allowed only as needed for connection to existing systems. Outlets for drypipe and preaction systems shall be mechanical tees. Mechanical tees with U-bolt back or other fastening means are not allowed.

Welding Materials: Comply with Section II, Part C, ASME Boiler and Pressure Vessel Code for welding materials.

Finish: Hot dipped zinc coated (galvanized) finish on piping and fittings shall be used in drypipe and pre-action systems, piping exposed to weather and piping exposed to corrosive environments where indicated. Thread or grooved hot dipped zinc coated pipe ends for fitting connections. Indoor dry standpipe systems supplied by a Fire Dept. connection only may be black steel piping and fittings.

#### UNIONS AND FLANGES

2" AND SMALLER STEEL:

ASTM A197/ANSI B16.3 malleable iron unions with brass seats. Use black malleable iron on black steel piping and galvanized malleable iron on galvanized steel piping. Grooved couplings may be used in lieu of unions.

#### 2-1/2" AND LARGER:

ASTM A181 or A105, Class 150, grade 1 hot forged steel flanges of threaded, welding neck, or slip-on pattern on black steel and threaded only on galvanized steel. ANSI B16.1 or ANSI B16.5, Class 150 cast iron threaded flanges. Use raised face flanges ANSI B16.5 for mating with other raised face flanges or equipment with flat ring or full-face gaskets. Use ANSI B16.1 flat face flanges with full face gaskets for mating with other flat face flanges on equipment.

#### MECHANICAL GROOVED PIPE CONNECTIONS

Mechanical grooved pipe couplings and fittings, ASTM F1476, as manufactured by Victaulic, Anvil, or Grinnell may be used with steel pipe. Mechanical grooved components and assemblies to be rated for minimum 175 psi working pressure unless noted otherwise.

All mechanical grooved pipe material including gaskets, couplings, fittings and flange adapters shall be from the same manufacturer.

Couplings and fittings to be malleable iron, ASTM A47, or ductile iron A536 with painted finish. Fittings used on galvanized steel pipe to have galvanized finish, ASTM A153.

Gaskets to be EPDM, ASTM D2000. Gaskets for dry systems to be flush seal design. Heat treated carbon steel oval neck track bolts and nuts, ASTM A-183, with zinc electroplated finish.

Flange adapters to be ductile iron, ASTM A536; except at lug type butterfly valves where standard threaded flanges shall be used.

Credit for the inherent flexibility of mechanical grooved pipe connections when used for expansion joints or flexible connectors may be allowed upon specific application by the Contractor. Three flexible couplings at first three connection points both upstream and downstream of pumps may be used in lieu of flexible connectors. Request for expansion joints shall be made in writing and shall include service, location, line size, proposed application and supporting calculations for the intended service.

#### SPRINKLER HEADS

Manufacturer: Sprinkler head model numbers establish type and style of head. Products of the following manufacturers determined to be equal by the Architect/Engineer will be accepted: Tyco, Reliable, Victaulic, Viking, and Globe.

Standard coverage sprinkler heads are to be the basis for design unless noted otherwise on the plans or within these specifications.

Fusible link or glass bulb type, cast brass or bronze construction. Provide heads with nominal 1/2" or 17/32" discharge orifice except where greater than normal density requires large orifice.

Select fusible link or glass bulb temperature rating to not exceed maximum ambient temperature rating allowed under normal conditions at installed location. Provide ordinary temperature (155 to 165 degree) fusible link or glass bulb type except at skylights, sealed display windows, unventilated attics and roof spaces, over cooking equipment, adjacent to diffusers, unit heaters, uninsulated heating pipes or ducts, mechanical rooms, storage rooms, or where otherwise indicated.

Provide quantity of spare heads as noted below and 1 wrench for each type of head and each temperature range installed. Provide 6 spare heads per 300 or less installed heads, 12 per 1000 or less and 24 for more than 1000. Provide steel cabinet for storage of heads and wrenches. Provide an equal number of concealed cover plates and/or sprinkler escutcheons for each spare sprinkler head.

Quick Response Upright: Viking Microfast M (QR), brass finish.

#### FLOW SWITCHES

Vane type waterflow switch with metal enclosure, adjustable pneumatic retard and electrical characteristics compatible with alarm system.

#### PRESSURE SWITCHES

Pressure actuated switch with field adjustable settings, metal enclosure and electrical characteristics compatible with alarm system.

#### PRESSURE GAUGES

Manufacturer: Ametek/U. S. Gauge Division, Ashcroft, Marsh, Taylor, H. O. Trerice, Weiss, Weksler.

Cast aluminum, stainless steel, brass, polycarbonate or ABS case of not less than 3.5 inches in diameter, double strength glass window, black lettering on a white background, phosphor bronze bourdon tube with bronze bushings, recalibration from the front of the dial, 99% accuracy over the middle half of the scale, 98.5% accuracy over the remainder of the scale. Include bronze 3-way globe valve with plugged outlet for Fire Inspector's test gauge.

#### **VALVES**

Manufacturers: Kennedy, Milwaukee, Nibco, Stockham, Victaulic, or Watts.

#### **BALL VALVES:**

2" and smaller: Bronze, 2-piece, threaded or sweat ends, standard port, blowout proof stem, chrome plated ball, glass reinforced seats, UL approved @ 250 psi. Watts No. B-6000 UL.

#### GATE VALVES:

2" and smaller: Outside screw and yoke gate valves, 175 psig, bronze body, bronze mounted, screwed bonnet, rising stem, solid wedge, with normally open tamper switch with double wire leads.

2-1/2" and larger: Outside screw and yoke gate valves, 175 psig, cast iron body, bronze mounted, bolted bonnet, rising stem, solid wedge, with normally open tamper switch with double wire leads.

#### **BUTTERFLY VALVES:**

2" and smaller: Bronze body butterfly valve, 175 psig, geared operator, visible position indicator, normally open tamper switch with double wire leads, Buna or Viton seat, stainless steel disc and stem.

2" and larger: Cast or ductile iron body butterfly valve, lug style or grooved, 175 psig, geared operator, visible position indicator, normally open tamper switch with double wire leads, EPDM resilient seat, EPDM seals, nickel plated ductile iron disc. Valve assembly to be bubble tight to 175 psig with no downstream flange/pipe attached. Use cap screws for removal of downstream piping while using the valve for system shutoff.

#### SUPERVISORY/TAMPER SWITCHES:

For O S & Y valve or butterfly valve installations, UL/FM listed/approved, to monitor position of valve, tamper resistant cover screws, single or double SPDT switch contacts, corrosion resistant, for indoor or outdoor use, NEMA 4 & 6P enclosures.

#### CHECK VALVES:

3" and smaller: Bronze body, threaded end, Y-pattern, regrindable bronze seat, renewable bronze disc, 175 psig, suitable for installation in a horizontal or vertical line with flow upward.

2-1/2" and larger: Cast or ductile iron body, flanged or grooved ends, bronze trim, bolted cap, renewable bronze seat and disc, 175 psig, suitable for installation in a horizontal or vertical line with flow upward.

Provide 1/2" automatic drip drain on inlet of fire dept. connection check valve.

#### SPRING LOADED CHECK VALVES:

2" and smaller: Bronze body, threaded ends, bronze trim, stainless steel spring, stainless steel center guide pin, 175 psig, teflon seat unless only bronze available.

2-1/2" and larger: Cast or ductile iron body, wafer or globe type, bronze trim, bronze or EPDM seat, stainless steel spring, stainless steel stem if stem is required, 175 psig.

#### DRAIN VALVES:

3/4" minimum, two-piece bronze body ball valve; threaded ends, chrome plated bronze ball; glass filled teflon seat; teflon packing and threaded packing nut; blowout-proof stem; 400 psig WOG, with hose thread outlet and cap.

#### SPECIALTY VALVES

Manufacturer: Tyco, Reliable, Victaulic, Viking, and Globe.

#### DRY PIPE VALVES:

Cast or ductile iron body, flanged or grooved ends, 175 psig, bronze grooved seat with o-ring seal, single hitch pin and latch design. Provide trim for air supply, drain, priming level, alarm connections, pressure gages, priming chamber attachment, ball drip valves, drip cup assembly piped to floor or hub drain, fill line attachment with strainer.

#### AIR PRESSURE MAINTENANCE DEVICE:

Automatic control capable of maintaining system air pressure, rated for 175 psig, adjustable air pressure range of 15 to 60 psig, complete with isolation valves, bypass fill valve, pressure regulator or pressure switch and strainer.

#### AIR COMPRESSOR

Manufacturer: Quincy, Ingersoll Rand, Nash, and Viking.

Multi-Zone and large systems: Simplex electric motor belt driven oil lubricated compressor mounted on ASME rated galvanized receiver tank, pressure operated electric switch, motor, magnetic motor starter with three phase overload protection, fused disconnect switch, safety relief valve, check valve, shutoff valve, pressure gauge, automatic tank drain, intake muffler-filter, belt guard and adjustable operating pressure control.

Single zone and small systems: Riser pipe mounted air compressor installation. Electric motor driven, air cooled, oil-less, adjustable, single stage compressor. With check valve, pressure switch, pressure relief valve, mounting bracket kit and air filter assembly. Equal to Viking model E-1.

#### PART 3-EXECUTION

#### **GENERAL**

Install pipe fittings, and other fire suppression system components in accordance with reference standards, manufacturers recommendations and recognized industry practices.

#### **PREPARATION**

Cut pipe ends square. Ream ends of piping to remove burrs. Clean scale and dirt from interior and exterior of each section of pipe and fitting prior to assembly.

#### ERECTION

Install all piping parallel to building walls and ceilings and at heights which do not obstruct any portion of a window, doorway, stairway, or passageway. Where interferences develop in the field, offset or reroute piping as required to clear such interferences. Coordinate locations of fire protection piping with piping, ductwork, conduit and equipment of other trades to allow sufficient clearances. In all cases, consult drawings for exact location of pipe spaces, ceiling heights, ceiling grid layout, light fixtures and grilles before installing piping.

Provide 3/32" min. thickness steel nailing plates behind or on either side of piping where the possibility of penetration from nails or drywall screws exists.

Maintain piping in clean condition internally during construction.

Provide clearance for access to valves and piping specialties.

Provide anchors, expansion joints, swing joints and/or expansion loops so that piping may expand and contract without damage to itself, equipment, or building.

Install piping so that system can be drained. Where possible, slope to main drain valve. Slope dry pipe and preaction systems subject to freezing at minimum 1/4"/10' on mains and 1/2"/10' on branches. Where piping not susceptible to freezing cannot be fully drained, install nipple and cap for drainage of less than 5 gallons or ball valve with hose thread outlet and cap for drainage over 5 gallons. Pipe main drain valve to grade or to air gap sewer receptor.

Mitered ells, notched tees, and orange peel reducers are not acceptable. On threaded piping, bushings are not acceptable.

Do not route piping within exterior walls.

Do not route piping through transformer vaults or above transformers, panelboards, or switchboards, including the required service space for this equipment, unless the piping is serving this equipment.

Install all valves and piping specialties, including items furnished by others, as specified and/or detailed. Provide access to valves and specialties for maintenance. Make connections to all equipment, fixtures and systems installed by others where same requires the piping services indicated in this section.

#### WELDED PIPE JOINTS

Make all welded joints by fusion welding in accordance with ASME Codes, ANSI B31, and State Codes where applicable. "Weldolets" and "Threadolets" may be used up to following sizes:

Maximum	
Weldolet/	Main
Threadolet	Pipe
Diameter	Diameter
3/4"	11/4"
1"	11/2"
11/4"	2"
11/2"	2½"
2"	3"
3"	4"
4"	6"
6"	8"

#### THREADED PIPE JOINTS

Use a thread lubricant or teflon tape when making joints; no hard setting pipe thread cement or caulking will be allowed.

#### MECHANICAL GROOVED PIPE CONNECTIONS

Use pipe factory grooved in accordance with the coupling manufacturer's specifications or field grooved pipe in accordance with the same specifications using specially designed tools available for the application. Lubricate pipe and coupling gasket, align pipe, and secure joint in accordance with the coupling manufacturer's specifications.

#### UNIONS AND FLANGES

Install a union, flange or grooved coupling combination at each connection to each piece of equipment and at other items which may require removal for maintenance, repair, or replacement. Where a valve is located at a piece of equipment, locate the flange or union or grooved coupling combination connections on the equipment side of the valve. Concealed unions, flanges or couplings are not acceptable.

#### PIPING SYSTEM LEAK TESTS

Conduct pressure test with test medium of water. If leaks are found, repair the area with new materials and repeat the test; caulking will not be acceptable.

Test piping in sections or entire system as required by sequence of construction. Do not conceal pipe until it has been successfully tested. If required for the additional pressure load under test, provide temporary restraints at fittings or expansion joints. Entire test must be witnessed by the Division's representative.

Use clean water and remove air from the piping being tested where possible. Measure and record test pressure at the high point in the system.

Test system at 200 psi for 2 hours showing no leakage. Where system design is in excess of 150 psig, test at a pressure 50 psig above system design pressure.

All pressure tests are to be documented on NFPA Contractor's Material and Test Certificate forms.

#### **INSTALLATION**

Install fire protection system components in accordance with NFPA rulings, listings and manufacturers recommendations. Locate where accessible for servicing and replacement.

Sprinkler Heads: Locate sprinkler heads as indicated on fire protection plan and reflected ceiling plan maintaining minimum clearances from obstructions, ceilings and walls. Install sprinkler heads level in locations not subject to spray pattern interference. Provide fire sprinkler head installations below ductwork, soffits, etc.

Switches: Locate flow and pressure switches where indicated and where required to obtain specified zoning to isolate floors and major areas of floors. Provide valved test connection for flow switch adjacent to flow switch. Pipe to floor drain. Test flow switch to verify proper operation.

Gauges: Provide a valved pressure gauge in main fire protection riser, at the top of each piping riser, at inlet and outlet of pump and elsewhere as indicated.

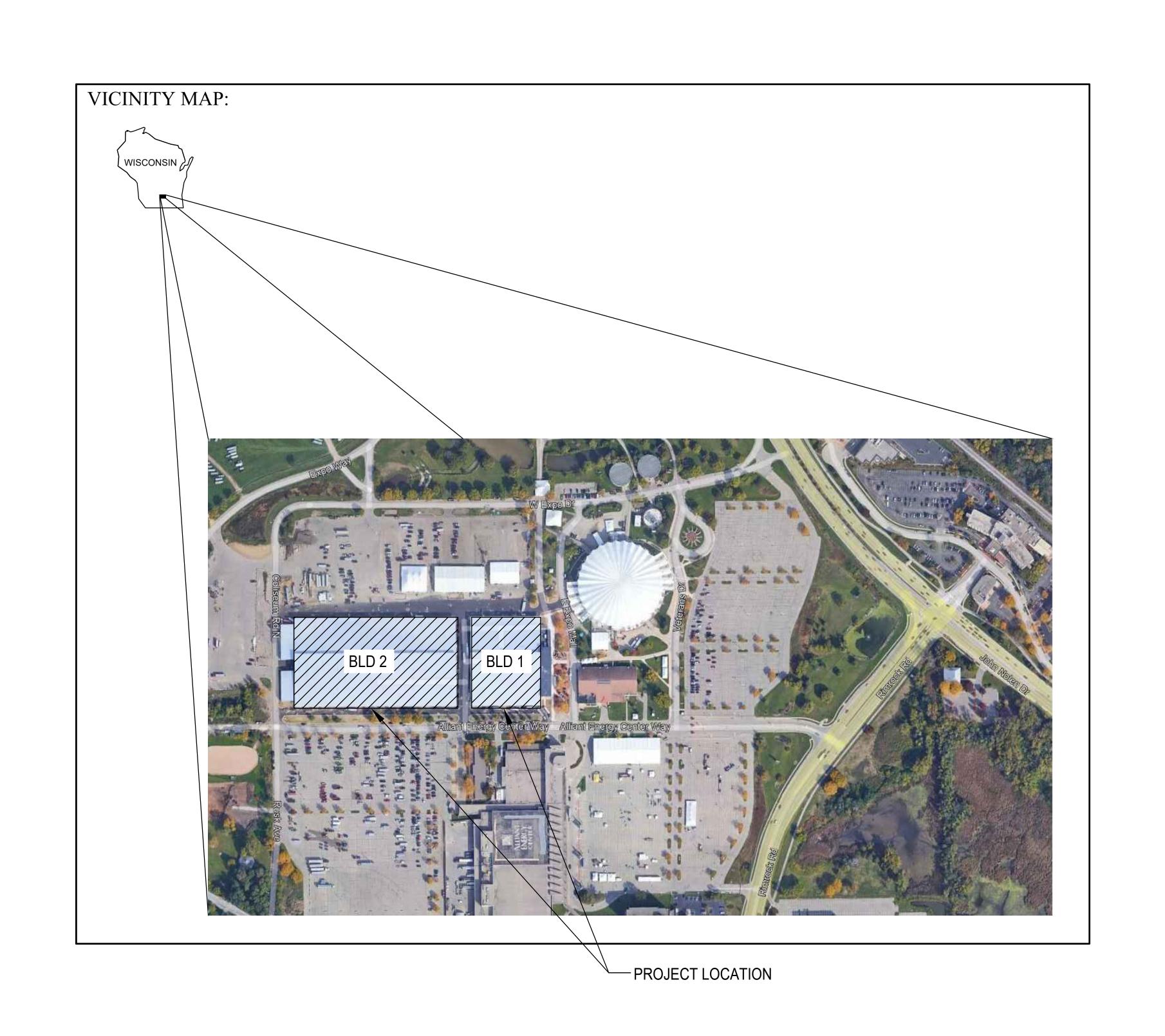
Valves: Properly align piping before installation of valves. Do not support weight of piping system on valve ends. Mount valves in locations which allow access for operation, servicing and replacement. Install all valves with the stem in the upright or horizontal position. Valves installed with the stems down will not be accepted. Provide a riser shutoff valve and a capped hose thread drain valve at the bottom of each riser. Provide capped hose thread drain valves to allow draining of each portion of piping.

Specialty Valves: Install in vertical position fire protection riser. Install trim recommended by manufacturer including drain and test valves. Pipe drains to hub or floor drains. Test and adjust operation of valves, alarms, pressure maintenance devices, emergency pull boxes and deluge/preaction controls.

Air Compressor: Install on concrete housekeeping pad, leveled and bolted in place. Pipe automatic drain discharge piping to floor drain. Install line size ball valve and check valve in discharge line. Install pressure gauge upstream of ball valve.

END OF SECTION

# RFB NO. 322030 FIRE PROTECTION UPGRADES ALLIANT ENERGY CENTER PAVILIONS 1 & 2 1919 ALLIANT ENERGY CENTER WAY MADISON, WI 53713



# FIRE PROTECTION DRAWING INDEX

TITLE SHEET - FIRE PROTECTION
FIRE PROTECTION GENERAL NOTES, SYMBOLS AND ABBREVIATIONS
EXISTING SYSTEM RISER DETAILS AND NOTES
FIRST FLOOR FIRE PROTECTION PLAN - AREA 'A NORTH' - BLD 1

FIRST FLOOR FIRE PROTECTION PLAN - AREA 'C SOUTH' - BLD 2

FIRST FLOOR FIRE PROTECTION PLAN - AREA A NORTH - BLD 1 F202 FIRST FLOOR FIRE PROTECTION PLAN - AREA 'A SOUTH' - BLD 1 F203 FIRST FLOOR FIRE PROTECTION PLAN - AREA 'B NORTH' - BLD 2 F204 FIRST FLOOR FIRE PROTECTION PLAN - AREA 'B SOUTH' - BLD 2 F205 FIRST FLOOR FIRE PROTECTION PLAN - AREA 'C NORTH' - BLD 2 TALILOBAED

TALILOBEED

1600 N High Point Rd, Middleton, WI 53562
Project: #22005
Project: #22005

REVISIONS

DESCRIPTION.

FIRE PROTECTION UPGRADES

RGY CENTER PAVILIONS #1 AND #2 UPGRADE

ROTECTION

ALLIANT ENERGY CENTEINLE SHEET - FIRE PROTECTION

DDRESS:

PROJECT NUMBER

22005

DATE

07-14-2022

DRAWN BY

RAWN BY

KH

HECKED BY

TB

F000

THE GENERAL CONDITIONS AND SUPPLEMENTAL GENERAL CONDITIONS ISSUED BY THE ARCHITECT SHALL GOVERN WHERE APPLICABLE. ENTIRE INSTALLATION SHALL BE PERFORMED IN A FIRST-CLASS

OPERATIONAL; ACCEPTANCE BY THE OWNER SHALL BE A CONDITION WITH

OTHER TRADES IN ORDER TO AVOID INTERFERENCES, PRESERVE

MAXIMUM HEADROOM AND AVOID OMISSIONS. CONTRACTOR TO MAKE ALL NECESSARY TAPS, AS CALLED FOR ON THE CONTRACTOR SHALL REMOVE ALL DEBRIS ON COMPLETION OF THE JOB

AND CLEAN ALL FIXTURES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO START-UP, ADJUST AND CHECK FOR PROPER OPERATION, ALL EQUIPMENT INSTALLED UNDER THIS CONTRACT.

ALL EQUIPMENT INSTALLED UNDER HIS CONTRACT FOR A PERIOD OF ONE USUSPENDED CEILING EXIST. (1) YEAR FROM DATE OF FINAL INSPECTION OF THE WORK. CONTRACTOR SHALL SUBMIT TO THE ARCHITECT, ENGINEER, OWNERS INSURANCE UNDERWRITER, AND LOCAL FIRE DEPARTMENT FOR APPROVAL COMPLETE INSTALLATION AND DESIGN DRAWINGS SHOWING THE SPRINKLER SYSTEM LAYOUTS THE LAYOUT SHALL INDICATE ALL OF

DETAILS OF ANCHORS AND SUPPORTS AS REQUIRED. THE SPRINKLER SYSTEM SHALL BE LAID OUT TO ELIMINATE ALL CONFLICTS BETWEEN THE SPRINKLER SYSTEM AND THE STRUCTURE INCLUDING THE MECHANICAL AND ELECTRICAL SYSTEMS AS THEY ARE SHOWN ON THE CONTRACT DRAWINGS.

THE LAYOUT SHALL INDICATE COORDINATION BETWEEN SUCH ITEMS AS DUCTWORK, LIGHTS, STRUCTURAL MEMBERS, ETC. PIPE FOR ABOVE GRADE SHALL BE NEW SCHEDULE 40 FOR BRANCHES AND SCHEDULE 10 FOR MAINS, STANDARD WEIGHT STEEL DESIGNED FOR 175 LB. WORKING PRESSURE, CONFORMING TO A.S.A. B36.10 MANUFACTURED IN THE U.S. FITTINGS SHALL BE NEW 125 LB. CAST IRON SCREWED OR FLANGED

CONFORMING TO A.S.A. B16.4, MANUFACTURED IN THE U.S. AND APPROVED FOR FIRE PROTECTION SPRINKLER SYSTEMS. THE SPRINKLER RISERS, MAINS AND BRANCH PIPING SHALL BE SUPPORTED FROM THE BUILDING STRUCTURE, USING APPROVED TYPE STEEL HANGERS, BRACKETS, ANCHORS AND STUDS, OF SIZE AND NUMBER IN ACCORDANCE WITH N.F.P.A. #13.

THE SPRINKLER SYSTEM SHALL BE INSTALLED IN CONFORMANCE WITH PAMPHLET 13 OF THE NATIONAL FIRE PROTECTION ASSOCIATION AND ALL REQUIREMENTS OF THE LOCAL FIRE DEPARTMENT AND OWNER'S INSURANCE UNDERWRITER.

ALL PIPING ABOVE GRADE SHALL BE HYDROSTATICALLY TESTED AT 200 PSIG FOR A TWO-HOUR PERIOD IN ACCORDANCE WITH N.F.P.A. #24. CONTRACTOR IS RESPONSIBLE FOR SPACING, PIPE SIZE, OFFSETS, CLEARANCES, VALVES, ELBOWS, HANGERS, ALL ACCESSORIES AND QUANTITIES FOR ALL.

ALL MECHANICAL ROOMS AND STORAGE ROOMS SHALL BE DESIGNED FOR ORDINARY HAZARD, GROUP I OCCUPANCY. CONTRACTOR SHALL DESIGN AND INSTALL A COMPLETE SPRINKLER

SYSTEM PER NFPA AND LOCAL CODES.

GENERAL FIRE PROTECTION NOTES SPRINKLER CONTRACTOR SHALL UTILIZE EXISTING BRANCH PIPING WHERE POSSIBLE TO SUPPLY NEW SPRINKLER HEADS IN NEW LOCATIONS.

SPRINKLER SYSTEM TO BE DESIGNED BY THE SPRINKLER CONTRACTOR. WORKMANLIKE MANNER. THE COMPLETED SYSTEMS SHALL BE FULLY | THIS CONTRACTOR TO VERIFY QUANTITY AND LOCATION OF HEADS AS PART OF DESIGN BUILD CONTRACT.

ALL FIRE PROTECTION WORK TO BE EXECUTED IN STRICT CONFORMANCE WITH NFPA 70 AND LOCAL CODES AND AMENDMENTS. THE SYSTEM SHALL BE GUARANTEED FOR MINIMUM OF ONE (1) YEAR FROM THE DATE OF FINAL ACCEPTANCE BY OWNER/ARCHITECT. COORDINATE LOCATIONS OF ALL RISER. COORDINATE INSTALLATION OF

ALL FIRE PROTECTION WORK, WITH OTHER TRADES. NOTIFY ARCHITECT OF ANY DISCREPANCIES PRIOR TO BEGINNING ANY SUCH INSTALLATION. CONTRACTOR TO SECURE ALL NECESSARY PERMITS AND APPROVALS FROM AUTHORITY HAVING JURISDICTION. CONTRACTOR SHALL ALLOW IN HIS INITIAL BID THE COST OF SERVICE ON SPRINKLER HEADS SHALL BE PLACED IN CENTER OF TILES WHERE

COORDINATION WITH OTHER TRADES IS A MUST PRIOR TO ANY INSTALLATION. SEE ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR EXACT CEILING SPACE AVAILABLE. FIRE PROTECTION CONTRACTOR IS RESPONSIBLE FOR ANY INSPECTIONS, THE SPRINKLER PIPING, SPRINKLER HEAD LOCATIONS, EQUIPMENT AND PERMITS, REQUIRED PRIOR TO INSTALLATION.

NEW FIRE EXTINGUISHER CABINETS TO BE LARSEN'S VERTICAL DUE CLEAR ACRYLIC FULLY RECESSED CABINET. ALL NEW FIRE PROTECTION PIPING SHALL BE SUSPENDED WITH CLEVIS AND/OR TRAPEZE PIPE HANGERS. ALL NEW PIPE PASSING THRU WALLS SHALL HAVE A GALVANIZED SHEET

METAL OR SCHEDULE 40 STEEL PIPE SLEEVE INSTALLED AROUND THE PIPE PITCH ALL NEW FIRE PROTECTION PIPING TO DRAIN COMPLETELY THROUGH EXISTING DRAIN VALVES.

MINIMUM PIPE SIZE SHALL BE 1 INCH. ANY REDUCING OF SIZE SHALL OCCUR AT SPRINKLER HEAD CONNECTION.

ALL UNUSED OPENINGS IN EXISTING PIPING SHALL BE CAPPED OR

# FIRE PROTECTION SYMBOLS & ABBREVIATIONS

### NOTE: NOT ALL SYMBOLS AND ABBREVIATIONS INDICATED IN THE LEGEND APPLY TO THIS PROJECT.

FIRE PROTECTION SYSTEMS **DESCRIPTION** <u>ABBREVIATION</u> EXISTING PIPING TO BE REMOVED/ ABANDONED EXISTING PIPING TO REMAIN ----XSPR-----SPRINKLER PIPING ------SPR------

SYMBOLS **ABBREVIATIONS ABBREVIATION ABBREVIATION DESCRIPTION** ABOVE FINISHED FLOOR ACCESS PANEL SIDEWALL SPRINKLER **─** BELOW FINISHED FLOOR <u>₹⊗⊗₹</u> Brake Horsepower BUILDING BOTTOM OF PIPE BOTTOM OF STRUCTURE DOUBLE CHECK VALVE ASSEMBLY CAST IRON CENTER LINE FLOW SWITCH DIAMETER ANGLE VALVE - FIRE HOSE CONNECTION DRAWING TEST AND DRAIN VALVE ELECTRICAL CONTRACTOR FIRE DEPARTMENT CONNECTION EXPANSION JOINT EQUIPMENT FIRE PUMP TEST CONNECTION EXISTING TO REMAIN EXISTING FIRE HYDRANT DEGREES FAHRENHEIT FOOD EQUIPMENT CONTRACTOR TEE (BRANCH TO SIDE) FIRE PROTECTION CONTRACTOR TEE (BRANCH DOWN) FOOT OR FEET GALLON GENERAL CONTRACTOR RISER DOWN GALLON PER MINUTE CLEANOUT HVAC CONTRACTOR WALL CLEANOUT MERCURY HORSEPOWER YARD CLEANOUT INVERT ELEVATION POUNDS MAXIMUM 1000 BRITISH THERMAL UNITS/HOUR MECHANICAL MEZZANINE MINIMUM PRESSURE REGULATING VALVE METER SOLENOID VALVE NOT IN CONTRACT NOT TO SCALE POINT OF CONNECTION ——— OR **↔** PLUMBING CONTRACTOR PRELIMINARY SHUT-OFF VALVE PRESSURE PRESSURE SWITCH PIPE STRAINER POUNDS PER SQUARE FOOT VALVE IN RISER POUNDS PER SQUARE INCH PRESSURE GAUGE POLYVINYL CHLORIDE ROUGH-IN CONTINUATION REVOLUTIONS PER MINUTE FINISHED FLOOR ELEVATION SQUARE FEET EQUIPMENT IDENTIFICATION STRUCTURAL/STRUCTURE TAMPER SWITCH KEYED NOTE VACUUM BREAKER DRAWING REVISION BRANCH VALVE/ ROAD BOX

victaulic.com | NXT Dry Valve | Series 768 | Publication 30.80

SPRINKLER SYMBOLS

PROJECT SUBMISSION

INSTALLING CONTRACTOR SHALL SUBMIT ALL DRAWINGS AND

HYDRAULIC CALCULATIONS TO THE CITY OF MADISON FIRE

DEPARTMENT, 314 W. DAYTON ST, MADISON, WISCONSIN -

ATTENTION BILL SULLIVAN, FIRE PROTECTION ENGINEER.

OF JURISDICTION (AJ).

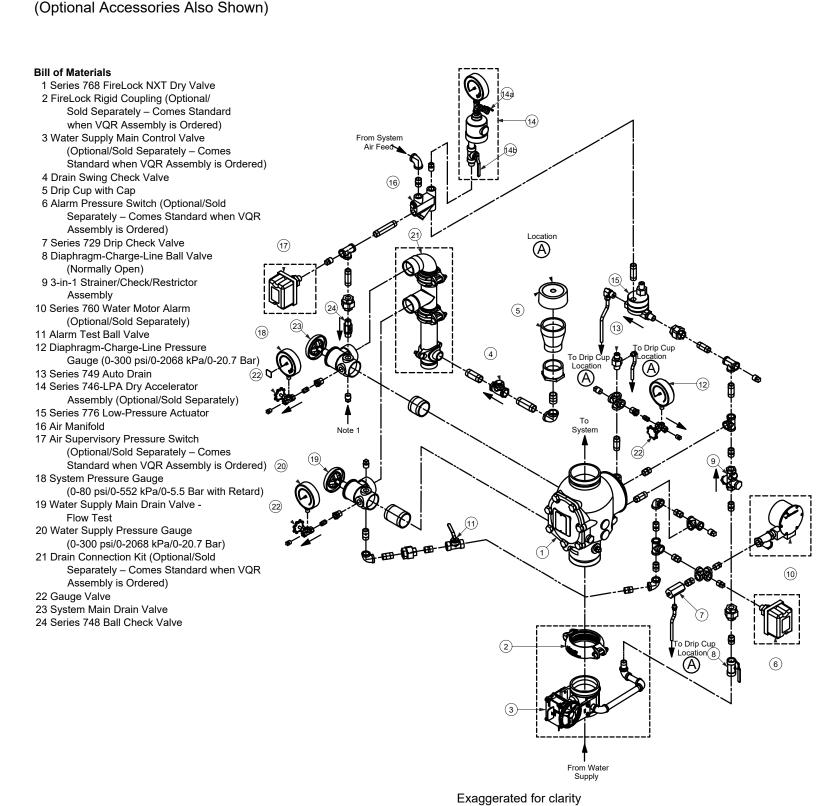
OFFICE NUMBER IS 608-261-9658. THEY ARE THE AUTHORITY

EQUAL TO VIKING MODEL #VK001.

Exploded View Drawing -**Trim Components** 

( SUL) US FM Trim)

Series 768 FireLock NXT Dry Valve

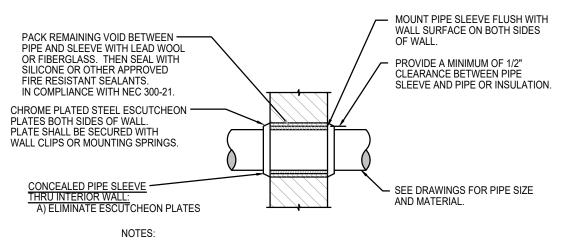


Optional devices include the Series 75D Water Column Device Kit and the Series 75B Supplemental Alarm Kit.

For installation of the Series 75B Supplemental Alarm Device, refer to the instructions supplied with the product.

VICTAULIC SERIES 768 FIRELOCK NXT DRY VALVE DETAIL

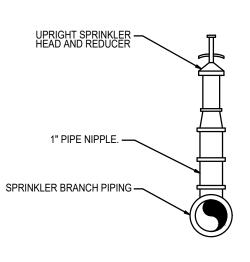
THIS DETAIL IS FOR REFERENCE - NEW DRY VALVE ASSEMBLIES BEING INSTALLED SHALL MEET THIS UNIT. THIS IS THE UNIT THAT IS CURRENTLY INSTALLED ON THE PROJECT.



1. CONTRACTOR SHALL ISOLATE ALL PIPES FROM CONSTRUCTION WHICH VIBRATE IN ORDER TO AVOID TRANSMISSION TO STRUCTURE.

2. CONTRACTOR SHALL BE RESPONSIBLE FOR THE COORDINATION OF THEIR SLEEVES WITH OTHER TRADES AND/OR CONTRACTORS. 3. PIPE SLEEVES THRU SMOKE OR FIRE WALLS SHALL BE IN COMPLIANCE WITH

EXPOSED PIPE SLEEVE THRU INTERIOR WALL DETAIL

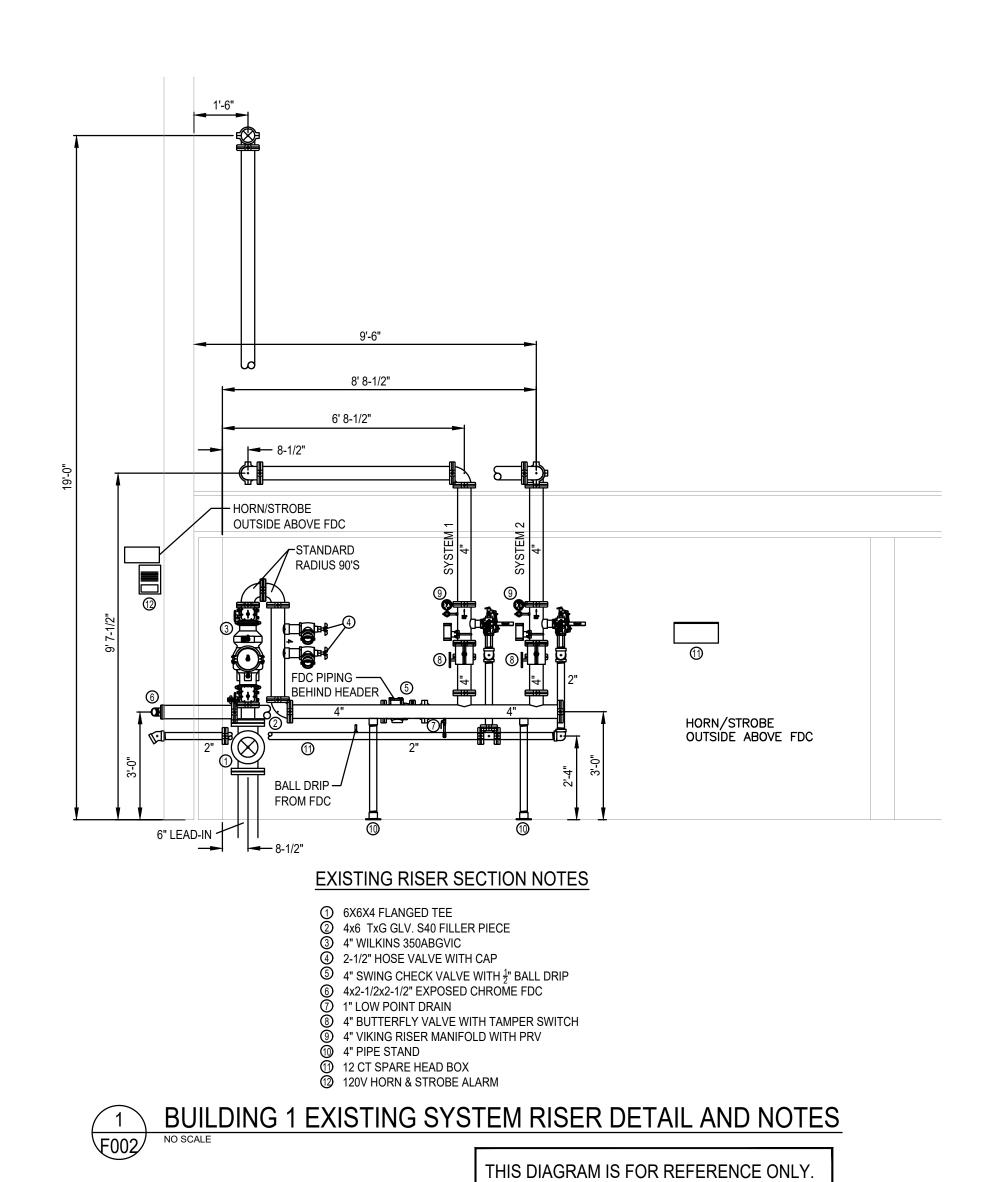


TYPICAL UPRIGHT SPRINKLER HEAD DETAIL

FIRE PROTECTION UPGRADES 30 RFB NO. 3220

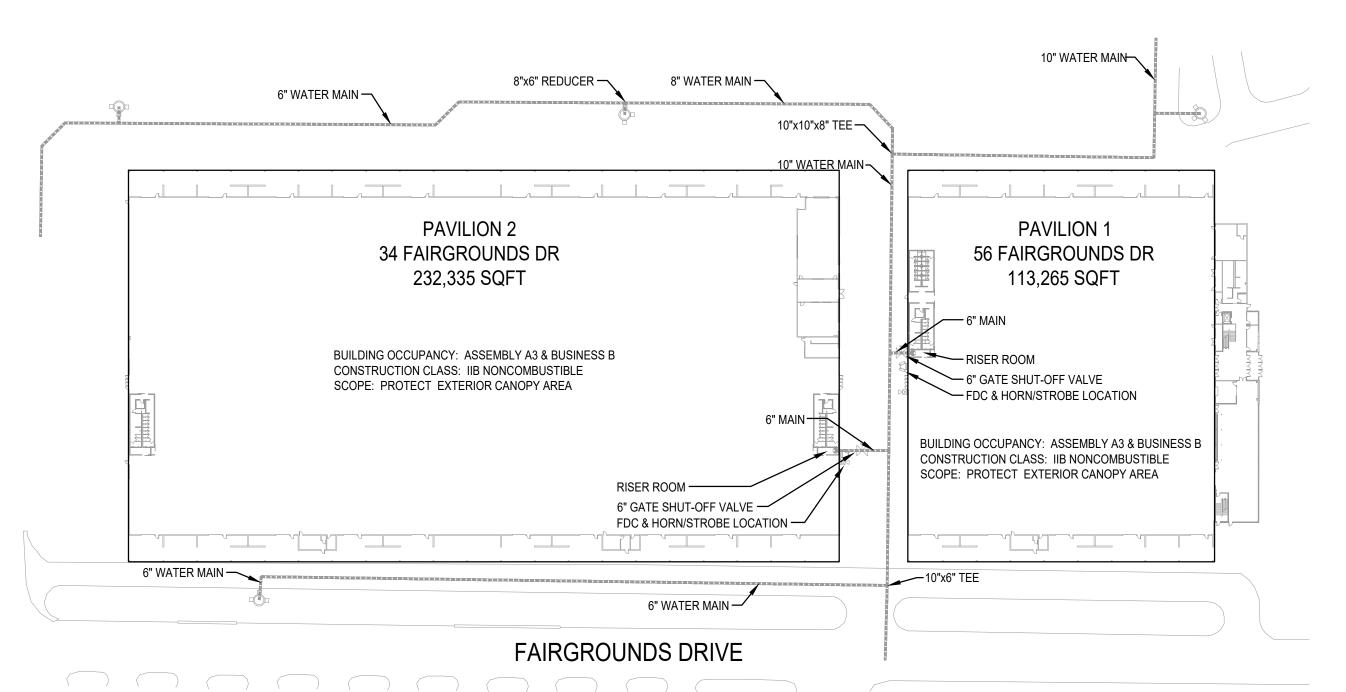
07-14-2022

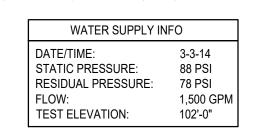
F001



THIS DIAGRAM IS BASED ON AS-BUILTS

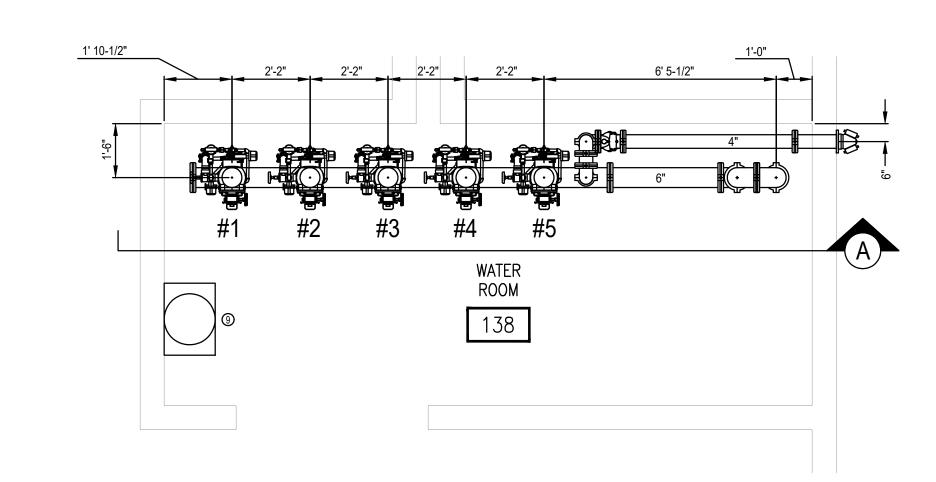
PLANS FOR THIS PROJECT DATED 9-15-14.

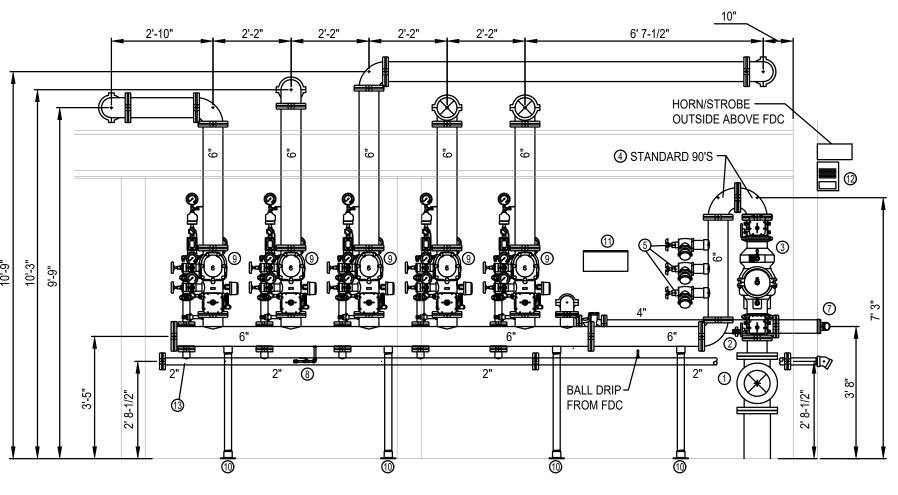




THIS PLAN IS FOR REFERENCE ONLY. THIS PLAN IS BASED ON AS-BUILTS PLANS FOR THIS PROJECT DATED 9-15-14.







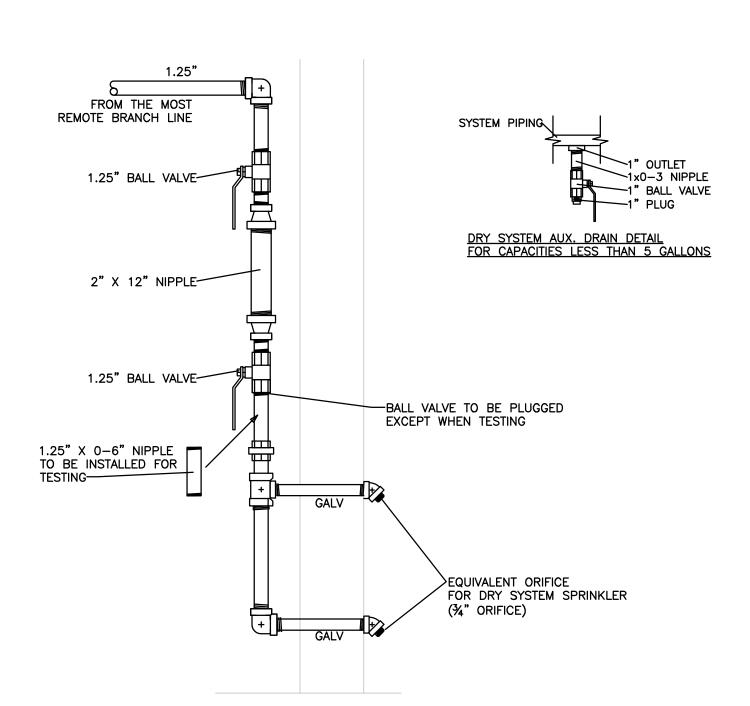
## EXISTING RISER SECTION 'A' AND NOTES

- ① 8X8X6 FLANGED TEE ② 8x6 TxG GLV. S40 FILLER PIECE 3 6" WILKINS 350ABGVIC 4 6" STANDARD RADIUS GRV 90'S
- 3 2-1/2" HOSE VALVE WITH CAP NOT USED 7) 4x2-1/2x2-1/2" EXPOSED CHROME FDC
- 1" LOW POINT DRAIN 9 6" VICTAULIC NXT DRY VALVE ASSEMBLY, TO INCLUDE 6" BUTTERFLY VALVE WITH TAMPER SWITCH
- 6" PIPE STAND 12 CT SPARE HEAD BOX 120V HORN & STROBE ALARM

3 2" SCH 40 DRAIN MANIFORD

# BUILDING 2 EXISTING SYSTEM RISER DETAIL AND NOTES F002 NO SCALE

THIS DIAGRAM IS FOR REFERENCE ONLY. THIS DIAGRAM IS BASED ON AS-BUILTS PLANS FOR THIS PROJECT DATED 9-15-14.



NFPA 7.2.3.6 DRY SYSTEM WATER DELIVERY

7.2.3.6.1 CALCULATION FOR DRY SYSTEM WATER DELIVERY SHALL BE BASED ON THE HAZARD SHOWN IN TABLE 7.2.3.6.1 (ORDINARY 50 SECONDS)

7.2.3.1 THE SYSTEM CAPACITY (VOLUME) CONTROLLED BY A DRY PIPE VALVE SHALL BE DETERMINED BY 7.2.3.7

7.2.3.7 SYSTEM SIZE SHALL BE SUCH THAT INITIAL WATER DISCHARGE AT SYSTEM TEST VALVE OF MANIFOLD OUTLET IS NOT MORE THAN THOSE IN TABLE 7.2.3.6.1 STARTING AT NORMAL AIR PRESSURE ON THE SYSTEM AND AT THE TIME OF FULLY OPENED TEST CONNECTION. WHEN FLOW IS FROM FOUR SPRINKLERS, THE TEST MANIFOLD SHALL BE ARRANGED TO SIMULATE TWO SPRINKLERS ON EACH OF TWO SPRINKLERS ON TWO SPRINKLER BRANCH LINES. A SYSTEM MEETING THE REQUIREMENTS OF THIS SECTION SHALL NOT BE REQUIRED TO ALSO MEET THE REQUIREMENTS OF 7.2.3.2 OR 7.2.3.5.



RFB NO. 322030 - FIRE PROTECTION UPGRADES

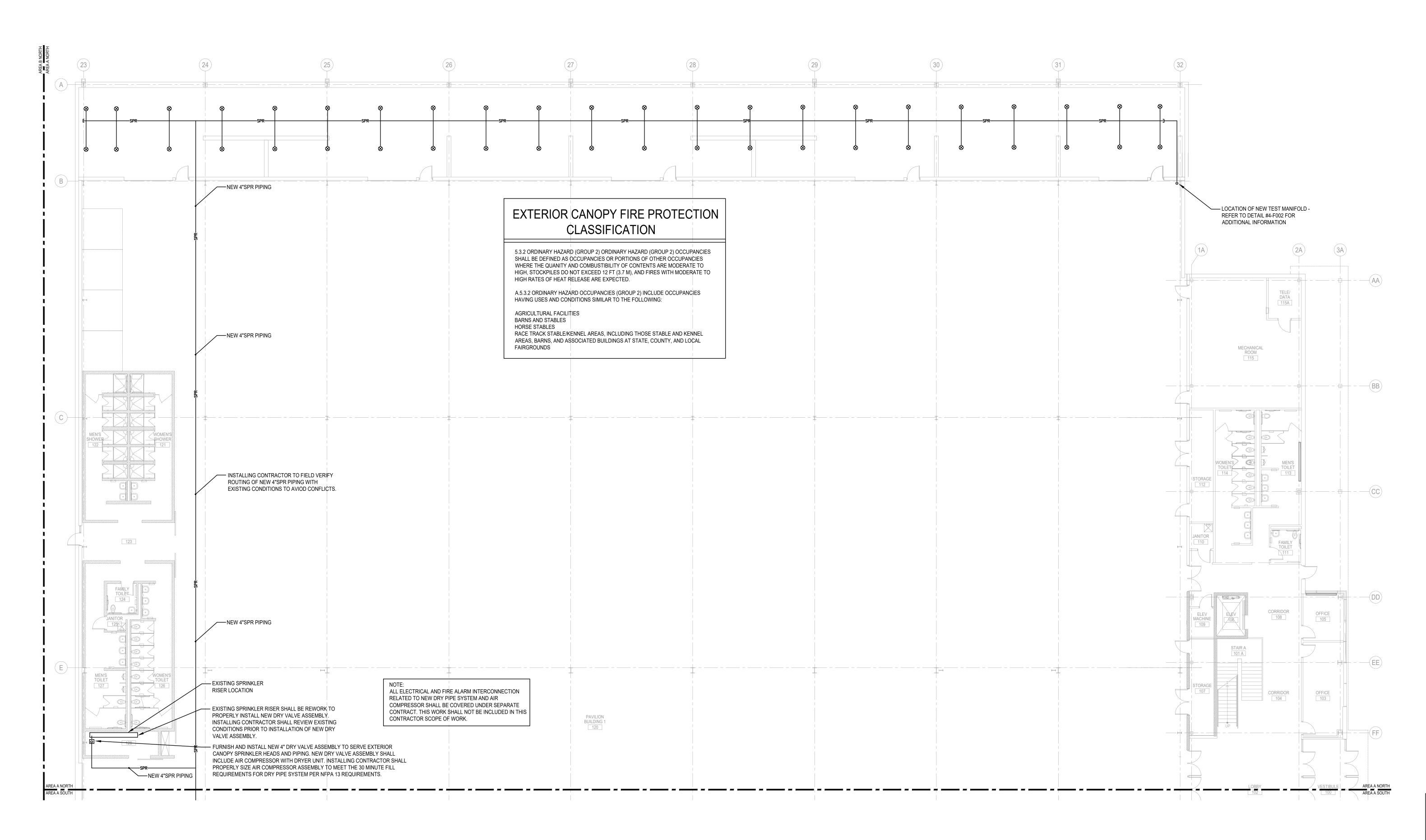
ALLIANT ENERGY CENTER PAVILIONS #1 A

ADDRESS:
1919 ALLIANT ENERGY CENTER WAY
MADISON, WI 53713

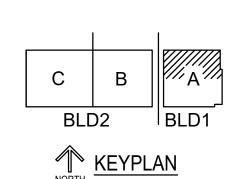
ADE

07-14-2022

F002 BID SET



FIRST FLOOR FIRE PROTECTION PLAN - AREA 'A NORTH' - BLD 1



RFB NO. 322030 - FIRE PROTECTION UPGRADES

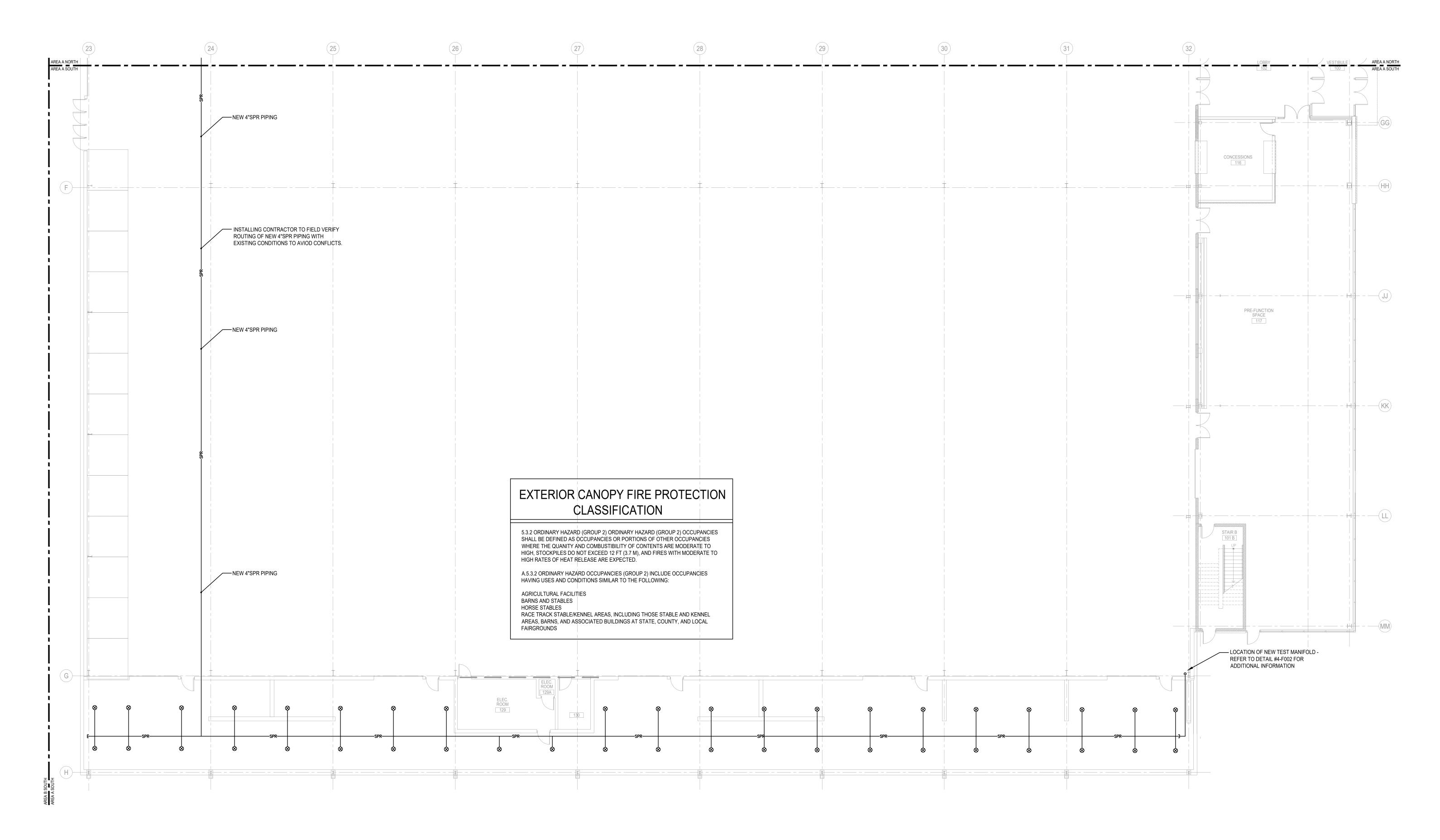
ALLIANT ENERGY CENTER PAVILIONS #1 AND #2 UPGRAD

LOS SERVICES PROTECTION PLAN - AREA 'A NORTH' - BLD 1

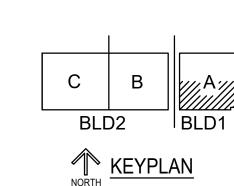
ADDRESS:

1919 ALLIANT ENERGY CENTER WAY

MA PISON WI 52713



FIRST FLOOR FIRE PROTECTION PLAN - AREA 'A SOUTH' - BLD 1



RFB NO. 322030 - FIRE PROTECTION UPGRADES

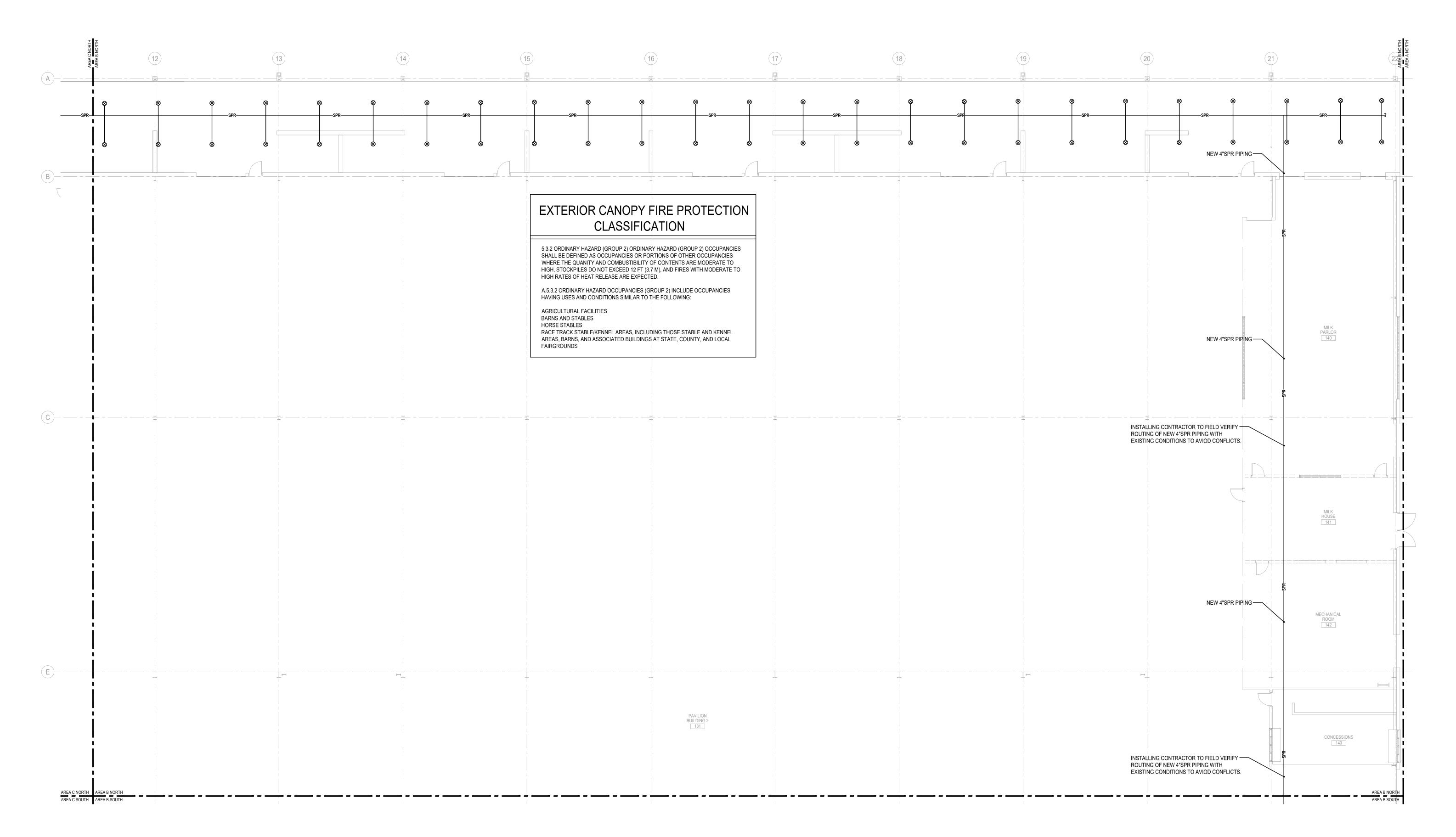
ALLIANT ENERGY CENTER PAVILIONS #1 AND #2 UPGRADE

PROTECTION PLAN - AREA 'A SOUTH' - BLD 1

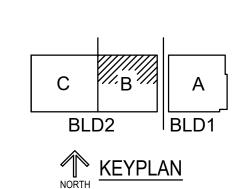
ADDRESS:
1919 ALLIANT ENERGY CENTER WAY
MADISON, WI 53713

07-14-2022

F202



FIRST FLOOR FIRE PROTECTION PLAN - AREA 'B NORTH' - BLD 2



RFB NO. 322030 - FIRE PROTECTION UPGRADES

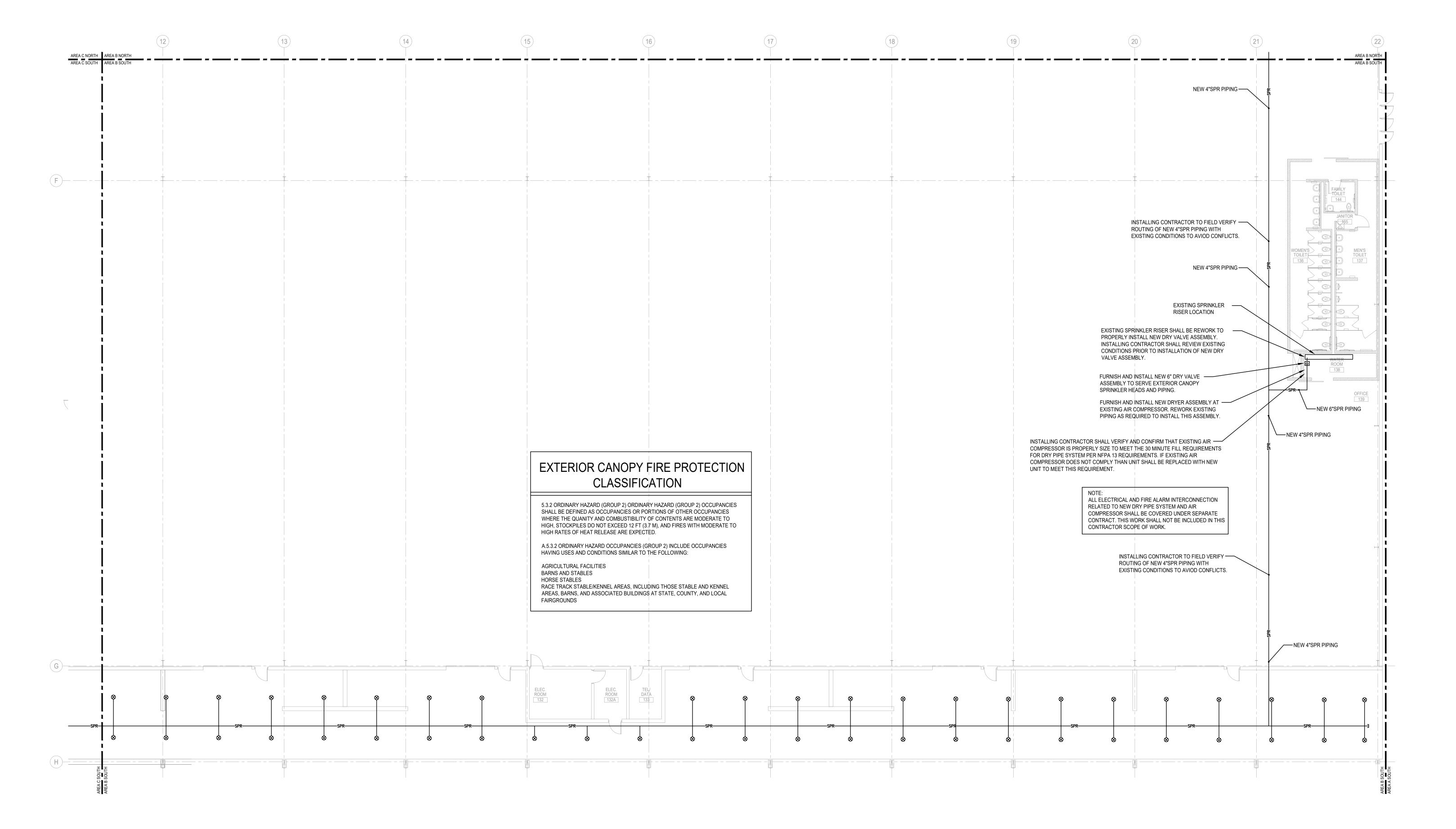
ALLIANT ENERGY CENTER PAVILIONS #1 AND #2 UPGRADE

PROPERTY FLOOR FIRE PROTECTION PLAN - AREA 'B NORTH' - BLD 2

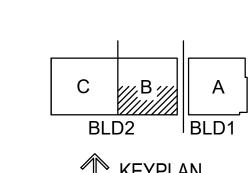
ADDRESS:
1919 ALLIANT ENERGY CENTER WAY
MADISON, WI 53713

07-14-2022

F203



FIRST FLOOR FIRE PROTECTION PLAN - AREA 'B SOUTH' - BLD 2



RFB NO. 322030 - FIRE PROTECTION UPGRADES

ALLIANT ENERGY CENTER PAVILIONS #1 AND #2 I

FIRST FLOOR FIRE PROTECTION PLAN - AREA 'B SOUTH' - BLD 2

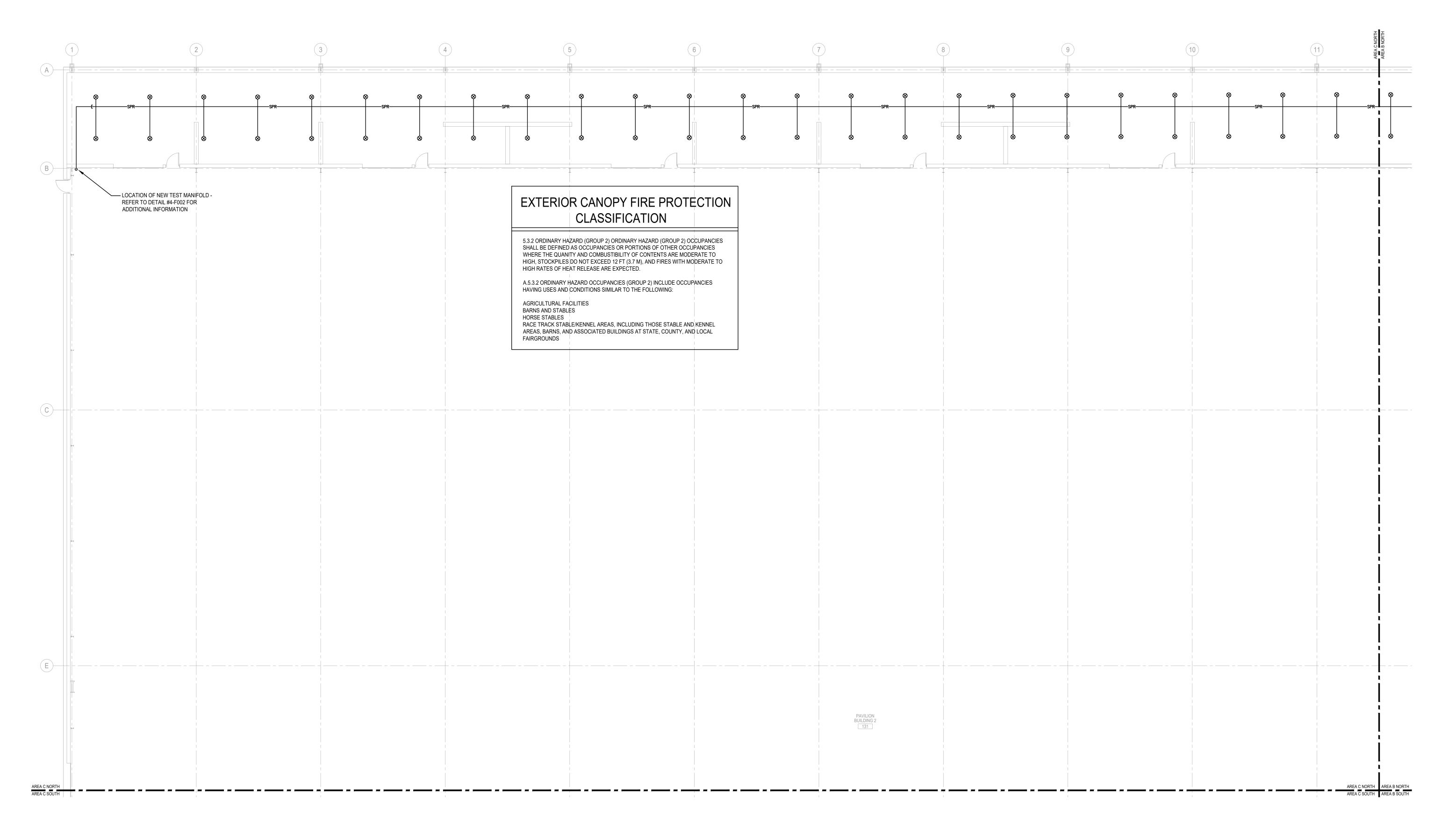
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1919 ALLIANT ENERGY CENTER WAY

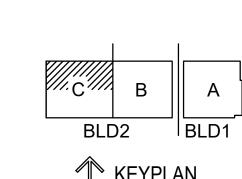
MADISON, WI 53713

22005
PROJECT NUMBER
22005
PATE
07-14-2022
PRAWN BY
KH

TB
ET NUMBER
F204



FIRST FLOOR FIRE PROTECTION PLAN - AREA 'C NORTH' - BLD 2



RFB NO. 322030 - FIRE PROTECTION UPGRADES

ALLIANT ENERGY CENTER PAVILIONS #1 AND #2

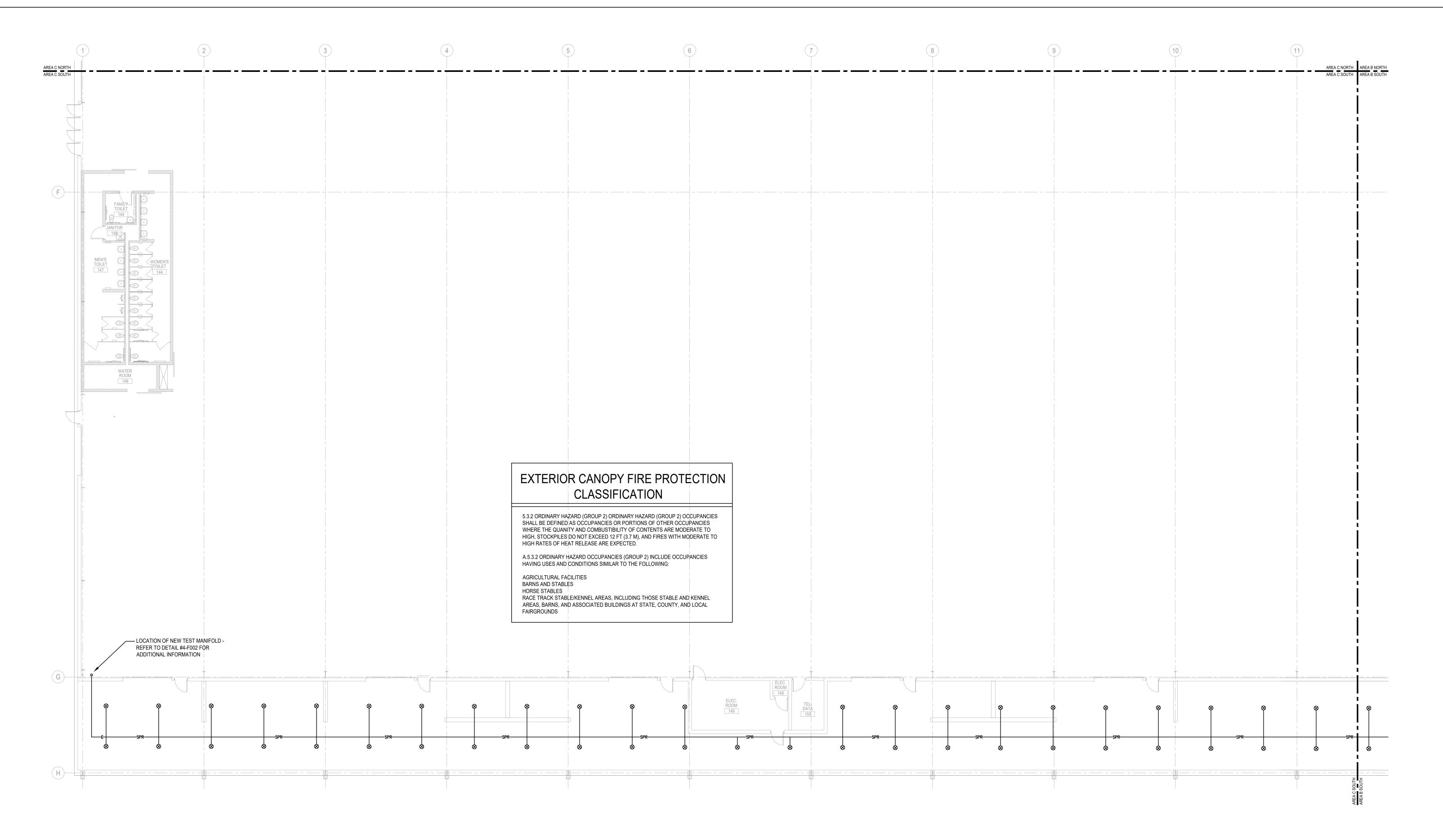
BOOK FIRE PROTECTION PLAN - AREA 'C NORTH' - BLD 2

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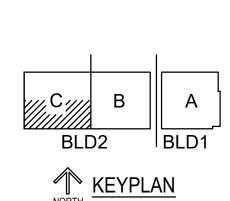
1919 ALLIANT ENERGY CENTER WAY
MADISON, WI 53713

07-14-2022

F205



FIRST FLOOR FIRE PROTECTION PLAN - AREA 'C SOUTH' - BLD 2



RFB NO. 322030 - FIRE PROTECTION UPGRADES

ALLIANT ENERGY CENTER PAVILIONS #1 AND #2

PROPERSE:

1919 ALLIANT ENERGY CENTER WAY

MADISON, WI 53713

07-14-2022

F206