

### **Division of Finance and Business Operations**

# Wayne State University

# **AAB Exterior Masonry Sill Restoration**

# WSU Project Number 062-240913

# **Prevailing Wage Work**

#### FOR:

Board of Governors Wayne State University Detroit, Michigan

#### Owner's Agent:

Valerie Kreher, Senior Buyer WSU – Procurement & Strategic Sourcing 5700 Cass, Suite 4200 Detroit, Michigan 48202 313-577-3720 / 313-577-3747 fax rfpteam2@wayne.edu

### Owner's Representative:

Jason R. Davis, Project Manager Facilities Planning & Management Design & Construction Services 5454 Cass Wayne State University Detroit, Michigan 48202

### Consultant:

French Associates, Inc. 1600 Parkdale Road Rochester, MI 48307

June 2, 2014

# **TABLE OF CONTENTS**

Title Page 00001-1

Table of Contents 00002-1

# Division 0 - Bidding Requirements, Contract Forms, and Conditions of the Contract

00005	Information for Bidders		00005-1 thru 00005-2
00100	Instructions to Bidders		00100-1 thru 00100-5
00250	Notice of Pre-Bid Conference		00250-1 thru 00250-2
00300	Form of Proposal & Qualification Statement		00300-1 thru 00300-7
00410	Prevailing Wage Rate Schedule		00410-1 thru 00410-3
00430	Payment Package Document Requirements		00430-1
00500	Agreement between Contractor and Owner for Construction		00500-1 thru 00500-9
00510	Form of Guarantee		00510-1
00700	General Conditions (A.I.A. A-201)		00700-1
00800	WSU Supplementary General Conditions of the Contract for Construction		00800-1 thru 00800-12
00850	Drawings	00850-1	

# **Division 1 - General Requirements**

01000	General Requirements	01000-1 thru 01000-9
01010	Summary of Work (Includes Scope of Work)	01010-1

TABLE OF CONTENTS 00002-1

### **INFORMATION FOR BIDDERS**

OWNER: Board of Governors
Wayne State University

PROJECT: AAB Exterior Masonry Sill Restoration

Project No. 062-240913

**LOCATION:** Wayne State University

**5700 Cass Avenue** Detroit, Michigan 48202

OWNER'S AGENT: Valerie Kreher, Senior Buyer

WSU - Procurement & Strategic Sourcing

5700 Cass, Suite 4200 Detroit, Michigan 48202

313-577-3720 / 313-577-3747 fax

rfpteam2@wayne.edu

OWNER'S REPRESENTATIVE: Jason R. Davis, Project Manager

Facilities Planning & Management Design & Construction Services

Wayne State University 5454 Cass Avenue Detroit, Michigan 48202

Architect: French Associates, Inc.

1600 Parkdale Road Rochester, MI 48307

**SPECIAL NOTE:** Right to reject any and all proposals, either in whole or in part and to waive any irregularities therein is reserved by the Owner.

BIDS ADVERTISED: June 2, 2014

<u>BIDDING:</u> Bidding documents may be obtained by vendors from the University Purchasing Web Site at <a href="http://www.forms.purchasing.wayne.edu/Adv\_bid/Adv\_bid.html">http://www.forms.purchasing.wayne.edu/Adv\_bid/Adv\_bid.html</a> beginning June 2, 2014. When visiting the Web Site, click on the "Construction" link in green. Copies of the RFP will not be available at the pre-proposal meeting.

<u>MANDATORY Pre-Bid Conference:</u> 2:00 P.M., local time, June 12, 2014 to be held at Wayne State University – 5700 Cass Avenue, Conference Room 4002, Detroit, MI, 48202. Late Arrivals may not be permitted to submit bids.

<u>OPTIONAL Second Walk Through:</u> (if needed) To be determined at the conclusion of the pre-bid conference, by those in attendance.

<u>DUE DATE FOR QUESTIONS</u>: Due Date for questions shall be **June 16, 2014 at 12:00 Noon.** All questions must be reduced to writing and emailed to the attention of **Valerie Kreher**, **Senior Buyer** at **rfpteam2@wayne.edu**, copy to **Robin Watkins**, **Buyer at ag5343@wayne.edu**.

<u>Bids Due:</u> Sealed proposals for lump-sum General Contract will be received at the office of the Procurement & Strategic Sourcing located at 5700 Cass Avenue, Suite 4200, Detroit, MI 48202 on **June 19, 2014,** until 2:00 p.m. (local time).

No public bid opening will be held.

<u>Bid Qualification Meeting:</u> Bidders must be available for bid prequalification meeting the day following the bid opening. The lowest qualified bidder will be contacted and requested to meet with Facilities Planning & Management at their office located at 5454 Cass Avenue, Detroit, MI 48202. During the prequalification, the Vendor must provide a Project Schedule and a Schedule of Values, including a list of Contractor's suppliers, subcontractors and other qualifications.

An unsigned contract will be given to the successful Contractor at the conclusion of the Pre Award meeting, if all aspects of the bid are in order. The Contractor has 5 business days to return the contract to the Project Manager for University counter signature. The contractor must also submit a Performance Bond as outlined above and a Certificate of Insurance in the same 5 business day period. In the event the Contractor fails to return the documents in this 5 day period, the University reserves the right to award the contract to the next most responsive bidder.

All available information pertaining to this project will be posted to the Purchasing web site at <a href="http://www.forms.purchasing.wayne.edu/Adv\_bid/Adv\_bid.html">http://www.forms.purchasing.wayne.edu/Adv\_bid/Adv\_bid.html</a>. Information that is not posted to the website is not available/not known

#### **INSTRUCTIONS TO BIDDERS**

OWNER: Board of Governors
Wayne State University

PROJECT: AAB Exterior Masonry Sill Restoration

Project No. 062-240913

**LOCATION:** Wayne State University

**5700 Cass Avenue**, Detroit, Michigan 48202

OWNER'S AGENT: Valerie Kreher, Senior Buyer

WSU - Procurement & Strategic Sourcing

5700 Cass, Suite 4200 Detroit, Michigan 48202

313-577-3720 / 313-577-3747 fax

rfpteam2@wayne.edu

#### 1. PROPOSALS

A. The Purchasing Agent will receive sealed Proposals for the work as herein set forth at the place and until the time as stated in the "Information for Bidders", a copy of which is bound herewith in theses specifications. **No public bid opening will be held.** 

- B. Proposals shall be for a lump-sum General Contract for the entire work of the Project as provided in the Form of Proposal.
- C. Proposals shall be submitted in duplicate on forms furnished with the Bidding documents. The forms must be fully filled out in ink or typewritten with the signature in longhand, and the completed forms shall be without alterations, interlineations, or erasures. Forms shall contain no recapitulations of the work to be done. Each proposal shall be delivered in an opaque sealed envelope, marked "PROPOSAL" AND SHALL BEAR THE NAME OF THE PROJECT AND THE NAME OF THE BIDDER. Proposals submitted by telephone or telegraph will not be accepted. Modifications by telephone or telegraph to previously submitted proposals will not be accepted.
- D. (revised 5-29-2009) All base bids must be conforming to the detailed specifications and drawings provided by the University, including any Addenda issued. Voluntary Alternates will only be considered if the Contractor has also submitted a conforming base bid. Any stipulation of voluntary alternates or qualifications contrary to the Contract requirements made by the Bidder in or accompanying his proposal as a condition for the acceptance of the Contract will not be considered in the award of the Contract and will cause the rejection of the entire Proposal.
- E. The competency and responsibility of Bidders will be considered in making the award. The Owner does not obligate himself to accept the lowest or any other bids. The Owner reserves the right to reject any and all bids and to waive any informalities in the Proposals.

#### 2. PROPOSAL GUARANTEE (revised 3-22-2012)

- A. A certified check or bank draft payable to the Owner, or satisfactory Bid Bond executed by the Bidder and Surety Company, in an amount equal to not less than five percent (5%) of the maximum proposal amount shall be submitted with each Proposal, which amount may be forfeited to the Board of Governors, Wayne State University, if the successful Bidder refuses to enter into a Contract within ninety (90) days from receipt of Proposals.
- B. Bond must be issued by a Surety Company with an "A rating as denoted in the AM Best Key Rating Guide"

- C. The bid deposit of all bidders except the lowest three will be returned within three (3) days after the bids are opened. After the formal Contract and bonds are approved, the bid deposit will be returned to the lowest three bidders, except when forfeited.
- D. Bid bonds shall be accompanied by a Power of Attorney authorizing the signer of the bond to do so on behalf of the Surety Company.
- E. Withdrawal of Proposals is prohibited for a period of ninety (90) days after the actual date of opening thereof.

### 3. CONTRACT SECURITY (revised 3-22-2012)

- A.The successful Bidder will be required to furnish a Performance Bond and Labor and Material Payment bond in an amount equal to 100% of the contract award amount, and include such cost in the Proposal, complying with the laws of the State of Michigan. The graduated formula no longer applies.
- B. Performance Bond and Labor and Material Payment Bond shall be from a surety company acceptable to the Owner and made payable as follows:
  - (1) A bond for 100% of the contract award amount to the Board of Governors of Wayne State University, and guaranteeing the payment of all subcontractors and all indebtedness incurred for labor, materials, or any cause whatsoever on account of the Contractor in accordance with the laws of the State of Michigan relating to such bonds.
  - (2) A bond for 100% of the contract award amount to the Board of Governors of Wayne State University to guarantee and insure the completion of work according to the Contract.
- C. The only acceptable Performance Bond shall be the AIA A312 2010.
- D. Bond must be issued by a Surety Company with an "A rating as denoted in the AM Best Key Rating Guide".

### 4. BOND CLARIFICATION

For bids below \$50,000.00,

- A. Bid bond will not be required.
- B. Performance Bond will not be required.

### 5. INSPECTION

A. Before submitting his Proposal, each Bidder shall be held to have visited the site of the proposed work and to have familiarized himself as to all existing conditions affecting the execution of the work in accordance with the Contract Documents. No allowance or extra consideration on behalf of the Contractor will subsequently be made by reason of his failure to observe the Conditions or on behalf of any subcontractor for the same reason.

#### 6. EXPLANATION TO BIDDERS AND ADDENDA

- A. Neither the Owner nor Representative nor Purchasing Agent will give verbal answers to any inquiries regarding the meaning of drawings and specifications, and any verbal statement regarding same by any person, previous to the award, shall be unauthoritative.
- B. Any explanation desired by Bidders must be requested of the Purchasing Agent in writing, and if explanation is necessary, a reply will be made in the form of an Addendum, a copy of which will be forwarded to each Bidder registered on the Bidders' List maintained by Procurement & Strategic Sourcing.

C. All addenda issued to Bidders prior to date of receipt of Proposals shall become a part of these Specifications, and all proposals are to include the work therein described.

### 7. <u>INTERPRETATION OF CONTRACT DOCUMENTS</u>

A. If any person contemplating submitting a bid for the proposed Contract is in doubt as to the true meaning of any part of the drawings, specifications, or other Contract Documents, he may submit to the Purchasing Agent, a written request for an interpretation thereof. The person submitting the request will be responsible for its prompt delivery. Any interpretation of the Contract Documents will be made by an addendum duly issued. A copy of such addendum will be mailed and delivered to each registered Bidder. Each proposal submitted shall list all addenda, by numbers, which have been received prior to the time scheduled for receipt of proposal.

#### 8. SUBSTITUTION OF MATERIALS AND EQUIPMENT\*

A. Whenever a material, article or piece of equipment is identified on the Drawings or in the Specifications by reference to manufacturers' or vendors' names, trade names, catalog numbers, or the like, it is so identified for the purpose of establishing a standard, and any material, article, or piece of equipment of other manufacturers or vendors which will perform adequately the duties imposed by the general design will be considered equally acceptable provided that the material, article, or piece of equipment so proposed is, in the opinion of the Architect, of equal substance, appearance and function. It shall not be purchased or installed by the Contractor without the Architect's written approval.

#### 9. TAXES

A. The Bidder shall include in his lump sum proposal and make payment of all Federal, State, County and Municipal taxes, including Michigan State Sales and Use Taxes, now in force or which may be enacted during the progress and completion of the work covered.

#### 10. REQUIREMENTS FOR SIGNING PROPOSALS AND CONTRACTS

- A. The following requirements must be observed in the signing of proposals that are submitted:
  - (1) Proposals that are not signed by individuals making them shall have attached thereto a Power of Attorney, evidencing the authority to sign the Proposal in the name of the person for whom it is signed.
  - (2) Proposals that are signed for partnership shall be signed by all of the partners or by an Attorney-in-Fact. If signed by an Attorney-in-Fact, there must be attached to the Proposal a Power of Attorney evidencing authority to sign the Proposal, executed by the partners.
  - (3) Proposals that are signed for a corporation shall have the correct corporate name thereof and the signature of the President or other authorized officer of the corporation, manually written in the line of the Form of Proposal following the words "signed by". If such a proposal is signed by an official other than the President of the Corporation, a certified copy of resolution of the Board of Directors, evidencing the authority of such official to sign the bid, shall be attached to it. Such proposal shall also bear the attesting signature of the Secretary of the Corporation and the impression of the corporate seal.

#### 11. QUALIFICATIONS OF BIDDERS

A. The Owner may request each of the three (3) low bidders to submit information necessary to satisfy the Owner that the Bidder is adequately prepared to fulfill the Contract. Such information may include past performance records, list of available personnel, plant and equipment, description of work that will be done simultaneously with the Owner's Project, financial statement, or any other pertinent information. This information and such other information as may be requested will be used in determining whether a Bidder is qualified to perform the work required and is responsible and reliable.

### 12. SPECIAL REQUIREMENTS

- A. The attention of all Bidders is called to the General Conditions, Supplementary General Conditions, and Special Conditions, of which all are a part of the Specifications covering all work, including Subcontracts, materials, etc. Special attention is called to those portions dealing with Labor Standards, including wages, fringe benefits, Equal Employment Opportunities, and Liquidated Damages.
- B. Prior to award of the project, the apparent low bidder will be required to produce a schedule of values which will include the proposed subcontractors for each division of work and whether the subcontractor is signatory or non-signatory. A contract will not be issued to the apparent low bidder until this document is provided. A contractor will have one week to produce this document. If the required document is not received within this time, the bidder will be disqualified.

### 13. NOTICE OF AWARD/ACCEPTANCE OF BID PROPOSAL (revised 12-15-2009)

A. The Proposal shall be deemed as having been accepted when a copy of the Contract (fully executed by both the vendor and the appropriate signatory authority for the University), with any/all Alternates, Addenda, and Pre-Contract Bulletins, as issued by the office or agent of the Owner has been duly received by the Contractor. After signing the Contracts, the Contractor shall then return all copies, plus any required bonds and certificates of insurance, to the office of the Owner's Representative, at 5454 Cass, Wayne State University, Detroit, MI 48202. Construction will begin when the fully-executed contract has been returned to the Contractor.

#### 14. TIME OF STARTING AND COMPLETION

- A. It is understood that the work is to be carried through to substantial completion with the utmost speed consistent with good workmanship and to meet the established start and completion dates.
- B. The Contractor shall begin work under the Contract without delay, upon receipt of a fully-executed contract from the Owner, and shall substantially complete the project ready for unobstructed occupancy and use of the Owner for the purposes intended within the completion time stated in the Contract.
- C. The Contractor shall, immediately upon receipt of fully-executed contract, schedule his work and expedite deliveries of materials and performance of the subcontractors to maintain the necessary pace for start and completion on the aforementioned dates.

#### 15. BIDDING DOCUMENTS

A. Bid specifications are not available at the University, but are available beginning **June 2, 2014** through Wayne State University Procurement & Strategic Sourcing's Website for Advertised Bids: <a href="http://www.forms.purchasing.wayne.edu/Adv\_bid/Adv\_bid.html">http://www.forms.purchasing.wayne.edu/Adv\_bid/Adv\_bid.html</a>. The plans for this project can be viewed in advance and/or printed from the above website. Copies of the RFP will not be available at the pre-proposal meeting.

#### B. DOCUMENTS ON FILE (revised 12-2007)

- (1) Wayne State University Procurement & Strategic Sourcing's Website. All available information pertaining to this project will be posted to the Purchasing web site at http://www.forms.purchasing.wayne.edu/Adv\_bid/Adv\_bid.html. Information that is not posted to the website is not available/not known.
- (2) Notification of this Bid Opportunity has been sent to DUNN BLUE (for purchase of Bid Documents only), DODGE REPORTS, REED CONSTRUCTION, CONSTRUCTION NEWS and the CONSTRUCTION ASSOCIATION OF MICHIGAN (CAM).
- (3) Please note: Effective December 1, 2007, bid notices will be sent only to those Vendors registered to receive them via our Bid Opportunities list serve. To register, to <a href="http://www.forms.purchasing.wayne.edu/Adv\_bid/Adv\_bid.html">http://www.forms.purchasing.wayne.edu/Adv\_bid/Adv\_bid.html</a>, and click on the "Join our Listserve" link at the top of the page.

#### **NOTICE OF MANDATORY PRE-BID CONFERENCE**

PROJECT: AAB Exterior Masonry Sill Restoration,

PROJECT NOS.: WSU PROJECT NO. 062-240913

It is **MANDATORY** that each Contractor proposing to bid on this work must attend a pre-bid conference at the following location:

Wayne State University 5700 Cass Avenue Conference Room 4002 Detroit MI 48202

2:00 P.M., local time, June 12, 2014

The purpose of this conference is to clarify the procedures, scope of work, and to identify any omissions and/or inconsistencies that may impede preparation and submission of representative competitive bids.

An attendance list shall be prepared and minutes of the conference shall be furnished to all those attending.

Any clarifications or corrections that cannot be made at the conference will be by Addendum.

For your convenience a map of the University and appropriate parking lots can be downloaded and printed from: http://campusmap.wayne.edu/. Guest parking in any of the University student and guest lots is \$6.50. A detailed list of Cash & Coin operated lots can be viewed at http://purchasing.wayne.edu/cash\_and\_credit\_card\_lots.php. Cash lots dispense change in quarters. Due to time constraints, Vendors are encouraged to avoid parking at meters on the street (especially blue "handicapped" meters).

All available information pertaining to this project will be posted to the Purchasing web site at <a href="http://www.forms.purchasing.wayne.edu/Adv\_bid/Adv\_bid.html">http://www.forms.purchasing.wayne.edu/Adv\_bid/Adv\_bid.html</a>. Information that is not posted to the website is not available/not known.

#### **AGENDA**

- I. Welcome and Introductions
  - A. Wayne State University Representatives
  - B. Vendor Representatives
  - C. Sign in Sheet- be sure to include your fax number and email address (LEGIBLY) on the sign in sheet.
- II. Brief Overview of Wayne State University
  - A. Purpose and Intent of RFP.
  - B. Detailed review of the RFP and the requirements for a qualified response.
  - C. Review of all pertinent dates and forms that are REQUIRED for a qualified response.
- III. Vendor Questions/Concerns/Issues
  - A. Questions that can be answered directly by the appropriate person in this meeting will be answered and both question and answer will be recorded in the minutes of the meeting.
  - B. Questions that need to be researched will be answered and a nature of clarification will be emailed to the appropriate ListServ. See <a href="http://www.forms.purchasing.wayne.edu/Adv\_bid/Adv\_Bid\_Listserve.html">http://www.forms.purchasing.wayne.edu/Adv\_bid/Adv\_Bid\_Listserve.html</a> for a list of ListServ Bid Lists.
  - C. Minutes will be emailed to all participants of the meeting within a reasonable amount of time. (be sure to include your email address/addresses on the sign in sheet)
  - D. Questions and concerns that come up after this meeting are to be addressed to Valerie Kreher, Procurement & Strategic Sourcing. Discussion with other University members is seriously discouraged and could lead to disqualification from further consideration. All questions and answers will be recorded and emailed to all participants of the RFP.
  - E. Due date for questions is June 16, 2014, 12:00 noon.
- IV. Proposal Due Date- June 19, 2014, 2:00 p.m.
- V. Final Comments
- VI. Adjourn

VENDOR NAME		
<u>GE</u>	NERAL CONTRACT - PROPOSAL FORM (revised 1 - 2011)	
Please Note – Vendors must Pro questions can be found on page	e-qualify themselves when responding to this bid opportunity. Our Prequalific e 4 of this section.	ation
OWNER:	Board of Governors Wayne State University	
PROJECT:	AAB Exterior Masonry Sill Restoration	
PROJECT NO.:	WSU PROJECT NO. 062-240913	
PROJECT TYPE:	General Construction, Cement Work Work	
PURCHASING AGENT:	Valerie Kreher, Senior Buyer WSU – Procurement & Strategic Sourcing 5700 Cass, Suite 4200 Detroit, Michigan 48202 313-577-3720/ 313-577-3747 fax rfpteam2@wayne.edu	
OWNER'S REPRESENTATIVE:	Jason R. Davis, Project Manager Design & Construction Services Facilities Planning & Management Wayne State University 5454 Cass Avenue Detroit, Michigan 48202	
TO:	Board of Governors Wayne State University Detroit, Michigan	
BASE PROPOSAL:	The undersigned agrees to enter into an Agreement to complete the entire wo AAB Exterior Masonry Sill Restoration project (WSU Project No. 062-24 accordance with the Bidding Documents for the following amounts:	
	<u> </u>	Dollars
	g alternates to the base proposal(s) are required to be offered by the respectes that the following amounts will be added to or deducted from the base bid	

indicated, for each alternate which is accepted.

### **ALTERNATE NO. 1:**

The undersigned agrees to enter into an agreement to complete the Alternate # 1 work of the North Elevation Sills Heads and Jambs project and to provide all labor and material associated with the work in accordance with the Bidding Documents for the following amounts:

(select one) ADD		\$	Dollars
or DEDUCT		\$	Dollars
ALTERNATE NO. 2:	The undersigned agrees to enter into an agwork of the West Elevation Sills Heads a labor and material associated with the videounders for the following amounts:	and Jambs project and	to provide all
(select one) ADD		\$	Dollars
or DEDUCT		\$	Dollars
ALTERNATE NO. 3:	The undersigned agrees to enter into an agwork of the East Elevation Quoins project associated with the work in accordance following amounts:	and to provide all labo	or and material
(select one) ADD		\$	Dollars
or DEDUCT		\$	Dollars
ALTERNATE NO. 4:	The undersigned agrees to enter into an agwork of the North Elevation Quoins project associated with the work in accordance following amounts:	t and to provide all labo	or and material
(select one) ADD		\$	Dollars
or DEDUCT		\$	Dollars
ALTERNATE NO. 5:			

The undersigned agrees to enter into an agreement to complete the Alternate # 5 work of the West Elevation Quoins project and to provide all labor and material associated with the work in accordance with the Bidding Documents for the

following amounts:

(select one) ADD	\$ Dollars
or	
DEDUCT	\$ Dollars

#### **LAWN REPLACEMENT:**

The undersigned agrees that, in the event of existing lawn or landscaping damage, due to the Contractor's work, that has not been properly addressed and repaired to the satisfaction of the University, the University may repair/replace the lawn and/or landscaping, and that the expense will be at a unit cost of \$10.00 per square yard for lawn, and landscaping at a rate of 1.5 times the cost of said repairs, the full cost of which shall be reimbursed by the contractor.

# CONTRACT CHANGE ORDERS: (revised 4-01-2011)

The undersigned agrees to the following pricing formula and rates for changes in the contract work:

- For subcontract work, Contractor's markup for handling, overhead, profit and bonding on subcontractors sell price, shall not exceed <u>5%.</u>
  - 1.1. For subcontract work that is provided on a time and material basis, the subcontractor shall be permitted a single markup for handling, overhead, profit and bonding of 5%. When a markup is identified in the subcontractor's hourly labor rate, additional markup on labor is not permitted.
    - 1.1.1 For changes that are based upon a lump sum value, subcontractor shall provide all labor and material back-ups to ensure that duplicative charges are avoided and authorized mark-ups for OH&P can be confirmed
- For work by his own organization, Contractor's markup for job\* and general overhead, profit and bonding shall not exceed 5% of the net labor\*\* and material costs.

Within 14 days of the project's contract execution Contractor shall provide to the Owner; Subcontractor's hourly labor rate breakdown details. This requirement shall extend to the lowest level of subcontractor participation.

- \* Job and general overhead includes supervision and executive expenses; use charges on small tools, scaffolding, blocking, shores, appliances, etc., and other miscellaneous job expenses.
- \*\* Net labor cost is the sum of the base wages, fringe benefits established by governing trade organizations, applicable payroll taxes, and increased expense for contractor's liability insurance (Workman's Compensation, P.L. and P.D.).

#### TIME OF COMPLETION:

#### (revised 4-01-2011)

The Contract is expected to be fully executed on or about 25 calendar days after successful bidder qualification and recommendation of award. The undersigned agrees to start construction **immediately after** receipt of a fully executed contract, and to complete the work as follows:

Substantial Completion will be completed no later than September 26, 2014 (Base Scope), November 21, 2014 (Any Alternates).

#### **LIQUIDATED DAMAGES:**

It is understood and agreed that, if project is not completed within the time specified in the contract plus any extension of time allowed pursuant thereto, the actual damages sustained by the Owner because of any such delay, will be uncertain and difficult to

ascertain, and it is agreed that the reasonable foreseeable value of the use of said project by Owner would be the sum of \$100.00.00, One Hundred Dollars per day, and therefore the contractor shall pay as liquidated damages to the Owner the sum of \$100.00.00, One Hundred Dollars per day for each day's delay in substantially completing said project beyond the time specified in the Contract and any extensions of time allowed thereunder.

TAXES:

The undersigned acknowledges that prices stated above include all applicable taxes of whatever character or description. Michigan State Sales Tax is applicable to the work. Bidder understands that the Owner reserves the right to reject any or all bids and to waive informalities or irregularities therein.

**ADDENDA:** 

The undersigned affirms that the cost of all work covered by the following Addenda are included in the lump sum price of this proposal.

Addendum No	_Date	Addendum No	_Date
Addendum No	_Date	Addendum No	_Date
Addendum No	_Date	Addendum No	_Date
Addendum No	_Date	Addendum No	_Date
Addendum No	Date	Addendum No	Date

### **CONTRACTOR'S PREQUALIFICATION STATEMENT & QUESTIONNAIRE:**

### **Our Minimum Requirements for Construction Bids are:**

WSU considers this project: General Construction, Cement Work.

Criteria	Small Project bid less than \$50,000	Medium Project bid between \$50,001 and \$250,000	Large Project bid between \$250,001 and \$2 million	Very Large Project bid greater than \$2 million
EMR Rating (Experience Modification Rating)	1.0 or Less	1.0 or Less	1.0 or Less	1.0 or Less
Bondable Vendor	N.A.	Required	Required	Required
Length of Time in Construction Business	2 Years	3 Years	5 Years	5 Years
Demonstrated Experience in Projects Similar in Scope and Price in the last 3 years	1 or more	1 or more	2 or more	3 or more
Unsuccessful Projects on Campus in last 3 years	None Allowed	None Allowed	None Allowed	None Allowed
Failure to comply with Prevailing Wage and/or Project Labor requirements	None Allowed	None Allowed	None Allowed	None Allowed
Withdrawn University Bid (with or without Bond forfeiture) within the last 3 years **	2 or less	2 or less	1 or less	1 or less
Company currently not in Chapter 11 of the US Bankruptcy Code	1 Year	2 Years	3 Years	3 Years

<sup>\*\*</sup> Withdrawal of a bid is subject to the University suspension policy, for a period up to one year.

<u>Contractors must complete the following information to determine their eligibility to participate in this bid.</u> This information is required with your Bid to the University

Failure to complete this form in its entirety will result in your bid being disqualified.

eck o	ne of the following on the mal	ceup of your company:		
	_ Corporation		Individual	
	_ Partnership		Joint Venture	
	_ Other (Explain)			
	_			
	-			
1.	How many years has your or	ganization been in busine	ess as a contractor?	
2.	How many years has your or	ganization been in busine	ss under its present business name?	
3.	List states in which your orga	ınization is legally qualifie	d to do business.	
4.	Provide the Name and Addre	ess of your Liability Insura	nce Carrier.	
5.		an EMR Rating of 1.0 or	less for all projects. Bidders with a rate discretion of the University.	ating higher than 1.0
6.	What percentage of work pe outsourced relationships, for	formed on projects are by the bid submitted?	company employees; excluding any %	hired subcontracting and
7.	What percentage of work pe disallowing 1099 contracting		es behalf are by subcontracted busine ubmitted? %	ess relationships;
8.			you? If so, attach a separate sheet ork, and the amount of the contract?	of explanation. Include th
9.		f award within the last 3 y	ng and/or refused to enter into a contrears? If so, state the Project Name a	
10.			en an officer or partner of another or n a separate sheet of explanation.	ganization that
11.	List the construction experies	nce of the principals and s	superintendents of your company.	
Nar	me:	Title:		

Name:	Title:
Name:	Title:
12. List the construction Projects, and approxima	te dates, when you performed work similar in Scope to this project.
Project:	Owner:
Contract Amount:	Date Completed:
Project:	Owner:
Contract Amount:	Date Completed:
Project:	Owner:
Contract Amount:	Date Completed:
project.	te dates, when you performed work similar in Dollar Amount to this  Owner:
Contract Amount:	Date Completed:
Project:	Owner:
Contract Amount:	Date Completed:
Project:	Owner:
Contract Amount:	Date Completed:
14. Is your Company "bondable"? Yes	<u>No</u>
15. What is your present bonding capacity? \$ _	
16. Who is your bonding agent?	
NAME:	
ADDRESS:	
PHONE: ()	
CONTACT:	
	ll reports to the University upon request? Failure to agree may result in No

18. Does your company agree that all o part of any ensuing agreement? Ye	f the Terms and Conditions of this RFP and Vendor's Response Proposal become s No
<ol> <li>Does your company agree to execu Contractor and Owner for Construct</li> </ol>	te a contract containing the clauses shown in Section 00500 "Agreement Between tion"? Yes No
If "No", clearly note any exceptions to ar	ny information contained in the contract documents and include with your proposal.
20. Did your company quote based upo	n Prevailing Wage Rates? Yes No
	his project may, at the discretion of the University, be required to submit e used to assist in the post bid evaluation process for the subject project
ACKNOWLEDGEMENT OF MINIMUM QUALIFICATIONS:	The undersigned has read and understands the minimum qualifications for University construction projects, and has completed the Prequalification section completely and accurately. The undersigned understands that a contractor, who fails to meet the minimum qualifications in the category identified for this project, will be disqualified from consideration for the project.
ACCEPTANCE OF PROPOSAL:	The undersigned agrees to execute a Contract, being the Wayne State University standard form titled "Agreement Between Contractor and Owner for Construction" (see section 00500 of the bid documents), provided that we are notified of the acceptance of our Proposal within sixty (60) days of the date set for the opening thereof.
The undersigned below understands above is not completed in its entirety	that the bid will be disqualified if the Prequalification information
NAME OF COMPANY:	
OFFICE ADDRESS:	
PHONE NUMBER:	DATE
FAX NUMBER:	
SIGNED BY:	
	Signature
	(Please print or type name here)
TITLE	
EMAIL ADDRESS:	

#### PREVAILING WAGE RATE SCHEDULE (revised 4-05-2010)

- A. See also Page 00100-4 Section 12.B
- B. Wayne State University requires all project contractors, including subcontractors, who provide labor on University projects to compensate at a rate no less than prevailing wage rates.
- C. The rates of wages and fringe benefits to be paid to each class of laborers and mechanics by each VENDOR and subcontractor(s) (if any) shall be not less than the wage and fringe benefit rates prevailing in Wayne County, Michigan, as determined by the United States Secretary of Labor. Individually contracted labor commonly referred to as "1099 Workers" and subcontractors using 1099 workers are not acceptable for work related to this project.
- D. To maintain compliance with State of Michigan Ordinances, Certified Payroll must be provided for each of the contractor's or subcontractor's payroll periods for work performed on this project. Certified Payroll should accompany all Pay Applications. Failure to provide certified payroll will constitute breach of contract, and pay applications will be returned unpaid, and remain so until satisfactory supporting documents are provided.

A Prevailing Wage Rate Schedule has been issued from the State of Michigan that is enclosed in this section

Additional information can be found on the University Procurement & Strategic Sourcing's web site at the following URL address:

### http://purchasing.wayne.edu/vendors/wage-rates.php

If you have any questions, or require rates for additional classifications, please contact:

Michigan Department of Consumer & Industry Services, Bureau of Safety and Regulation, Wage and Hour Division, 7150 Harris Drive, P.O. Box 30476, Lansing, Michigan 48909-7976

http://www.michigan.gov/dleg/0,1607,7-154-27673\_27706---,00.html

#### F. Wayne State University's Prevailing Wage Requirements:

When compensation will be paid under prevailing wage requirements, the University shall require the following:

- A. The contractor shall obtain and keep posted on the work site, in a conspicuous place, a copy of all current prevailing wage and fringe benefit rates.
- B. The contractor shall obtain and keep an accurate record showing the name and occupation of and the actual wages and benefits paid to each laborer and mechanic employed in connection with this contract.
- C. The contractor shall submit a completed certified payroll document [U.S. Department of Labor Form WH 347] verifying and confirming the prevailing wage and benefits rates for all employees and subcontractors for each payroll period for work performed on this project. The contractor shall include copies of pay stubs for all employee or contract labor payments related to Wayne State University work. The certified payroll form can be downloaded from the Department of Labor website at http://www.dol.gov/whd/forms/wh347.pdf.
- D. A properly executed sworn statement is required from all tiers of contractors, sub-contractors and suppliers which provide services or product of \$1,000.00 or greater. Sworn statements must accompany applications for payment. All listed parties on a sworn statement and as a subcontractor must submit Partial or Full Conditional Waivers for the amounts invoiced on the payment application. A copy of the acceptable WSU Sworn Statement and Waiver will be provided to the awarded contractor.

- E. Apprentices for a skilled trade must provide proof of participation in a Certified Apprenticeship Program and the level of hours completed in the program.
- F. Daily project sign-in sheets and field reports for the project must be turned in weekly.

Note: Contractor invoices WILL NOT be processed until all listed certified payroll documents are received.

- G. If the VENDOR or subcontractor fails to pay the prevailing rates of wages and fringe benefits and does not cure such failure within 10 days after notice to do so by the UNIVERSITY, the UNIVERSITY shall have the right, at its option, to do any or all of the following:
  - 1. Withhold all or any portion of payments due the VENDOR as may be considered necessary by the UNIVERSITY to pay laborers and mechanics the difference between the rates of wages and fringe benefits required by this contract and the actual wages and fringe benefits paid;
  - Terminate this contract and proceed to complete the contract by separate agreement with another vendor or otherwise, in which case the VENDOR and its sureties shall be liable to the UNIVERSITY for any excess costs incurred by the UNIVERSITY.
  - 3. Propose to the Director of Purchasing that the Vendor be considered for Debarment in accordance with the University's Debarment Policy, found on our website at <a href="http://purchasing.wayne.edu/docs/appm28.pdf">http://purchasing.wayne.edu/docs/appm28.pdf</a>

Terms identical or substantially similar to this section of this RFP shall be included in any contract or subcontract pertaining to this project.

- H. The current applicable prevailing wage rates as identified by the State of Michigan Department of Consumer & Industry Services, Bureau of Safety and Regulation, Wage and Hour Division are attached. Refer to item C above if additional information is required.
- I. Prior to award of the project, the apparent low bidder will be required to produce a schedule of values which will include the proposed subcontractors for each division of work and whether the subcontractor is signatory or non-signatory. A letter of intent or **contract will not** be issued to the apparent low bidder until this document is provided. The apparent low bidder will have one week to produce this document. If the required document is not received within this time, the bidder will be disqualified, and the next low bidder will be required to provide this schedule of values.

SEE ATTACHED STATE PREVAILING WAGE INFORMATION

## State of Michigan

WHPWRequest@michigan.gov
Official Request #: 887

Requestor: Wayne State University

Project Description: AAB Exterior Masonry Sill Restoration

Project Number: 062-240913

# **Wayne County**

# Official 2014 Prevailing Wage Rates for State Funded Projects

Page 1 of 29

Issue Date: 5/28/2

5/28/2014

Contract must be awarded by:

8/26/2014

<u>Classification</u>		Last	Straight Ti	me and a	Double	Overtime
Name Description		Updated	Hourly	Half	Time	Provision
			=======		======	======
Asbestos & Lead Abatement Laborer						
Asbestos & Lead Abatement Laborer	MLDC		\$39.75	\$53.04	\$66.32 H	H H X X X X
4 ten hour days @ straight time allowed Monday-Satu	rday,	8/14/2013				
must be consecutive calendar days						

Aspestos & Lead Apatement, mazardous material manufer						
Asbestos and Lead Abatement, Hazardous Material Handler AS	S207		\$39.75	\$53.08	\$66.40 H H H X X X X D	
		9/16/2013				

4 ten hour days @ straight time allowed Monday-Saturday,

Ashastas & Load Abatament Hazardous Material Handler

BO169		\$54.70	\$81.08	\$107.45 H H H H H H D Y
	8/14/2009			
prentice Rates:				
6 months		\$40.31	\$59.49	\$78.67
d 6 months		\$41.45	\$61.21	\$80.95
6 months		\$42.57	\$62.88	\$83.19
6 months		\$43.69	\$64.57	\$85.43
6 months		\$44.81	\$66.24	\$87.67
6 months		\$49.53	\$73.40	\$97.26
6 months		\$49.32	\$73.01	\$96.69
6 months		\$51.58	\$76.40	\$101.21
	prentice Rates: 6 months	8/14/2009 prentice Rates: 6 months	8/14/2009  prentice Rates: 6 months \$40.31 6 months \$41.45 6 months \$42.57 6 months \$43.69 6 months \$44.81 6 months \$49.53 6 months \$49.32	8/14/2009  prentice Rates: 6 months

Official Request #: 887

Requestor: Wayne State University

Project Description: AAB Exterior Masonry Sill Restoration

Project Number: 062-240913 County: Wayne Official Rate Schedule

X D Y

Υ

Every contractor and subcontractor shall keep posted on the construction site, in a conspicuous place, a copy of all prevailing wage and fringe benefit rates prescribed in a contract.

Page 1 of 29

5/28/2014 **Issue Date:** 

8/26/2014 Contract must be awarded by:

Page 2 of 29

Name	ssification Description	1 age 2	Last Updated	Straight Tir Hourly	Half	Double Time	Overtime Provision ======
Between incleme	er  r, stone mason, pointer, cleaner, caulker  October 1 and April 30, if lost time occurs due to nt weather, Saturday may be worked as a make-  straight time until forty hours are worked.	BR1	9/3/2013	\$51.93	\$77.90	\$103.86 H	H D H D D D D N
	Apprentice F First 6 months 2nd 6 months 3rd 6 months 4th 6 months 5th 6 months 6th 6 months 7th 6 months 8th 6 months	S		\$31.54 \$33.39 \$35.24 \$37.09 \$38.94 \$40.79 \$42.64 \$44.49	\$47.32 \$50.10 \$52.87 \$55.64 \$58.42 \$61.20 \$63.97 \$66.74	\$63.08 \$66.78 \$70.48 \$74.18 \$77.88 \$81.58 \$85.28 \$88.98	
	er allowed M-Sat; double time due when over 12 orked per day	CA 687 D	10/9/2013	\$63.30	\$91.30	\$119.29 X	X
installatio	nd Resilient Floor Layer, (does not include on of prefabricated formica & parquet flooring to be paid carpenter rate)	CA1045	11/6/2013	\$48.14	\$68.71	\$89.27 X	X
	Apprentice F 1st 6 months 2nd 6 months 3rd 6 months 4th 6 months 5th 6 months 6th 6 months 7th 6 months 8th 6 months	S .		\$23.56 \$27.57 \$29.64 \$31.69 \$33.75 \$35.80 \$37.86 \$39.91	\$31.84 \$37.85 \$40.96 \$44.03 \$47.12 \$50.20 \$53.28 \$56.36	\$40.11 \$48.13 \$52.27 \$56.37 \$60.49 \$64.59 \$68.71 \$72.81	

Official Request #: 887

Requestor: Wayne State University

Project Description: AAB Exterior Masonry Sill Restoration

Project Number: 062-240913 County: Wayne

Official Rate Schedule

Every contractor and subcontractor shall keep posted on the construction site, in a conspicuous place, a copy of all prevailing wage and fringe benefit rates prescribed in a contract.

Page 2 of 29

**Issue Date:** 5/28/2014

Contract must be awarded by: 8/26/2014

Page 3 of 29

<u>Classification</u> Name Description		Last Updated	Straight Tir Hourly	me and a Half	Double Time	Overtime Provision
Carpenter-four 10s allowed Mon-Sat; double time due wh over 12 hours worked per day	en CA687Z1	10/1/2013	\$53.89	\$77.19	\$100.49 X	X X H X X H H D Y
Apprentice	Rates:					
1st year			\$32.92	\$45.74	\$58.55	
3rd 6 month	ns		\$35.26	\$49.25	\$63.23	
4th 6 month	ıs		\$37.58	\$52.73	\$67.87	
5th 6 month			\$39.92	\$56.23	\$72.55	
6th 6 month			\$42.24	\$59.72	\$77.19	
7th 6 month			\$44.57	\$63.22	\$81.85	
8th 6 month	ns .		\$46.91	\$66.72	\$86.53	
Piledriver	CA687Z1P		\$53.89	\$77.19	\$100.49 X	X H X X H H D Y
Four 10s allowed Monday-Saturday; double time due whe over 12 hours worked per day	n	10/1/2013				
Apprentice	Rates:					
1st 6 month	IS		\$32.92	\$45.74	\$58.55	
2nd 6 mont	hs		\$37.58	\$52.73	\$67.87	
3rd 6 month	าร		\$42.24	\$59.72	\$77.19	
4th 6 month	ns		\$46.91	\$66.72	\$86.53	
Cement Mason						
Cement Mason	br1cm	9/3/2013	\$49.30	\$70.06	\$90.81 X	XHHHHHDN
Apprentice	Rates:	9/3/2013				
1st 6 month	ıs		\$28.71	\$38.90	\$49.09	
2nd 6 mont	hs		\$30.74	\$41.93	\$53.12	
3rd 6 month	าร		\$34.79	\$47.99	\$61.19	
4th 6 month	ns		\$38.85	\$54.05	\$69.23	
5th 6 month	ns		\$40.88	\$57.07	\$73.25	
6th 6 month	ns		\$44.93	\$63.11	\$81.30	
Cement Mason	CE514		\$46.30	\$64.89	\$83.48 H	IHDHHHHDN
Apprentice	Rates:	11/10/2011				
1st 6 month			\$26.77	\$36.07	\$45.36	
2nd 6 mont			\$28.68	\$38.91	\$49.13	
3rd 6 month			\$32.50	\$44.59	\$56.66	
ord o monti			\$36.32	\$50.26	\$64.19	
4th 6 month	15					
4th 6 month 5th 6 month			\$38.24	\$53.11	\$67.98	

Official Request #: 887

Requestor: Wayne State University

Project Description: AAB Exterior Masonry Sill Restoration

Project Number: 062-240913 County: Wayne

#### Official Rate Schedule

Every contractor and subcontractor shall keep posted on the construction site, in a conspicuous place, a copy of all prevailing wage and fringe benefit rates prescribed in a contract.

Page 3 of 29

**Issue Date:** 5/28/2014

Contract must be awarded by:

8/26/2014

Page 4 of 29

<u>Classification</u> Name Description	1 age +	Last Updated	Straight Tii Hourly	Half	Time	Overtime Provision
Drywall						
Drywall Taper	PT-22-D		\$43.16	\$56.14	\$69.11 H	HDHDDDDY
Four 10s allowed Monday-Thursday		7/3/2012				
	Apprentice Rates:					
	First 3 months		\$30.19	\$36.68	\$43.17	
;	Second 3 months		\$32.78	\$40.57	\$48.35	
:	Second 6 months		\$35.37	\$44.45	\$53.53	
•	Third 6 months		\$37.97	\$48.35	\$58.73	
•	4th 6 months		\$39.27	\$50.30	\$61.33	
Electrician						
Road Way Electrical Work	EC-17		\$50.53	\$73.30	\$96.06 H	H H H H H D Y
Double time due after 16 hours on any calend hours Sunday.	ar day and all	8/6/2013				
	Apprentice Rates:					
	1st 6 months		\$32.32	\$45.98	\$59.64	
	2nd 6 months		\$34.59	\$49.39	\$64.18	
	3rd 6 months		\$36.88	\$52.82	\$68.76	
	4th 6 months		\$39.15	\$56.23	\$73.30	
	5th 6 months		\$41.43	\$59.65	\$77.86	
	6th 6 months		\$45.97	\$66.46	\$86.94	
Inside Wireman	EC-58-IW		\$57.73	\$75.80	\$93.86 H	H $H$ $H$ $H$ $H$ $D$ $N$
	Apprentice Rates:	6/26/2013				
	0-1000 hours		\$36.05	\$43.27	\$50.50	
	1000-2000 hours		\$37.86	\$45.99	\$54.12	
	2000-3500 hours		\$39.67	\$48.71	\$57.74	
	3500-5000 hours		\$41.47	\$51.41	\$61.34	
	5000-6500 hours		\$45.08	\$56.82	\$68.56	
	6500-8000 hours		\$48.70	\$62.25	\$75.80	
Sound and Communication Installer/Technicia	n EC-58-SC		\$36.12	\$48.25	\$60.37 H	нннннру
4 consecutive 10s allowed M-TH		9/16/2013	,	,	•	
	Apprentice Rates:					
	Period 1		\$23.99	\$30.06	\$36.11	
	Period 2		\$25.21	\$31.88	\$38.55	
	Period 3		\$26.41	\$33.68	\$40.95	
	Period 4		\$27.63	\$35.51	\$43.39	
			00004	007.00	<b>045 04</b>	
	Period 5		\$28.84	\$37.33	\$45.81	

Official Request #: 887

Requestor: Wayne State University

Project Description: AAB Exterior Masonry Sill Restoration

Project Number: 062-240913 County: Wayne

### **Official Rate Schedule**

Every contractor and subcontractor shall keep posted on the construction site, in a conspicuous place, a copy of all prevailing wage and fringe benefit rates prescribed in a contract.

Page 4 of 29

Page 5 of 29

Issue Date:

5/28/2014

Contract must be awarded by:

8/26/2014

Clas	sification	Last	Straight Ti	me and a	Double	Overtime
Name	Description	Updated	Hourly	Half	Time	Provision

Glazier GL357 \$46.21 \$64.51 \$82.80 H H H H H H H H H ff a four 10 hour day workweek is scheduled, four 10s must be consecutive, M-F.    Apprentice Rates:	Name Description		Updated	Hourly	Hait	ı ime	Provision
Apprentice Rates:							
Apprentice Rates:   1st Year Apprentice   \$37.74   \$58.89   \$68.94   2nd Year Apprentice   \$41.90   \$66.94   3rd Year Apprentice   \$43.98   \$70.95   \$46.21   \$64.51   \$78.96   \$79.95   \$79.9	Elevator Constructor						
Apprentice Rates:  1st Year Apprentice 2nd Year Apprentice 2nd Year Apprentice 31.98 3rd Year Apprentice 343.98 3r0.95 4th Year Apprentice 343.98 3r0.95 4th Year Apprentice 343.98 3r0.95 481.4 3r0.95 3r0.95 481.4 3r0.95 481.4 3r0.95 3r0.	Elevator Constructor	EL 36		\$56.46		<b>\$94.99</b> D	$D \ D \ D \ D \ D \ D \ D$
1st Year Apprentice 2nd Year Apprentice 337.74 \$58.93   2nd Year Apprentice \$41.90 \$66.94   3rd Year Apprentice \$43.98 \$70.95   4th Year Apprentice \$48.14 \$78.96    Slazier GL-357 \$46.21 \$64.51 \$82.80 H H H H H H H H H H H H H H H H H H H	Elevator Constructor		8/7/2007				
2nd Year Apprentice 341.90 \$66.64 \$70 \$70 \$95.95 \$70.95 \$48.14 \$76.96 \$70.95 \$48.14 \$76.96 \$70.95 \$48.14 \$76.96 \$70.95 \$48.14 \$76.96 \$70.95 \$48.14 \$76.96 \$70.95 \$48.14 \$76.96 \$70.95 \$48.14 \$76.96 \$70.95 \$48.14 \$76.96 \$70.95 \$70.95 \$48.14 \$70.95 \$7		Apprentice Rates:					
Stazier   GL-357   State   S		1st Year Apprentice		\$37.74		\$58.93	
### State		2nd Year Apprentice		\$41.90		\$66.94	
Glazier Glazie		3rd Year Apprentice		\$43.98		\$70.95	
Glazier GL-357 \$46.21 \$64.51 \$82.80 H H H H H H H H fr a four 10 hour day workweek is scheduled, four 10s must be consecutive, M-F.    Apprentice Rates:		4th Year Apprentice		\$48.14		\$78.96	
### Apprentice Rates:    1st 6 months	Glazier						
Apprentice Rates:  1st 6 months \$31.63 \$42.64 \$53.64 2nd 6 months \$33.09 \$44.83 \$56.56 3rd 6 months \$33.09 \$44.83 \$56.56 3rd 6 months \$36.00 \$49.19 \$62.38 4th 6 months \$37.46 \$51.39 \$65.30 5th 6 months \$38.92 \$53.57 \$68.22 6th 6 months \$40.33 \$55.75 \$7 \$71.14 7th 6 months \$41.84 \$57.95 \$74.06 8th 6 months \$41.84 \$57.95 \$74.06 8th 6 months \$44.75 \$62.32 \$79.88 \$81.84 \$87.95 \$79.88 \$81.84 \$87.95 \$79.88 \$81.84 \$87.95 \$79.88 \$81.84 \$87.95 \$91.74 \$81.84 \$81.	Glazier	GL-357	,	\$46.21	\$64.51	\$82.80 H	HHHHHHD
St 6 months   S31.63   \$42.64   \$53.64     2nd 6 months   S33.09   \$44.83   \$56.56     3rd 6 months   S33.09   \$44.83   \$56.30     5th 6 months   S37.46   \$51.39   \$65.30     5th 6 months   S40.38   \$55.77   \$71.14     7th 6 months   S41.84   \$57.95   \$74.06     8th 6 months   S44.75   \$62.32   \$79.88      Heat and Frost Insulator   Spray Insulation   AS25S   \$20.14   \$29.14   H H H H H H H H H H H H H H H H H H	If a four 10 hour day workweek is scheduled, must be consecutive, M-F.	four 10s	7/3/2012				
2nd 6 months		Apprentice Rates:					
3rd 6 months   \$36.00   \$49.19   \$62.38     4th 6 months   \$37.46   \$51.39   \$65.30     5th 6 months   \$38.92   \$53.57   \$68.22     6th 6 months   \$40.38   \$55.77   \$71.14     7th 6 months   \$41.84   \$57.95   \$74.06     8th 6 months   \$44.75   \$62.32   \$79.88     Heat and Frost Insulator   Spray Insulation   AS25S   \$20.14   \$29.14   H H H H H H H H H H H H H H H H H H		1st 6 months		\$31.63	\$42.64	\$53.64	
### 4th 6 months		2nd 6 months		\$33.09	\$44.83	\$56.56	
Sth 6 months 6 th 6 months 7 th 6 months 8 40.38 \$55.77 \$71.14 7th 6 months 8 41.84 \$57.95 \$74.06 8th 6 months 8 44.75 \$62.32 \$79.88 \$		3rd 6 months		\$36.00	\$49.19	\$62.38	
6th 6 months 7th 6 months 8th 6		4th 6 months			\$51.39	\$65.30	
Tth 6 months 8th 8		5th 6 months			\$53.57		
Heat and Frost Insulator Spray Insulation  AS25S  AS25S  S20.14  S29.14  H H H H H H H H H H H H H H H H H H H							
Heat and Frost Insulation  AS25S  \$20.14 \$29.14							
AS25S \$20.14 \$29.14 H H H H H H H H H H H H H H H H H H H		8th 6 months		\$44.75	\$62.32	\$79.88	
Heat and Frost Insulator and Asbestos Worker Heat and Frost Insulators and Asbestos Workers Heat and Frost Insulators and Asbestos Workers Four 10s must be worked for a minimum of 2 weeks Consecutively, Monday thru Thursday. All hours worked in excess of 10 will be paid at double time. All hours worked on the fifth day, Monday thru Friday will paid at time and one-half.  Apprentice Rates:  1st Year 2nd Year 446.08 554.74 \$63.40 \$69.70	Heat and Frost Insulator						
Heat and Frost Insulator and Asbestos Worker Heat and Frost Insulators and Asbestos Workers Heat and Frost Insulators and Asbestos Workers Heat and Frost Insulators and Asbestos Workers Four 10s must be worked for a minimum of 2 weeks Four 10s must be worked for a minimum of 2 weeks  Il/29/2014  Il/29/201	Spray Insulation	AS25S		\$20.14	\$29.14	Н	н н н н н н н
Heat and Frost Insulators and Asbestos Workers AS25 \$60.25 \$76.00 \$91.74 H H H H H H H H H H H H H H H H H H H			3/5/2007				
Four 10s must be worked for a minimum of 2 weeks  consecutively, Monday thru Thursday. All hours worked in excess of 10 will be paid at double time. All hours worked on the fifth day, Monday thru Friday will paid at time and one-half.  Apprentice Rates:  1st Year 2nd Year 346.08 554.74 \$63.40 \$69.70							
consecutively, Monday thru Thursday. All hours worked in excess of 10 will be paid at double time. All hours worked on the fifth day, Monday thru Friday will paid at time and one-half.  Apprentice Rates:  1st Year \$46.08 \$54.74 \$63.40 2nd Year \$49.23 \$59.46 \$69.70				\$60.25	\$76.00	\$91.74 H	HHHHHD
excess of 10 will be paid at double time. All hours worked on the fifth day, Monday thru Friday will paid at time and one-half.  Apprentice Rates:  1st Year \$46.08 \$54.74 \$63.40 2nd Year \$49.23 \$59.46 \$69.70			1/29/2014				
on the fifth day, Monday thru Friday will paid at time and one-half.  Apprentice Rates:  1st Year \$46.08 \$54.74 \$63.40 2nd Year \$49.23 \$59.46 \$69.70							
1st Year \$46.08 \$54.74 \$63.40 2nd Year \$49.23 \$59.46 \$69.70	on the fifth day, Monday thru Friday will paid						
2nd Year \$49.23 \$59.46 \$69.70		Apprentice Rates:					
2nd Year \$49.23 \$59.46 \$69.70		1st Year		\$46.08	\$54.74	\$63.40	
3rd Year \$50.80 \$61.82 \$72.84		3rd Year		\$50.80	\$61.82	\$72.84	

Official Request #: 887

Requestor: Wayne State University

Project Description: AAB Exterior Masonry Sill Restoration

4th Year

Project Number: 062-240913 County: Wayne

## **Official Rate Schedule**

Every contractor and subcontractor shall keep posted on the construction site, in a conspicuous place, a copy of all prevailing wage and fringe benefit rates prescribed in a contract.

\$53.95 \$66.54 \$79.14

Page 5 of 29

# Official 2014 Prevailing Wage Rates for State Funded Projects

Issue Date:

5/28/2014

Contract must be awarded by:

8/26/2014

Page	6	of	29
------	---	----	----

Name   Description   Updated   Hourly   Half   Time   Provision		rage o					
Free money of the properties o	Classification		Last				Overtime
Free-engineered Metal Work    Race	·			,	Half 		
Fence, Sound Barrier & Guardrail erection/installation and R-25-F1							
Apprentice Rates:	Ironworker						
Apprentice Rates: 60% Level 65% Level 75% Level 75% Level 822.75 \$29.95 \$37.15 \$29.95 \$39.85 \$29.95 \$39.85 \$29.25 \$39.45 \$49.65 \$29.25 \$39.45 \$49.65 \$29.25 \$39.45 \$49.65 \$29.25 \$39.45 \$49.65 \$29.25 \$39.45 \$49.65 \$29.25 \$39.45 \$49.65 \$29.25 \$39.45 \$49.65 \$29.25 \$39.45 \$49.65 \$29.25 \$39.45 \$49.65 \$29.25 \$39.45 \$49.65 \$29.25 \$39.45 \$49.65 \$29.25 \$39.45 \$49.65 \$29.25 \$39.45 \$49.65 \$29.25 \$39.45 \$49.65 \$29.25 \$39.45 \$49.65 \$29.25 \$39.45 \$49.45 \$29.25 \$39.25 \$49.45 \$49.45 \$39.25 \$49.45		on and IR-25-F1		\$33.15	\$45.15	\$57.15 X	XHXXXHDY
Apprentice Rates: 60% Level \$22.75 \$29.95 \$37.15 65% Level \$24.05 \$31.85 \$39.65 70% Level \$22.36 \$33.66 \$42.16 75% Level \$25.36 \$33.66 \$42.16 \$27.95 \$27.95 \$47.15 85% Level \$26.65 \$35.65 \$44.65 80% Level \$29.25 \$39.45 \$49.65 \$44.65 80% Level \$29.25 \$39.45 \$49.65 \$44.65 80% Level \$29.25 \$39.45 \$49.65 \$44.61 \$41.2013 \$44.11 \$55.52 \$66.93 X X H H H H D D Y Y S S S S S S S S S S S S S S S S			4/2/2013				
Apprentice Rates: 60% Level	, ,	nday-					
60% Level \$22.75 \$29.95 \$37.15 \$30.85 \$39.65 \$30.65	Saturday.						
60% Level \$22.75 \$29.95 \$37.15 \$30.85 \$39.65 \$30.65	Annr	ontico Patos:					
65% Level \$24.05 \$31.85 \$33.65 \$42.16 70% Level \$25.36 \$33.76 \$42.16 75% Level \$25.36 \$33.76 \$44.65 80% Level \$27.95 \$37.55 \$47.15 85% Level \$29.25 \$39.45 \$49.65 \$31.66 \$49.65 \$				400 75	000.05	007.45	
70% Level \$26.65 \$35.66 \$44.65 80% Level \$26.65 \$35.66 \$44.65 80% Level \$27.95 \$37.55 \$47.15 85% Level \$29.25 \$39.45 \$49.65 \$35.66 \$44.65 85% Level \$27.95 \$37.55 \$47.15 85% Level \$29.25 \$39.45 \$49.65 \$35.66 \$44.65 85% Level \$29.25 \$39.45 \$49.65 \$35.66 \$44.65 85% Level \$29.25 \$39.45 \$49.65 \$35.64 \$44.11 \$55.52 \$66.93 X X H H H H H D D Y Y Y Y Y Y Y Y Y Y Y Y Y							
75% Level 826.65 \$36.65 \$44.65 80% Level \$27.95 \$37.55 \$47.15 85% Level \$29.25 \$39.45 \$49.65 \$35.65 \$44.65 \$27.95 \$37.55 \$47.15 \$35.65 \$44.65 \$27.95 \$37.55 \$47.15 \$35.65 \$44.65 \$29.25 \$39.45 \$49.65 \$39.85 \$49.45 \$39.85 \$40.65 \$49.65 \$49.45 \$49.65							
80% Level 85% Level \$27.95 \$37.55 \$47.15 \$49.65 \$61ding, Glazing, Curtain Wall IR25-GZ2 \$44.11 \$55.52 \$66.93 X X H H H H H D D Y It tens may be worked Monday thru Thursday ® straight ime.    Apprentice Rates:						•	
85% Level \$29.25 \$39.45 \$49.65 \$  Siding, Glazing, Curtain Wall IR-25-GZ2 \$44.11 \$55.52 \$66.93 X X H H H H D D Y Wall tens may be worked Monday thru Thursday @ straight ime.  **Apprentice Rates:**  Level 1 \$27.18 \$33.53 \$39.88 \$42.25 \$43.25 \$43.25 \$46.44 \$33.53 \$41.78 \$50.02 \$46.64 \$45.00 \$47.28 \$56.78 \$47.28							
Siding, Glazing, Curtain Wall  It tens may be worked Monday thru Thursday @ straight ime.  Apprentice Rates:  Level 1 Level 2 Level 3 Level 4 S33.53 Level 4 S33.53 S39.88 Level 4 S33.53 S41.78 S50.02 Level 5 S35.64 S44.53 S53.40 Level 6 S37.76 S47.28 S56.78  Apprentice Rates:  1st Year S76.84 S76.84 S77.84 S77.84 S78.85 S78.86 S7							
Apprentice Rates:  Level 1 \$27.18 \$33.53 \$39.88	85%	Level		\$29.25	\$39.45	\$49.65	
Apprentice Rates:  Level 1 \$27.18 \$33.53 \$39.88	Siding Clazing Curtain Wall	ID 25 C72		\$44.11	<b>\$55.52</b>	\$66.03.Y	У Н Н Н Н П Л Л V
Apprentice Rates:  Level 1 \$27.18 \$33.53 \$39.88  Level 2 \$29.29 \$36.27 \$43.25  Level 3 \$31.41 \$39.03 \$46.64  Level 5 \$35.64 \$44.53 \$55.00  Level 6 \$37.76 \$47.28 \$56.78  Pre-engineered Metal Work  IR-25-PE-Z1 \$44.59 \$54.71 \$64.83 X X H X X X X D Y  Apprentice Rates:  1st Year \$25.46 \$30.77 \$36.08  3rd 6 month period \$27.58 \$33.64 \$39.70  4th 6 month period \$27.58 \$33.64 \$39.70  4th 6 month period \$31.83 \$39.40 \$46.97  6th 6 month period \$31.83 \$39.40 \$46.97  6th 6 month period \$33.39 \$42.29 \$50.61  Reinforced Iron Work  IR-25-RF \$54.61 \$81.78 \$108.95 H H D H D D D D N  Apprentice Rates:  Level 1 \$34.66 \$51.56 \$68.45  Level 2 \$37.11 \$55.23 \$73.35  Level 3 \$39.54 \$58.70 \$77.84  Level 4 \$42.16 \$62.80 \$83.45  Level 5 \$44.76 \$66.71 \$88.65	G		4/11/2013	φ44.11	ψ55.52	Ψ00.93 Λ	X 11 11 11 11 11 11 11 11 11 11 11 11 11
Apprentice Rates:  Level 1 \$27.18 \$33.53 \$39.88 Level 2 \$29.29 \$36.27 \$43.25 Level 3 \$31.41 \$39.03 \$46.64 Level 4 \$33.53 \$41.78 \$50.02 Level 5 \$35.64 \$44.53 \$53.40 Level 6 \$37.76 \$47.28 \$56.78  Pre-engineered Metal Work    R-25-PE-Z1	,	aignt	4/11/2013				
Level 1 \$27.18 \$33.53 \$39.88	uno.						
Level 2	Appro	entice Rates:					
Level 3 Level 4 Level 5 Level 6  Pre-engineered Metal Work  IR-25-PE-Z1  Apprentice Rates:  1st Year 3rd 6 month period 4th 6 month period 5th 6 month period 6th 6 month period 6th 6 month period 6th 6 month period 6th 6 month period 5th 6 month period 6th 6 month period 5th 6 m	Level	1		\$27.18	\$33.53	\$39.88	
Level 3 Level 4 Level 5 Level 6  Pre-engineered Metal Work  IR-25-PE-Z1  Apprentice Rates:  1st Year 3rd 6 month period 4th 6 month period 5th 6 month period 6th 6 month period 6th 6 month period 6th 6 month period 6th 6 month period 5th 6 month period 6th 6 month period 5th 6 m	Level	2		\$29.29	\$36.27	\$43.25	
Level 4							
Level 5 Level 6  \$35.64 \$44.53 \$53.40 \$56.78  Pre-engineered Metal Work  IR-25-PE-Z1  \$44.59 \$54.71 \$64.83							
Level 6 \$37.76 \$47.28 \$56.78  Pre-engineered Metal Work  IR-25-PE-Z1 \$44.59 \$54.71 \$64.83 X X H X X X D Y  6/3/2013  Apprentice Rates:  1st Year \$25.46 \$30.77 \$36.08 3rd 6 month period \$27.58 \$33.64 \$39.70 4th 6 month period \$29.71 \$36.53 \$43.35 5th 6 month period \$31.83 \$39.40 \$46.97 6th 6 month period \$33.96 \$42.29 \$50.61  Reinforced Iron Work  IR-25-RF \$54.61 \$81.78 \$108.95 H H D H D D D D N  Apprentice Rates:  Level 1 \$34.66 \$51.56 \$68.45 Level 2 \$37.11 \$55.23 \$73.35 Level 3 \$39.54 \$58.70 \$77.84 Level 4 \$42.16 \$62.80 \$83.45 Level 5 \$44.76 \$66.71 \$88.65							
Pre-engineered Metal Work  IR-25-PE-Z1  Apprentice Rates:  1st Year  3rd 6 month period 4th 6 month period 527.58 531.83 544.59 54.61  Reinforced Iron Work  IR-25-RF  Level 1 Level 2 Level 3 Level 4 Level 5  Level 4 Level 5  Apprentice Rates:  \$44.59 \$54.71 \$64.83							
Apprentice Rates:  1st Year \$25.46 \$30.77 \$36.08 3rd 6 month period \$27.58 \$33.64 \$39.70 4th 6 month period \$29.71 \$36.53 \$43.35 5th 6 month period \$31.83 \$39.40 \$46.97 6th 6 month period \$33.96 \$42.29 \$50.61  Reinforced Iron Work  IR-25-RF \$54.61 \$81.78 \$108.95 H H D H D D D D N  Apprentice Rates:  Level 1 \$34.66 \$51.56 \$68.45 Level 2 \$37.11 \$55.23 \$73.35 Level 3 \$39.54 \$58.70 \$77.84 Level 4 \$42.16 \$62.80 \$83.45 Level 5 \$44.76 \$66.71 \$88.65	2000			ψσσ	Ų <u>-</u> 0	ψουο	
Apprentice Rates:  1st Year \$25.46 \$30.77 \$36.08 3rd 6 month period \$27.58 \$33.64 \$39.70 4th 6 month period \$29.71 \$36.53 \$43.35 5th 6 month period \$31.83 \$39.40 \$46.97 6th 6 month period \$33.96 \$42.29 \$50.61  Reinforced Iron Work  IR-25-RF \$54.61 \$81.78 \$108.95 H H D H D D D D N  Apprentice Rates:  Level 1 \$34.66 \$51.56 \$68.45 Level 2 \$37.11 \$55.23 \$73.35 Level 3 \$39.54 \$58.70 \$77.84 Level 4 \$42.16 \$62.80 \$83.45 Level 5 \$44.76 \$66.71 \$88.65	Pre-engineered Metal Work	IR-25-PE-Z1		\$44.59	\$54.71	\$64.83 X	X H X X X X D Y
1st Year \$25.46 \$30.77 \$36.08 3rd 6 month period \$27.58 \$33.64 \$39.70 4th 6 month period \$29.71 \$36.53 \$43.35 5th 6 month period \$31.83 \$39.40 \$46.97 6th 6 month period \$33.96 \$42.29 \$50.61			6/3/2013				
3rd 6 month period \$27.58 \$33.64 \$39.70 4th 6 month period \$29.71 \$36.53 \$43.35 5th 6 month period \$31.83 \$39.40 \$46.97 6th 6 month period \$33.96 \$42.29 \$50.61  Reinforced Iron Work IR-25-RF \$54.61 \$81.78 \$108.95 H H D H D D D D N  Apprentice Rates:  Level 1 \$34.66 \$51.56 \$68.45 Level 2 \$37.11 \$55.23 \$73.35 Level 3 \$39.54 \$58.70 \$77.84 Level 4 \$42.16 \$62.80 \$83.45 Level 5 \$44.76 \$66.71 \$88.65	Appr	entice Rates:					
4th 6 month period \$29.71 \$36.53 \$43.35 \$5th 6 month period \$31.83 \$39.40 \$46.97 \$6th 6 month period \$33.96 \$42.29 \$50.61  Reinforced Iron Work IR-25-RF \$54.61 \$81.78 \$108.95 H H D H D D D D N  Apprentice Rates:  Level 1 \$34.66 \$51.56 \$68.45 \$60.45 \$1.40 \$1.	1st Ye	ear		\$25.46	\$30.77	\$36.08	
Sth 6 month period \$31.83 \$39.40 \$46.97 6th 6 month period \$33.96 \$42.29 \$50.61  Reinforced Iron Work IR-25-RF \$54.61 \$81.78 \$108.95 H H D H D D D D N  Apprentice Rates:  Level 1 \$34.66 \$51.56 \$68.45 Level 2 \$37.11 \$55.23 \$73.35 Level 3 \$39.54 \$58.70 \$77.84 Level 4 \$42.16 \$62.80 \$83.45 Level 5 \$44.76 \$66.71 \$88.65	3rd 6	month period		\$27.58	\$33.64	\$39.70	
6th 6 month period \$33.96 \$42.29 \$50.61  Reinforced Iron Work IR-25-RF \$54.61 \$81.78 \$108.95 H H D H D D D D N  Apprentice Rates:  Level 1 \$34.66 \$51.56 \$68.45 Level 2 \$37.11 \$55.23 \$73.35 Level 3 \$39.54 \$58.70 \$77.84 Level 4 \$42.16 \$62.80 \$83.45 Level 5 \$44.76 \$66.71 \$88.65	4th 6	month period		\$29.71	\$36.53	\$43.35	
Reinforced Iron Work IR-25-RF \$54.61 \$81.78 \$108.95 H H D H D D D D N 6/25/2013  Apprentice Rates:  Level 1 \$34.66 \$51.56 \$68.45 Level 2 \$37.11 \$55.23 \$73.35 Level 3 \$39.54 \$58.70 \$77.84 Level 4 \$42.16 \$62.80 \$83.45 Level 5 \$44.76 \$66.71 \$88.65	5th 6	month period		\$31.83	\$39.40	\$46.97	
Apprentice Rates:  Level 1 \$34.66 \$51.56 \$68.45  Level 2 \$37.11 \$55.23 \$73.35  Level 3 \$39.54 \$58.70 \$77.84  Level 4 \$42.16 \$62.80 \$83.45  Level 5 \$44.76 \$66.71 \$88.65	6th 6	month period		\$33.96	\$42.29	\$50.61	
Apprentice Rates:  Level 1 \$34.66 \$51.56 \$68.45  Level 2 \$37.11 \$55.23 \$73.35  Level 3 \$39.54 \$58.70 \$77.84  Level 4 \$42.16 \$62.80 \$83.45  Level 5 \$44.76 \$66.71 \$88.65							
Apprentice Rates:  Level 1 \$34.66 \$51.56 \$68.45  Level 2 \$37.11 \$55.23 \$73.35  Level 3 \$39.54 \$58.70 \$77.84  Level 4 \$42.16 \$62.80 \$83.45  Level 5 \$44.76 \$66.71 \$88.65	Reinforced Iron Work	IR-25-RF	6/25/2013	\$54.61	\$81.78	\$108.95 H	HDHDDDDN
Level 2 \$37.11 \$55.23 \$73.35 Level 3 \$39.54 \$58.70 \$77.84 Level 4 \$42.16 \$62.80 \$83.45 Level 5 \$44.76 \$66.71 \$88.65	Appr	entice Rates:	0/23/2013				
Level 2 \$37.11 \$55.23 \$73.35 Level 3 \$39.54 \$58.70 \$77.84 Level 4 \$42.16 \$62.80 \$83.45 Level 5 \$44.76 \$66.71 \$88.65	Level	1		\$34.66	\$51.56	\$68.45	
Level 3       \$39.54       \$58.70       \$77.84         Level 4       \$42.16       \$62.80       \$83.45         Level 5       \$44.76       \$66.71       \$88.65							
Level 4 \$42.16 \$62.80 \$83.45 Level 5 \$44.76 \$66.71 \$88.65							
Level 5 \$44.76 \$66.71 \$88.65							
						•	
Εστοί σ ψτ1.00 ψ10.04 ψ00.03							
	Level	•		Ψ-1.00	ψ, υ.υ-τ	ψυυ.υυ	

Official Request #: 887

Requestor: Wayne State University

Project Description: AAB Exterior Masonry Sill Restoration

Project Number: 062-240913 County: Wayne

Official Rate Schedule

Every contractor and subcontractor shall keep posted on the construction site, in a conspicuous place, a copy of all prevailing wage and fringe benefit rates prescribed in a contract.

Page 6 of 29

Issue Date:

5/28/2014

Contract must be awarded by:

8/26/2014

Page 7 of 29

<u>Classification</u> Name Description		Last Updated	Straight Tii Hourly	Half	Time	Overtime Provision
Rigging Work	IR-25-RIG	6/25/2013	\$60.28			 H H H H H H H D N
	Apprentice Rates:	0/20/20 10				
 	Level 1& 2 Level 3 Level 4 Level 5 Level 6		\$34.93 \$37.80 \$40.66 \$43.53 \$46.41	\$52.39 \$56.71 \$60.99 \$65.29 \$69.62	\$69.86 \$75.60 \$81.32 \$87.06 \$92.82	
Decking 4 tens may be worked Monday thru Thursday time. If bad weather, Friday may be a make u holiday celebrated on a Monday, 4 10s may be Tuesday thru Friday. Work in excess of 12 ho must be paid @ double time.	ıp day. İf e worked	6/25/2013	\$52.24	\$78.08	\$103.92	ХХННННООҮ
Structural, ornamental, conveyor, welder and partial tens may be worked Monday thru Thursday time. If bad weather, Friday may be a make used to be a make used to be a may be	@ straight up day. If e worked	6/25/2013	\$60.41	\$90.34	\$120.26	нннннооү
	Apprentice Rates:					
 	Levels 1 & 2 Level 3 Level 4 Level 5 Level 6 Level 7 Level 8		\$35.06 \$37.89 \$40.71 \$43.54 \$46.37 \$49.19 \$52.02	\$52.64 \$56.52 \$60.74 \$65.37 \$69.24 \$73.47 \$77.71	\$69.98 \$75.14 \$80.78 \$86.94 \$92.10 \$97.74 \$103.40	
Industrial Door erection & construction	IR-25-STR-D	6/27/2013	\$40.97	\$61.13	\$81.29	H H H H H D D Y

Official Request #: 887

Requestor: Wayne State University

Project Description: AAB Exterior Masonry Sill Restoration

Project Number: 062-240913 County: Wayne

## Official Rate Schedule

Every contractor and subcontractor shall keep posted on the construction site, in a conspicuous place, a copy of all prevailing wage and fringe benefit rates prescribed in a contract.

Page 7 of 29

Issue Date:

5/28/2014

Contract must be awarded by:

8/26/2014

	Page	8	of	29
--	------	---	----	----

Clas	<u>sification</u>	Last	Straight Ti	ime and a	Double	Overtime
Name	Description	Updated	Hourly	Half	Time	Provision
======		=======	=======	======	======	======

#### Laborer

Construction Laborer, Demolition Laborer, Mason Tender, Carpenter Tender, Drywall Handler, Concrete Laborer, Cement Finisher Tender, Concrete Chute, and Concrete Bucket Handler L33401-A-CC

7/15/2013

\$43.54 \$61.94 \$80.33 H H H H H H H D Y

If conditions beyond the employer/employee's control prevent one or more hours of working during Mon-Fri, the employer may choose to work up to 10 hour straight time weekdays. Work may be scheduled up to 10 hours per Mon-Fri for the purpose of reaching 40 hours @ straight time. Make up days may also include 8 hours of work on Saturdays @ straight time.

#### **Apprentice Rates:**

0-1,000 work hours	\$37.60	\$53.03	\$68.45
1,001 - 2,000 work hours	\$38.79	\$54.81	\$70.83
2,001 - 3,000 work hours	\$39.98	\$56.60	\$73.21
3,001 - 4,000 work hours	\$42.35	\$60.15	\$77.95

Signal Man (on sewer & caisson work), Air, Electric or Gasoline Tool Operator, Concrete Vibrator Operator, Acetylene Torch & Air Hammer Operator; Scaffold Builder, Caisson Worker L33401-B-SB 7/16/2013

7/16/2013

\$43.80 \$62.33 \$80.85 H H H H H H H D Y

If conditions beyond the employer/employee's control prevent one or more hours of working during Mon-Fri, the employer may choose to work up to 10 hour straight time weekdays. Work may be scheduled up to 10 hours per Mon-Fri for the purpose of reaching 40 hours @ straight time. Make up days may also include 8 hours of work on Saturdays @ straight time.

Furnace Battery Heater Tender, Burning Bar & Oxy-Acetylene Gun L33401-D-HH

\$44.04 \$62.69 \$8

\$81.33 H H H H H H D Y

If conditions beyond the employer/employee's control prevent one or more hours of working during Mon-Fri, the employer may choose to work up to 10 hour straight time weekdays. Work may be scheduled up to 10 hours per Mon-Fri for the purpose of reaching 40 hours @ straight time. Make up days may also include 8 hours of work on Saturdays @ straight time.

Official Request #: 887

Requestor: Wayne State University

Project Description: AAB Exterior Masonry Sill Restoration

Project Number: 062-240913

Official Rate Schedule

Every contractor and subcontractor shall keep posted on the construction site, in a conspicuous place, a copy of all prevailing wage and fringe benefit rates prescribed in a contract. County: Wayne

Page 8 of 29

Issue Date:

5/28/2014

Contract must be awarded by:

8/26/2014

	Pag	е	9	of	29
--	-----	---	---	----	----

		Page 9 c	DT 29				
Classification  Name Description		_	Last Updated	Straight Ti	me and a Half	Double Time	Overtime Provision
Expediter Man, Top Man and/or Bottom Man Work or Battery Work)	(Blast Furnace	L33401-E-EX	7/16/2013	\$44.79	\$63.81		====== H H H H H D Y
If conditions beyond the employer/employee prevent one or more hours of working during employer may choose to work up to 10 hour weekdays. Work may be scheduled up to 10 Mon-Fri for the purpose of reaching 40 hours time. Make up days may also include 8 hour Saturdays @ straight time.	g Mon-Fri, the straight time hours per s @ straight						
Cleaner/Sweeper Laborer; Furniture Laborer		L33401-F-CL	7/17/2012	\$38.09	\$53.76	<b>\$69.43</b> H	нннннрү
If conditions beyond the employer/employee prevent one or more hours of working during employer may choose to work up to 10 hour weekdays. Work may be scheduled up to 10 Mon-Fri for the purpose of reaching 40 hours time. Make up days may also include 8 hour Saturdays @ straight time.	g Mon-Fri, the straight time hours per s @ straight		7/16/2013				
Lansing Burner, Blaster & Powder Man; Air, Gasoline Tool Operator (Blast Furance Work Work)		L334C	7/16/2013	\$44.29	\$63.06	\$81.83 X	X
Plasterer Tender, Plastering Machine Opera	tor	LPT-1	10/05/0010	\$43.54	\$61.94	\$80.33 X	X H H H H H D Y
If conditions beyond the employer/employee prevent one or more hours of working during employer may choose to work up to 10 hour weekdays. Work may be scheduled up to 10 Mon-Fri for the purpose of reaching 40 hours time. Make up days may also include 8 hour Saturdays @ straight time.	g Mon-Fri, the straight time hours per s @ straight		10/25/2013				
	Apprentice R	ates:					
	0 - 1,000 hour 1,001 - 2,000			\$37.60 \$38.79	\$53.03 \$54.81	\$68.45 \$70.83	
	2,001 - 3,000 3,001 - 4,000	hours		\$39.98 \$42.35	\$56.60 \$60.15	\$73.21 \$77.95	
	_,			T	,		

Official Request #: 887

Requestor: Wayne State University

Project Description: AAB Exterior Masonry Sill Restoration

Project Number: 062-240913 County: Wayne

### Official Rate Schedule

Every contractor and subcontractor shall keep posted on the construction site, in a conspicuous place, a copy of all prevailing wage and fringe benefit rates prescribed in a contract.

Page 9 of 29

Issue Date:

5/28/2014

Contract must be awarded by:

8/26/2014

Page '	10 of 29				
Classification Name Description	Last Updated	Straight Tii Hourly	Half	Time	Overtime Provision
Laborer - Hazardous  Class A performing work in conjunction with site preparation and other preliminary work prior to actual removal, handling, or containment of hazardous waste substances not requiring use of personal protective equipment required by state or federal regulations; or a laborer performing work in conjunction with the removal, handling, or containment of hazardous waste substances when use of personal protective equipment level "D" is		\$43.54	\$61.94		====== I
Apprentice Rates: 0-1,000 work hours		\$37.60	\$53.03	\$68.45	
1,001-2,000 work hours 2,001-3,000 work hours 3,001-4,000 work hours		\$38.79 \$39.98 \$42.35	\$54.81 \$56.60 \$60.15	\$70.83 \$73.21 \$77.95	
Class B performing work in conjunction with the removal, handling, or containment of hazardous waste substances when the use of personal protective equipment levels "A", "B" or "C" is required.	3 11/4/2013	\$44.54	\$63.44	\$82.33 H F	ннннн р ү
Apprentice Rates:					
0-1,000 work hours 1,001-2,000 work hours 2,001-3,000 work hours 3,001-4,000 work hours		\$38.36 \$39.59 \$40.83 \$43.30	\$54.17 \$56.01 \$57.87 \$61.58	\$69.97 \$72.43 \$74.91 \$79.85	
Laborer Underground - Tunnel, Shaft & Caisson Class I - Tunnel, shaft and caisson laborer, dump man, shanty man, hog house tender, testing man (on gas), and watchman.	-1 9/6/2013	\$37.87	\$48.66	\$59.44 X >	(
Apprentice Rates: 0-1,000 work hours 1,001-2,000 work hours 2,001-3,000 work hours		\$33.05 \$34.02 \$34.98	\$41.43 \$42.88 \$44.32	\$49.80 \$51.74 \$53.66	

3,001-4,000 work hours

Official Request #: 887

Requestor: Wayne State University

Project Description: AAB Exterior Masonry Sill Restoration

Project Number: 062-240913 County: Wayne

### Official Rate Schedule

Every contractor and subcontractor shall keep posted on the construction site, in a conspicuous place, a copy of all prevailing wage and fringe benefit rates prescribed in a contract.

\$36.91 \$47.21 \$57.52

Page 10 of 29

Issue Date:

5/28/2014

Contract must be awarded by:

8/26/2014

Page	11	of	29
------	----	----	----

Classification Name Description	Last Updated	Straight Tii Hourly	me and a Half	Double Overtime Time Provision
Class II - Manhole, headwall, catch basin builder, bricklayer LAUCT-Z1-2 tender, mortar man, material mixer, fence erector, and guard rail builder.	9/6/2013	\$37.98	\$48.82	\$59.66 X X X X X X X D Y
Apprentice Rates:				
0-1,000 work hours		\$33.14	\$41.56	\$49.98
1,001-2,000 work hours		\$34.10	\$43.00	\$51.90
2,001-3,000 work hours		\$35.07	\$44.45	\$53.84
3,001-4,000 work hours		\$37.01	\$47.37	\$57.72
Class III - Air tool operator (jack hammer man, bush hammer man and grinding man), first bottom man, second bottom man, cage tender, car pusher, carrier man, concrete man, concrete form man, concrete repair man, cement invert laborer, cement finisher, concrete shoveler, conveyor man, floor man, gasoline and electric tool operator, gunnite man, grout operator, welder, heading dinky man, inside lock tender, pea gravel operator, pump man, outside lock tender, scaffold man, top signal man, switch man, track man, tugger man, utility man, vibrator man, winch operator, pipe jacking man, wagon drill and air track operator and concrete saw operator (under 40 h.p.).  Apprentice Rates: 0-1,000 work hours	9/6/2013	\$38.04 \$33.18	\$48.91 \$41.62	\$59.78 X X X X X X X D Y
0-1,000 work hours 1,001-2,000 work hours		\$33.18 \$34.15	\$41.62 \$43.07	\$50.06 \$52.00
2,001-3,000 work hours		\$35.12	\$44.53	\$53.94
3,001-4,000 work hours		\$37.07	\$47.45	\$57.84
Class IV - Tunnel, shaft and caisson mucker, bracer man, LAUCT-Z1-4 liner plate man, long haul dinky driver and well point man.	9/6/2013	\$38.22	\$49.18	\$60.14 X X X X X X X D Y
Apprentice Rates:				
0-1,000 work hours		\$33.32	\$41.83	\$50.34
1,001-2,000 work hours		\$34.30	\$43.30	\$52.30
2,001-3,000 work hours		\$35.28	\$44.77	\$54.26 \$59.49
3,001-4,000 work hours		\$37.24	\$47.71	\$58.18
Class V - Tunnel, shaft and caisson miner, drill runner, keyboard operator, power knife operator, reinforced steel or mesh man (e.g. wire mesh, steel mats, dowel bars)	9/6/2013	\$38.47	\$49.56	\$60.64 X X X X X X X D Y
Apprentice Rates:				
0-1,000 work hours		\$33.50	\$42.10	\$50.70
1,001-2,000 work hours		\$34.50	\$43.60	\$52.70
2,001-3,000 work hours		\$35.49	\$45.09	\$54.68 \$59.66
3,001-4,000 work hours		\$37.48	\$48.07	\$58.66
Official Request #: 887	_			Official Rate Schedule

Requestor: Wayne State University

Project Description: AAB Exterior Masonry Sill Restoration

Every contractor and subcontractor shall keep posted on the construction site, in a conspicuous place, a copy of all prevailing wage and fringe benefit rates

Project Number: 062-240913 County: Wayne

Page 11 of 29

prescribed in a contract.

Issue Date:

5/28/2014

Contract must be awarded by:

8/26/2014

Page <sup>1</sup>	12 o	f 29
-------------------	------	------

	Page 12	OT 29					
Classification		Last	Straight Ti	Straight Time and a		Overtime	
Name Description		Updated	Hourly	Half	Time	Provision	
	========	=======	=======	======	=======	=====	
Oleve VIII. Domenita mana and a sundan man	LALIOT 74 /		<b>#00.00</b>	<b>#</b> 50.05	#04.00 V	V V V V V V D V	
Class VI - Dynamite man and powder man.	LAUCT-Z1-6	9/6/2013	\$38.80	\$50.05	\$61.30 X	XXXXXXDY	
Apprentice	Rates:						
0-1,000 wo	rk hours		\$33.75	\$42.47	\$51.20		
	) work hours		\$34.76	\$43.99	\$53.22		
2,001-3,000	) work hours		\$35.77	\$45.51	\$55.24		
3,001-4,000	) work hours		\$37.79	\$48.53	\$59.28		
Class VII. Destaration laborar cooding codding planting	. I ALIOT 71 7		¢22.00	#20 0 <del>7</del>	£47.06 V	XXXXXXDY	
Class VII - Restoration laborer, seeding, sodding, planting cutting, mulching and topsoil grading and the restoration		9/6/2013	\$32.08	\$39.97	Φ47.00 Λ	^ ^ ^ ^ ^ ^ D T	
property such as replacing mail boxes, wood chips, plant		7/0/2013					
boxes and flagstones.	.01						
Apprentice							
0-1,000 wo			\$28.71	\$34.91	\$41.12		
	) work hours		\$29.38	\$35.92	\$42.46		
	) work hours		\$30.06	\$36.94	\$43.82		
3,001-4,000	) work hours		\$31.41	\$38.97	\$46.52		
Landscape Laborer	11 ANI 71 A		<b>#20.40</b>	<b>#20.04</b>	#40.04 V	V II V V V II D V	
Landscape Specialist includes air, gas, and diesel	LLAN-Z1-A	7/5/2012	\$28.18	\$38.91	\$49.64 X	XHXXXHDY	
equipment operator, skidsteer (or equivalent), lawn sprinkler installer on landscaping work where seeding,		7/5/2013					
sodding, planting, cutting, trimming, backfilling, rough							
grading or maintenance of landscape projects occurs.							
grading of maintenance of landscape projects coodis.							
Sundays paid at time & one half. Holidays paid at double	<u>.</u>						
time.							
Skilled Landscape Laborer: small power tool operator,	LLAN-Z1-B		\$23.96	\$32.58	\$41.20 X	X H X X X H D Y	
lawn sprinkler installers' tender, material mover, truck		7/5/2013					
driver when seeding, sodding, planting, cutting, trimming	,						
backfilling, rough grading or maintaining of landscape							
projects occurs							
Sundays paid at time & one half. Holidays paid at double	<b>:</b>						
time.							

Official Request #: 887

Requestor: Wayne State University

Project Description: AAB Exterior Masonry Sill Restoration

Project Number: 062-240913 County: Wayne

### Official Rate Schedule

Every contractor and subcontractor shall keep posted on the construction site, in a conspicuous place, a copy of all prevailing wage and fringe benefit rates prescribed in a contract.

Page 12 of 29

Issue Date:

5/28/2014

Contract must be awarded by:

8/26/2014

Page	13	of	29
------	----	----	----

	Page 13	OT 29				
Classification		Last	Straight Ti	me and a	Double	Overtime
Name Description		Updated	Hourly	Half	Time	Provision
Marble Finisher	DD1 ME		£40.04	<b>Ф</b> ГО ОГ	ФС4 ОБ II	
Marble Finisher	BR1-MF	0/5/0040	\$42.94	\$53.65	\$64.35 H	HDHDDDDY
A 4 ten workweek may be worked Monday thru Thursday		9/5/2013				
or Tuesday thru Friday.						
Apprentice I	Rates:					
Level 1			\$18.80	\$24.77	\$30.73	
Level 2			\$19.99	\$26.55	\$33.11	
Level 3			\$26.67	\$33.52	\$40.36	
Level 4			\$28.12	\$35.69	\$43.26	
Level 5			\$29.62	\$37.37	\$45.13	
Level 6			\$31.22	\$39.37	\$47.51	
Level 7			\$32.89	\$41.08	\$49.26	
Level 8			\$34.36	\$42.95	\$51.54	
Markle Marcon						
Marble Mason Marble Mason	BR1-MM		\$49.67	\$63.74	\$77.81 ⊔	HDHDDDDY
A 4 ten workweek may be worked Monday thru Thursday	DICT-WIN	9/5/2013	Ψ+3.07	ψ03.74	Ψ77.01 11	
or Tuesday thru Friday.		7/3/2013				
Appropried	Pate:					
Apprentice I	Nates.		<b>6040</b> 0	¢22.24	¢20.65	
Level 1 Level 2			\$24.83	\$32.24	\$39.65	
			\$27.85	\$36.04	\$44.23	
Level 3 Level 4			\$33.00 \$35.70	\$41.45 \$45.09	\$49.90 \$54.49	
Level 5			\$35.70 \$37.94	\$47.57	\$57.21	
Level 5			\$37.94 \$41.55	\$52.91	\$64.27	
Level 7			\$42.21	\$53.72	\$65.22	
Level 7			\$43.13	\$55.10	\$67.06	
Level o			φ43.13	φ55.10	φ07.00	
Operating Engineer						
Crane with boom & jib or leads 120' or longer	EN-324-A120	8/2/2013	\$56.01	\$73.30	\$90.58 X	XHHDDDDY
Work in excess of 12 per day shall be paid at double time.		0,2,2010				
Crane with boom & jib or leads 140' or longer	EN-324-A140		\$56.83	\$74.53	\$92.22 X	XHHDDDDY
•		8/2/2013				
Work in excess of 12 per day shall be paid at double time.						
Crane with boom & jib or leads 220' or longer	EN-324-A220		\$57.13	\$74.98	\$92.82 X	X H H D D D D Y
Work in excess of 12 per day shall be paid at double time.		8/2/2013				

Official Request #: 887

Requestor: Wayne State University

Project Description: AAB Exterior Masonry Sill Restoration

Project Number: 062-240913 County: Wayne

# Official Rate Schedule

Every contractor and subcontractor shall keep posted on the construction site, in a conspicuous place, a copy of all prevailing wage and fringe benefit rates prescribed in a contract.

Page 13 of 29

8/26/2014

# Official 2014 Prevailing Wage Rates for State Funded Projects

**Issue Date:** 5/28/2014

Contract must be awarded by:

Page 14 of 29

<u>Classification</u> Name Description		age 14 0	Last Updated	Straight Tin Hourly	ne and a Half	Double Time	Overtime Provision
Crane with boom & jib or leads 300' or longer Work in excess of 12 per day shall be paid at do	EN	I-324-A300	8/2/2013	\$58.63	\$77.23		 : H H D D D D Y
Crane with boom & jib or leads 400' or longer Work in excess of 12 per day shall be paid at do		I-324-A400	8/2/2013	\$60.13	\$79.48	\$98.82 X X	HHDDDDY
Compressor or welding machine Work in excess of 12 per day shall be paid at do		J-324-CW	8/2/2013	\$45.16	\$57.02	\$68.88 X X	HHDDDDY
Forklift, lull, extend-a-boom forklift Work in excess of 12 per day shall be paid at do		I-324-FL	8/2/2013	\$52.47	\$67.99	\$83.50 X X	HHDDDDY
Fireman or oiler Work in excess of 12 per day shall be paid at do		I-324-FO	8/2/2013	\$44.13	\$55.48	\$66.82 X X	HHDDDDY
Regular crane, job mechanic, concrete pump wi Work in excess of 12 per day shall be paid at do		I-324-RC	8/2/2013	\$55.15	\$72.01	\$88.86 X X	HHDDDDY
Regular engineer, hydro-excavator, remote con concrete breaker  Work in excess of 12 per day shall be paid at do		I-324-RE	8/2/2013	\$54.18	\$70.55	\$86.92 X X	HHDDDDY
0- 1, 2 3, 4.	pprentice Rates -999 hours .000-1,999 hours .000-2,999 hours .000-3,999 hours .000-4,999 hours	S S S		\$43.51 \$45.14 \$46.79 \$48.42 \$50.05 \$51.70	\$54.98 \$57.41 \$59.89 \$62.34 \$64.78 \$67.26	\$66.43 \$69.69 \$72.99 \$76.25 \$79.51 \$82.81	
Operating Engineer - DIVER Diver/Wet Tender/Tender/Rov Pilot/Rov Tender	· GL	.F D	4/2/2014	\$52.80	\$79.20	\$105.60 H H	HHHHHDN
Operating Engineer - Marine Construction Diver/Wet Tender, Engineer (hydraulic dredge)	GL	.F-1	2/12/2014	\$65.00	\$84.85	\$104.70 X X	ннннру

Holiday pay= \$124.55 per hour, wages & fringes

Official Request #: 887

Requestor: Wayne State University

Project Description: AAB Exterior Masonry Sill Restoration

Project Number: 062-240913 County: Statewide

#### Official Rate Schedule

Every contractor and subcontractor shall keep posted on the construction site, in a conspicuous place, a copy of all prevailing wage and fringe benefit rates prescribed in a contract.

Page 14 of 29

\$63.50

\$82.60 \$101.70 X X H H H H H D Y

# Official 2014 Prevailing Wage Rates for State Funded Projects

**Issue Date:** 5/28/2014

Contract must be awarded by: 8/26/2014

Page 15 of 29

Last Straight Time and a Double Overtime Classification Name Description Updated Hourly Half Time Provision

Subdivision of county all Great Lakes, islands therein, & connecting & tributary waters

Crane/Backhoe Operator, 70 ton or over Tug Operator,

2/12/2014

Mechanic/Welder, Assistant Engineer (hydraulic dredge),

Leverman (hydraulic dredge), Diver Tender

Holiday pay = \$120.80 per hour, wages & fringes

All Great Lakes, islands therein, & connecting & tributary waters Subdivision of county

Friction, Lattice Boom or Crane License Certification GLF-2B \$64.50 \$84.10 \$103.70 X X H H H H H D Y

2/12/2014

2/12/2014

2/12/2014

Holiday pay = \$123.30

Subdivision of county All Great Lakes, islands, therein, & connecting & tributary waters

Deck Equipment Operator, Machineryman, Maintenance of GLF-3 \$59.30 \$76.30 \$93.30 X X H H H H H D Y

Crane (over 50 ton capacity) or Backhoe (115,000 lbs or

more), Tug/Launch Operator, Loader, Dozer on Barge,

**Deck Machinery** 

Holiday pay = \$110.30 per hour, wages & fringes

Subdivision of county All Great Lakes, islands therein, & connecting & tributary waters

Deck Equipment Operator, (Machineryman/Fireman), (4 GLF-4 \$53.60 \$67.75 \$81.90 X X H H H H H D Y

equipment units or more), Off Road Trucks, Deck Hand, Tug Engineer, & Crane Maintenance 50 ton capacity and under or Backhoe 115,000 lbs or less, Assistant Tug

Holiday pay = \$96.05 per hour, wages & fringes

Subdivision of county All Great Lakes, islands therein, & connecting & tributary waters

Official Request #: 887

Requestor: Wayne State University

Project Description: AAB Exterior Masonry Sill Restoration

Project Number: 062-240913

Official Rate Schedule

Every contractor and subcontractor shall keep posted on the construction site, in a conspicuous place, a copy of all prevailing wage and fringe benefit rates prescribed in a contract.

County: Statewide

Page 15 of 29

**Issue Date:** 5/28/2014

Contract must be awarded by: 8/26/2014

Page 16 of 29

	Page 16 of 29				
<u>Classification</u>	Last	Straight Ti	me and a	Double	Overtime
Name Description	Updated	Hourly	Half	Time	Provision
	===========	=======		======	======
Operating Engineer Hazardous Waste Class I					
Level A - Fully encapsulating chemical resistant suit w/	EN-324-HWCI-Z1A	\$51.84	\$67.86	\$83.87 H	HHHHHDY
pressure demand, full face piece SCBA or pressure demand	1/20/2012	φοι.σι	φοι.σσ	φοσ.στ 11	
	1/20/2012				
supplied air respirator w/ escape SCBA. The highest					
available level of respiratory, skin and eye protection.					
Four 10 hour days may be worked Manday Thursday with					
Four 10 hour days may be worked Monday-Thursday with Friday as a straight-time make up day.					
Triday as a straight-time make up day.					
Apprentice R	ates:				
1st 6 months		\$41.63	\$52.85	\$64.05	
2nd 6 months		\$43.23	\$55.25	\$67.25	
3rd 6 months		\$44.83	\$57.64	\$70.45	
4th 6 months		\$46.43	\$60.04	\$73.65	
5th 6 months		\$48.03	\$62.44	\$76.85	
6th 6 months		\$49.64	\$64.86	\$80.07	
Level B & C protection. B - Pressure demand, full face	EN-324-HWCI-Z1B	\$50.89	\$66.43	\$81.97 H	HHHHHHDY
SCBA or pressure demand supplied air respirator w/	1/20/2012				
escape SCBA w/chemical resistant clothing. C - Full face					
piece, air purifying canister-equipped respirator w/chemical					
resistant clothing.					
, and the second					
Four 10 hour days may be worked Monday-Thursday with					
Friday as a straight-time make up day.					
Apprentice R	ates:				
1st 6 months		\$40.97	\$51.85	\$62.73	
2nd 6 months	3	\$42.52	\$54.17	\$65.83	
3rd 6 months		\$44.07	\$56.50	\$68.93	
4th 6 months		\$45.64	\$58.86	\$72.07	
5th 6 months		\$47.19	\$61.19	\$75.17	
6th 6 months		\$48.74	\$63.51	\$78.27	
our o monuto		Ψ10.71	φοσ.σ ι	Ψ1 0.21	
Level D - Coveralls, safety boots, glasses or chemical	EN-324-HWCI-Z1D	\$49.59	\$64.48	\$70.37 <sup></sup>	нннннрү
ş ş		φ49.59	φ04.40	φ <i>19.31</i> 11	11 11 11 11 11 11 1
splash goggles and hard hats.	1/20/2012				
Four 10 hour days may be worked Monday-Thursday with					
Friday as a straight-time make up day.					
Apprentice R	ates:				
1st 6 months		\$40.06	\$50.49	\$60.91	
2nd 6 months		\$41.54	\$52.71	\$63.87	
3rd 6 months		\$43.04	\$54.96	\$66.87	
4th 6 months		\$44.53	\$57.19	\$69.85	
5th 6 months		\$46.02	\$59.42	\$72.83	
6th 6 months		\$47.50	\$61.65	\$75.79	
Official Request #: 887				Official I	Rate Schedule

Official Request #: 887

Requestor: Wayne State University

Project Description: AAB Exterior Masonry Sill Restoration

Project Number: 062-240913 County: Wayne Every contractor and subcontractor shall keep posted on the construction site, in a conspicuous place, a copy of all prevailing wage and fringe benefit rates prescribed in a contract.

Page 16 of 29

Issue Date: 5/2

5/28/2014

Contract must be awarded by:

8/26/2014

Classification Name Description	Last Updated	Straight Time and a Hourly Half	Double Overtime Time Provision
Level D When Capping Landfill Coveralls, safety boots, glasses or chemical splash goggles and hard hats.  Four 10 hour days may be worked Monday-Thursday with Friday as a straight-time make up day.	EN-324-HWCI-Z1DCL 1/20/2012	\$49.34 \$64.11	\$78.87 H H H H H H D Y
Apprentice R 1st 6 months 2nd 6 months 3rd 6 months 4th 6 months 5th 6 months 6th 6 months		\$39.89 \$50.23 \$41.36 \$52.44 \$42.83 \$54.64 \$44.31 \$56.86 \$45.79 \$59.08 \$47.27 \$61.30	\$60.57 \$63.51 \$66.45 \$69.41 \$72.37 \$75.33
Operating Engineer Hazardous Waste Class II Level A - Fully encapsulating chemical resistant suit w/ pressure demand, full face piece SCBA or pressure demand supplied air respirator w/ escape SCBA. The highest available level of respiratory, skin and eye protection.	EN-324-HWCII-Z1A 1/20/2012	\$47.61 \$61.51	\$75.41 H H H H H H D Y
Four 10 hour days may be worked Monday-Thursday with Friday as a straight-time make up day.			
Level B & C protection. B - Pressure demand, full face SCBA or pressure demand supplied air respirator w/ escape SCBA w/chemical resistant clothing. C - Full face piece, air purifying canister-equipped respirator w/chemical resistant clothing.	EN-324-HWCII-Z1B 1/20/2012	\$46.66 \$60.09	\$73.51 H H H H H H H D Y
Four 10 hour days may be worked Monday-Thursday with Friday as a straight-time make up day.			
Level D - Coveralls, safety boots, glasses or chemical splash goggles and hard hats.	EN-324-HWCII-Z1D 1/20/2012	\$45.36 \$58.14	\$70.91 H H H H H H H D Y
Four 10 hour days may be worked Monday-Thursday with Friday as a straight-time make up day.			
Level D When Capping Landfill Coveralls, safety boots, glasses or chemical splash goggles and hard hats.	EN-324-HWCII-Z1DCL 1/20/2012	\$45.11 \$57.76	\$70.41 H H H H H H D Y
Four 10 hour days may be worked Monday-Thursday with Friday as a straight-time make up day.			

Official Request #: 887

Requestor: Wayne State University

Project Description: AAB Exterior Masonry Sill Restoration

Project Number: 062-240913 County: Wayne Official Rate Schedule

Every contractor and subcontractor shall keep posted on the construction site, in a conspicuous place, a copy of all prevailing wage and fringe benefit rates

prescribed in a contract.

Page 17 of 29

# Official 2014 Prevailing Wage Rates for State Funded Projects

Issue Date:

5/28/2014

8/26/2014

Contract must be awarded by:

Page 18 of 29

	Page to of 29			
Classification Name Description	Last Updated	Straight Time an Hourly Half		Overtime Provision
======================================	======================================	========		======
Operating Engineer Hazardous Waste Crane w/ Boom & 140' or longer	Jib leads			
Level A - Fully encapsulating chemical resistant suit w/ pressure demand, full face piece SCBA or pressure demand supplied air respirator w/ escape SCBA. The highest available level of respiratory, skin and eye protection.	EN-324-HW140-Z1A 1/20/2012	\$54.49 \$71	.83 \$89.17 Н	н н н н н н
Four 10 hour days may be worked Monday-Thursday with Friday as a straight-time make up day.				
Level B & C protection. B - Pressure demand, full face SCBA or pressure demand supplied air respirator w/ escape SCBA w/chemical resistant clothing. C - Full face piece, air purifying canister-equipped respirator w/chemical resistant clothing.	EN-324-HW140-Z1B 1/20/2012	\$53.54 \$70	.41 \$87.27 Н	ннннннрү
Four 10 hour days may be worked Monday-Thursday with Friday as a straight-time make up day.				
Level D Coveralls, safety boots, glasses or chemical splash goggles and hard hats.	EN-324-HW140-Z1D 1/20/2012	\$52.24 \$68	.46 \$84.67 Н	ннннннрү
Four 10 hour days may be worked Monday-Thursday with Friday as a straight-time make up day.				
Level D When Capping Landfill Coveralls, safety boots, glasses or chemical splash goggles and hard hats. Four 10 hour days may be worked Monday-Thursday with Friday as a straight-time make up day.	EN-324-HW140-Z1DCL 1/20/2012	\$51.99 \$68	.08 \$84.17 Н	нннннрү
Operating Engineer Hazardous Waste Crane w/ Boom & 220' or longer	Jib leads			
Level A - Fully encapsulating chemical resistant suit w/ pressure demand, full face piece SCBA or pressure demand supplied air respirator w/ escape SCBA. The highest available level of respiratory, skin and eye protection.	EN-324-HW220-Z1A 1/20/2012	\$54.79 \$72	.28 \$89.77 Н	н н н н н н
Four 10 hour days may be worked Monday-Thursday with Friday as a straight-time make up day.				

Official Request #: 887

Requestor: Wayne State University

Project Description: AAB Exterior Masonry Sill Restoration

Official Rate Schedule

Every contractor and subcontractor shall keep posted on the construction site, in a conspicuous place, a copy of all prevailing wage and fringe benefit rates

#### AAB Exterior Masonry Sill Restoration WSU Project No. 062-240913

Project Number: 062-240913 County: Wayne

prescribed in a contract.

Page 18 of 29

Issue Date: 5

5/28/2014

Contract must be awarded by:

8/26/2014

Page	19	of	29
------	----	----	----

Classification Name Description	Last Updated	Straight Tir Hourly	Half	Time	Overtime Provision
Level B & C protection. B - Pressure demand, full face SCBA or pressure demand supplied air respirator w/ escape SCBA w/chemical resistant clothing. C - Full face piece, air purifying canister-equipped respirator w/chemical resistant clothing.	EN-324-HW220-Z1B 1/20/2012	\$53.84	\$70.86		 Н Н Н Н Н Н D Y
Four 10 hour days may be worked Monday-Thursday with Friday as a straight-time make up day.					
Level D Coveralls, safety boots, glasses or chemical splash goggles and hard hats.	EN-324-HW220-Z1D 1/20/2012	\$52.54	\$68.91	\$85.27 H	ннннннрү
Four 10 hour days may be worked Monday-Thursday with Friday as a straight-time make up day.					
Level D When Capping Landfill Coveralls, safety boots, glasses or chemical splash goggles and hard hats.	EN-324-HW220-Z1DCL 1/20/2012	\$52.29	\$68.53	\$84.77 H	нннннрү
Four 10 hour days may be worked Monday-Thursday with Friday as a straight-time make up day.					
Operating Engineer Hazardous Waste Regular Crane, Jo Mechanic, Dragline Operator, Boom Truck Operator, Po Operator and Concrete Pump with boom	ob wer Shovel				
Level D When Capping Landfill Coveralls, safety boots, glasses or chemical splash goggles and hard hats.	EN-324-HWRC-Z1DCL 1/20/2012	\$49.69	\$64.63	\$79.57 H	ннннннрү
Four 10 hour days may be worked Monday-Thursday with Friday as a straight-time make up day.					
Operating Engineer Hazardous Waste Regular Crane, Jo Mechanic, Dragline Operator, Boom Truck Operator, Po Operator and Concrete Pump with Boom Operator					
Level D - Coveralls, safety boots, glasses or chemical splash goggles and hard hats.	EN-324-HWRC-Z1D 1/20/2012	\$50.56	\$65.94	\$81.31 H	нннннру
Four 10 hour days may be worked Monday Thursday with					

Four 10 hour days may be worked Monday-Thursday with Friday as a straight-time make up day.

Official Request #: 887

Requestor: Wayne State University

Project Description: AAB Exterior Masonry Sill Restoration

Official Rate Schedule Every contractor and subcontractor shall keep posted on the construction site, in a conspicuous place, a copy

#### AAB Exterior Masonry Sill Restoration WSU Project No. 062-240913

Project Number: 062-240913 County: Wayne of all prevailing wage and fringe benefit rates prescribed in a contract.

Page 19 of 29

**Issue Date:** 5/28/2014

Contract must be awarded by: 8/26/2014

Page 20 of 29

	<u>Classification</u>	Last	Straight T	Time and a	a Double	Overtime
Name Description Updated Hourly Half Time	me Description	Updated	Hourly	Half	Time	Provision

Operating Engineer Hazardous Waste Regular Crane, Job Mechanic, Dragline Operator, Boom Truck Operator, Power Shovel **Operator and Concrete Pump with booms** 

Level B & C protection. B - Pressure demand, full face SCBA or pressure demand supplied air respirator w/ escape SCBA w/chemical resistant clothing. C - Full face piece, air purifying canister-equipped respirator w/chemical resistant clothing.

EN-324-HWRC-Z1B 1/20/2012 \$51.86 \$67.89 \$83.91 H H H H H H D Y

Four 10 hour days may be worked Monday-Thursday with Friday as a straight-time make up day.

Operating Engineer Hazardous Waste Regular Crane, Job Mechanic, Dragline Operator, Boom Truck Operator, Power Shovel **Operators and Concrete Pump with booms** 

Level A - Fully encapsulating chemical resistant suit w/ pressure demand, full face piece SCBA or pressure demand supplied air respirator w/ escape SCBA. The highest available level of respiratory, skin and eye protection.

EN-324-HWRC-Z1A 1/20/2012 \$52.81 \$69.31 \$85.81 H H H H H H H D Y

Four 10 hour days may be worked Monday-Thursday with Friday as a straight-time make up day.

Operating Engineer Steel Work Forklift, 1 Drum Hoist	EN-324-ef 6/17/2013	\$57.11	\$75.12	\$93.13 H H D H H H D D Y
Crane w/ 120' boom or longer	EN-324-SW120 6/14/2013	\$59.81	\$79.17	\$98.53 H H D H H H D D Y
Crane w/ 120' boom or longer w/ Oiler	EN-324-SW120-O 6/14/2013	\$60.81	\$80.67	\$100.53 H H D H H H D D Y
Crane w/ 140' boom or longer	EN-324-SW140 6/14/2013	\$60.99	\$80.94	\$100.89 H H D H H H D D Y
Crane w/ 140' boom or longer W/ Oiler	EN-324-SW140-O 6/14/2013	\$61.99	\$82.44	\$102.89 H H D H H H D D Y
Boom & Jib 220' or longer	EN-324-SW220 6/14/2013	\$61.26	\$81.35	\$101.43 H H D H H H D D Y
Crane w/ 220' boom or longer w/ Oiler	EN-324-SW220-O 6/14/2013	\$62.26	\$82.85	\$103.43 H H D H H H D D Y

Official Request #: 887

Requestor: Wayne State University

Project Description: AAB Exterior Masonry Sill Restoration

Project Number: 062-240913 County: Wayne

Official Rate Schedule

Every contractor and subcontractor shall keep posted on the construction site, in a conspicuous place, a copy of all prevailing wage and fringe benefit rates prescribed in a contract.

Page 20 of 29

Issue Date:

5/28/2014

Contract must be awarded by:

8/26/2014

Page 21 of 29

<u>Classification</u> Name Description		Last Updated	Straight Tir Hourly	Half	Double Time	Overtime Provision
Boom & Jib 300' or longer	EN-324-SW300	6/14/2013	\$62.76			 + D H H H D D Y
Crane w/ 300' boom or longer w/ Oiler	EN-324-SW300	0-O 6/14/2013	\$63.76	\$85.10	\$106.43 H H	H D H H H D D Y
Boom & Jib 400' or longer	EN-324-SW400	6/14/2013	\$64.26	\$85.85	\$107.43 H H	HDHHHDDY
Crane w/ 400' boom or longer w/ Oiler	EN-324-SW400	I-O 6/14/2013	\$65.26	\$87.35	\$109.43 H H	H D H H H D D Y
Crane Operator, Job Mechanic, 3 Drum Hoist & Excavator	EN-324-SWCO	6/17/2013	\$59.45	\$78.63	\$97.81 H H	H D H H H D D Y
Apprentice F 0-999 hours 1,000-1,999 1 2,000-2,999 1 3,000-3,999 1 4,000-4,999 1 5,000 hours	hours hours hours		\$47.09 \$49.01 \$50.93 \$52.85 \$54.76 \$56.68	\$60.51 \$63.40 \$66.28 \$69.16 \$72.02 \$74.91	\$73.94 \$77.78 \$81.62 \$85.46 \$89.28 \$93.12	
Crane w/ Oiler	EN-324-SWCO	-O 6/17/2013	\$60.45	\$80.13	\$99.81 H H	H D H H H D D Y
Compressor or Welder Operator	EN-324-SWCW	6/17/2013	\$52.00	\$67.46	\$82.91 H F	H D H H H D D Y
Hoisting Operator, 2 Drum Hoist, & Rubber Tire Backhoe	EN-324-SWHO	6/17/2013	\$58.81	\$77.67	\$96.53 H H	H D H H H D D Y
Oiler	EN-324-SWO	6/17/2013	\$50.59	\$65.34	\$80.09 H H	H D H H H D D Y
Tower Crane & Derrick where work is 50' or more above first level	EN-324-SWTD!	50 6/14/2013	\$60.54	\$80.27	\$99.99 Н Н	H D H H H D D Y
Tower Crane & Derrick 50' or more w/ Oiler where work station is 50' or more above first level	EN-324-SWTD!	50-O 6/14/2013	\$61.54	\$81.77	\$101.99 H F	H D H H H D D Y

Official Request #: 887

Requestor: Wayne State University

Project Description: AAB Exterior Masonry Sill Restoration

Project Number: 062-240913 County: Wayne

#### Official Rate Schedule

Every contractor and subcontractor shall keep posted on the construction site, in a conspicuous place, a copy of all prevailing wage and fringe benefit rates prescribed in a contract.

Page 21 of 29

Issue Date: 5/2

5/28/2014

Contract must be awarded by:

8/26/2014

Page 22 of 29

Classification Name Description			Last Updated	Straight Tii Hourly	Half	Time	Overtime Provision
Operating Engineer Underground Class I Equipment		EN-324A1-UC1	9/13/2013	\$50.34	\$65.33		н н н н н
	Apprentice R: 0-999 hours 1,000-1,999 h: 2,000-2,999 h: 3,000-3,999 h: 4,000-4,999 h: 5,000-5,999 h:	ours ours ours ours		\$40.75 \$42.24 \$43.75 \$45.24 \$46.74 \$48.25	\$51.25 \$53.48 \$55.75 \$57.98 \$60.23 \$62.50	\$61.74 \$64.72 \$67.74 \$70.72 \$73.72 \$76.74	
Class II Equipment		EN-324A1-UC2	9/13/2013	\$45.61	\$58.24	\$70.86 H	нннннрү
Class III Equipment		EN-324A1-UC3	9/13/2013	\$44.88	\$57.14	\$69.40 H	H H H H H D Y
Class IV Equipment		EN-324A1-UC4	9/13/2013	\$44.31	\$56.29	\$68.26 H	ннннннрү
Master Mechanic		EN-324A1-UMN	1 9/13/2013	\$50.59	\$65.71	\$80.82 H	ннннннрү
Painter Painter (8 hours of repaint work performed on Sunday shall PT-22-P be paid time & one half rate)			6/18/2012	\$41.32	\$53.78	\$66.23 H	H D H D D D Y
Four 10s allowed Monday-Thursday with Fri if job down due to weather, holiday or othe beyond the control of the employer.		,					
	Apprentice R First 6 months Second 6 mon Third 6 months Fourth 6 months Final 6 months	s nths s hs		\$28.87 \$32.60 \$33.85 \$35.09 \$36.34 \$37.58	\$35.10 \$40.69 \$42.57 \$44.43 \$46.31 \$48.17	\$41.33 \$48.79 \$51.29 \$53.77 \$56.27 \$58.75	
Pipe and Manhole Rehab General Laborer for rehab work or normal of cctv work-top man, scaffold man, CCTV ass vac assistant		TM247	10/15/2012	\$27.20	\$36.70	н	нннннн

Official Request #: 887

Requestor: Wayne State University

Project Description: AAB Exterior Masonry Sill Restoration

Project Number: 062-240913 County: Statewide Official Rate Schedule

Every contractor and subcontractor shall keep posted on the construction site, in a conspicuous place, a copy of all prevailing wage and fringe benefit rates prescribed in a contract.

Page 22 of 29

**Issue Date:** 5/28/2014

Contract must be awarded by: 8/26/2014

Page 23 of 29

		raye 23	0 01 29			
Classification Name Description			Last Updated	Straight Ti	Half	Double Overtime Time Provision
Tap cutter/CCTV Tech/Grout Equipment Opedriver and operator of CCTV; grouting equipcutting equipment	erator: unit	TM247-2	10/15/2012	\$31.70	\$43.45	 н н н н н н н н N
CCTV Technician/Combo Unit Operator: unit operator of cctv unit or combo unit in conne normal cleaning and televising work		TM247-3	10/15/2012	\$30.45	\$41.57	ннннннн
Boiler Operator: unit driver and operator of heater units and all ancillary equipment asso		TM247-4	10/15/2012	\$32.20	\$44.20	нннннни
Combo Unit driver & Jetter-Vac Operator		TM247-5	10/15/2012	\$32.20	\$44.20	ннннннн
Pipe Bursting & Slip-lining Equipment Opera	tor	TM247-6	10/15/2012	\$33.20	\$45.70	ннннннн
<b>Pipefitter</b> Pipefitter		PF-636	6/26/2013	\$65.63	\$86.83	\$104.03 H H D H D D D Y
	Apprentice F	Rates:				
	1st & 2nd per	riods		\$26.93	\$35.28	\$42.28
	3rd period			\$28.93	\$38.28	\$46.28
	4th period			\$30.18	\$40.16	\$48.78
	5th period			\$31.43	\$42.03	\$51.28
	6th period			\$32.68	\$43.90	\$53.78
	7th period 8th period			\$33.93 \$34.93	\$45.78 \$47.28	\$56.28 \$58.28
	9th period			\$35.93	\$48.78	\$60.28
	10th period			\$37.36	\$50.92	\$63.14
<b>Plasterer</b> Plasterer		BR1P		\$45.04	\$67.56	\$90.08 H H H H H H D N
riastei ei		DKIF	11/1/2012	φ45.04	φ07.50	\$90.00 II II II II II II II II
	Apprentice F	Rates:				
	1st 6 months			\$32.11	\$48.17	\$64.22
	2nd 6 months			\$33.40	\$50.10	\$66.80
	3rd 6 months			\$34.69	\$52.04	\$69.38
	4th 6 months 5th 6 months			\$37.28 \$39.87	\$55.92 \$59.81	\$74.56 \$79.74
	6th 6 months			\$42.45	\$63.68	\$84.90
				,		•

Official Request #: 887

Requestor: Wayne State University

Project Description: AAB Exterior Masonry Sill Restoration

Project Number: 062-240913 County: Wayne Official Rate Schedule

Every contractor and subcontractor shall keep posted on the construction site, in a conspicuous place, a copy of all prevailing wage and fringe benefit rates prescribed in a contract.

Page 23 of 29

**Issue Date:** 5/28/2014

Contract must be awarded by: 8/26/2014

Page 24 of 29

			JE 24 OI 29				<u> </u>
	sification		Last	Straight Ti			Overtime
Name	Description	:=======	Updated	d Hourly	Half ======	Time	Provision
Plasterer		PL67		\$44.72	\$60.11	\$75.50 H	HHXDDDDN
1 10510101		1 207	9/8/2010	Ψ12	φοσ	φ/0.00 11	11 11 11 11 11 11 11 11 11
	Appro	entice Rates:					
	1st 6	months		\$29.33	\$37.02	\$44.72	
	2nd 6	months		\$30.87	\$39.34	\$47.80	
	3rd 6	months		\$32.41	\$41.64	\$50.88	
	4th 6	months		\$35.49	\$46.26	\$57.04	
		months		\$38.56	\$51.16	\$63.76	
	6th 6	months		\$41.64	\$55.49	\$69.34	
Plumber							
Plumber		PL-98		\$64.45	\$84.87	\$101.29 H	HDHDDDDY
i idiliboi		1270	7/18/2013		ψο 1.01	ψ101.20 H	
	Appro	entice Rates:					
	Perio	d 1		\$19.93	\$26.43	\$32.93	
	Perio	d 2		\$23.90	\$31.40	\$38.90	
	Perio	d 3		\$30.60	\$39.19	\$47.77	
	Perio	d 4		\$31.23	\$40.13	\$49.03	
	Perio	d 5		\$32.39	\$41.87	\$51.35	
	Perio	d 6		\$33.54	\$43.59	\$53.65	
	Perio	d 7		\$34.69	\$45.32	\$55.95	
	Perio	d 8		\$35.86	\$47.07	\$58.29	
	Perio	d 9		\$37.01	\$48.80	\$60.59	
	Period	d 10		\$38.16	\$50.53	\$62.89	
Roofer							
Commerc	cial Roofer	RO-14	9-WOM	\$48.46	\$62.29	\$76.62 H	HDHHHDDN
	time is not to exceed ten (10) hours per da ) hours per week.	y or	8/18/2008				
	Appro	entice Rates:					
	Appre	entice 1		\$32.62	\$39.86	\$48.04	
	• • • • • • • • • • • • • • • • • • • •	entice 2		\$36.80	\$44.80	\$53.30	
	Appre	entice 3		\$38.22	\$46.93	\$56.14	
	Appre	entice 4		\$39.25	\$48.48	\$58.20	
	Appre	entice 5		\$40.47	\$50.30	\$60.64	
	Appre	entice 6		\$41.87	\$52.40	\$63.44	
Sewer R	elinina						
	perator of audio visual CCTV system includ	ling SR-I		\$42.26	\$57.09	\$71.91 H	HHHHHDN
remote in	n-ground cutter and other equipment used on with CCTV system.		5/6/2014	Ţ . <b></b> _0	<b>4030</b>	7 11	

Official Request #: 887

Requestor: Wayne State University

Project Description: AAB Exterior Masonry Sill Restoration

Project Number: 062-240913 County: Statewide Official Rate Schedule

Every contractor and subcontractor shall keep posted on the construction site, in a conspicuous place, a copy of all prevailing wage and fringe benefit rates

prescribed in a contract.

Page 24 of 29

**Issue Date:** 5/28/2014

Contract must be awarded by: 8/26/2014

Page 25 of 29

Classification Name Description			Last Updated	Straight Tir Hourly	Half	Double Time	Overtime Provision
Class II-Operator of hot water heaters and ci system; water jetters; and vacuum and mech removal systems and those assisting.	rculation	SR-II	5/6/2014	\$40.73	\$54.79		H H H H H D N
Sheet Metal Worker Sheet Metal Worker A 4 10 schedule may be worked, 4 consecuti Monday thru Friday.	ve days	SHM-80	8/1/2013	\$60.77	\$77.68	\$94.59 H I	н
	Apprentice R	Rates:					
	1st & 2nd Per 11	riods Indenture	ed after 6-1-	\$38.12	\$45.73	\$53.34	
	3rd & 4th Peri	iods Indenture	d after 6-1-	\$39.82	\$48.28	\$56.74	
	5th & 6th Peri	iods Indenture	d after 6-1-	\$41.50	\$50.80	\$60.10	
	7th & 8th Peri	iods Indenture	d after 6-1-	\$43.19	\$53.34	\$63.48	
	9th & 10th Pe 1-11	eriods Indentur	red before 6-	\$50.86	\$63.38	\$75.90	
Siding and decking		SHM-80-SD	1/13/2014	\$42.07	\$54.28	\$66.48 H I	нннннрү
Sprinkler Fitter							
Sprinkler Fitter 4 ten hour days allowed Monday-Friday Double time pay due after 12 hours worked l	M-F	SP 704	1/10/2014	\$63.92	\$84.88	\$105.83 H I	HDHDDDDY
	Apprentice R 1st Period 2nd Period 3rd Period 4th Period 5th Period 6th Period 7th Period 8th Period 9th Period 10th Period	ates:		\$27.77 \$40.87 \$42.97 \$45.06 \$47.16 \$49.25 \$51.35 \$53.44 \$55.54 \$57.63	\$36.15 \$50.30 \$53.45 \$56.59 \$59.73 \$62.87 \$66.02 \$69.15 \$72.31 \$75.44	\$44.53 \$59.73 \$63.93 \$68.11 \$72.31 \$76.49 \$80.69 \$84.87 \$89.07 \$93.25	

Official Request #: 887

Requestor: Wayne State University

Project Description: AAB Exterior Masonry Sill Restoration

Project Number: 062-240913 County: Wayne Official Rate Schedule

Every contractor and subcontractor shall keep posted on the construction site, in a conspicuous place, a copy of all prevailing wage and fringe benefit rates prescribed in a contract.

Page 25 of 29

5/28/2014 **Issue Date:** 

Contract must be awarded by: 8/26/2014

Page 26 of 29

Classification Name Description		Last Updated	Straight Tii Hourly	Half	Time	Overtime Provision
Terrazzo						
Terrazzo Finisher A 4 ten workweek may be worked Monday thru Thursday or Tuesday thru Friday.	BR1-TRF	9/5/2013	\$43.43	\$54.38	<b>\$05.33</b> Н	HDHDDDDY
Apprentice I	Rates:					
Level 1			\$18.80	\$24.77	\$30.73	
Level 2			\$19.99	\$26.55	\$33.11	
Level 3			\$26.67	\$33.52	\$40.36	
Level 4 Level 5			\$28.12 \$29.62	\$35.69 \$37.37	\$43.26 \$45.13	
Level 6			\$31.22	\$39.37	\$47.51	
Level 7			\$32.89	\$41.08	\$49.26	
Level 8			\$34.36	\$42.95	\$51.54	
Terrazzo Worker	BR1-TRW		\$49.11	\$62.90	\$76.69 H	HDHDDDDY
A 4 ten workweek may be worked Monday thru Thursday or Tuesday thru Friday.		9/5/2013				
Apprentice I	Rates:					
Level 1			\$24.83	\$32.24	\$39.65	
Level 2			\$27.85	\$36.04	\$44.23	
Level 3			\$33.00	\$41.45	\$49.90	
Level 4 Level 5			\$35.70 \$37.94	\$45.09 \$47.57	\$54.49 \$57.21	
Level 6			\$37.94 \$41.55	\$52.91	\$64.27	
Level 7			\$42.21	\$53.72	\$65.22	
Level 8			\$43.13	\$55.10	\$67.06	
Tile						
Tile Finisher	BR1-TF		\$42.96	\$53.68	\$64.39 H	HDHDDDDY
A 4 ten workweek may be worked Monday thru Thursday or Tuesday thru Friday.		9/5/2013				
Apprentice I	Rates:					
Level 1			\$18.80	\$24.77	\$30.73	
Level 2			\$19.99	\$26.55	\$33.11	
Level 3			\$26.67	\$33.52	\$40.36	
Level 4			\$28.12	\$35.69	\$43.26	
Level 5 Level 6			\$29.62 \$31.22	\$37.37 \$39.37	\$45.13 \$47.51	
Level 7			\$31.22 \$32.89	\$41.08	\$47.31 \$49.26	
Level 8			\$34.36	\$42.95	\$51.54	

Official Request #: 887

Requestor: Wayne State University

Project Description: AAB Exterior Masonry Sill Restoration

Project Number: 062-240913 County: Wayne

Official Rate Schedule

Every contractor and subcontractor shall keep posted on the construction site, in a conspicuous place, a copy of all prevailing wage and fringe benefit rates

prescribed in a contract.

Page 26 of 29

**Issue Date:** 5/28/2014

Contract must be awarded by: 8/26/2014

Page 27 of 29

Classification Name Description	. ugo _	Last Updated	Straight Tii Hourly	Half	Double Time	Overtime Provision ======
Tile Layer A 4 ten workweek may be worked Monday t or Tuesday thru Friday.	BR1-TL hru Thursday	9/5/2013	\$49.06	\$62.83	\$76.59 H H	H D H D D D D Y
	Apprentice Rates:					
	Level 1		\$24.83	\$32.24	\$39.65	
	Level 2		\$27.85	\$36.04	\$44.23	
	Level 3		\$33.00	\$41.45	\$49.90	
	Level 4		\$35.70	\$45.09	\$54.49	
	Level 5		\$37.94	\$47.57	\$57.21	
	Level 6		\$41.55	\$52.91	\$64.27	
	Level 7 Level 8		\$42.21	\$53.72	\$65.22	
	Level o		\$43.13	\$55.10	\$67.06	
Truck Driver on all trucks of 8 cubic yard capacity or less trucks of 8 cubic yard capacity or over, tand trucks, transit mix and semis, euclid type eq double bottoms and low boys)	dem axle	8/8/2013	\$41.92	\$37.85	н	1 Н Н Н Н Н Ү
of all trucks of 8 cubic yard capacity or over	TM-RB1A	8/8/2013	\$41.30	\$38.00	н	1 H H H H H Y
on euclid type equipment	TM-RB1B	8/8/2013	\$41.45	\$38.23	Н	1 H H H H H Y
Underground Laborer Open Cut, Class I Construction Laborer	LAUC-Z1-1	9/5/2013	\$37.72	\$48.43	\$59.14 X )	X X X X X D Y
	Apprentice Rates: 0-1,000 work hours 1,001-2,000 work hours 2,001-3,000 work hours 3,001-4,000 work hours		\$32.94 \$33.90 \$34.85 \$36.76	\$41.26 \$42.70 \$44.13 \$46.99	\$49.58 \$51.50 \$53.40 \$57.22	

Official Request #: 887

Requestor: Wayne State University

Project Description: AAB Exterior Masonry Sill Restoration

Project Number: 062-240913 County: Wayne

#### Official Rate Schedule

Every contractor and subcontractor shall keep posted on the construction site, in a conspicuous place, a copy of all prevailing wage and fringe benefit rates prescribed in a contract.

Page 27 of 29

Issue Date: 5/28

5/28/2014

Contract must be awarded by:

8/26/2014

Page :	28 of	29
--------	-------	----

<u>Classification</u> Name Description		Last Updated	Straight Tii Hourly	Half	Double Time	Overtime Provision
Underground Laborer Open Cut, Class II Mortar and material mixer, concrete form man, well point man, manhole, headwall and builder, guard rail builders, headwall, seawadock builder and fence erector.	an, signal LAUC-Z1-2 d catch basin	10/25/2013	\$37.83	\$48.60		X
	Apprentice Rates: 0-1,000 work hours 1,001-2,000 work hours 2,001-3,000 work hours 3,001-4,000 work hours		\$33.02 \$33.98 \$34.95 \$36.87	\$41.38 \$42.82 \$44.27 \$47.15	\$49.74 \$51.66 \$53.60 \$57.44	
Underground Laborer Open Cut, Class III Air, gasoline and electric tool operator, vibra drillers, pump man, tar kettle operator, brac reinforced steel or mesh man (e.g. wire mes dowel bars, etc.), cement finisher, welder, p and boring man, wagon drill and air track op concrete saw operator (under 40 h.p.), wind man, and directional boring man.	ers, rodder, h, steel mats, pipe jacking perator and	9/5/2013	\$37.88	\$48.67	\$59.46 X	X
	Apprentice Rates: 0-1,000 work hours 1,001-2,000 work hours 2,001-3,000 work hours 3,001-4,000 work hours		\$33.06 \$34.02 \$34.99 \$36.92	\$41.44 \$42.88 \$44.33 \$47.23	\$49.82 \$51.74 \$53.68 \$57.54	
Underground Laborer Open Cut, Class IV Trench or excavating grade man.	LAUC-Z1-4  Apprentice Rates: 0-1,000 work hours 1,001-2,000 work hours 2,001-3,000 work hours 3,001-4,000 work hours	9/5/2013	\$37.96 \$33.12 \$34.09 \$35.06 \$36.99	\$48.79 \$41.53 \$42.99 \$44.44 \$47.33	\$59.62 X \$49.94 \$51.88 \$53.82 \$57.68	X
Underground Laborer Open Cut, Class V Pipe Layer	LAUC-Z1-5  Apprentice Rates: 0-1,000 work hours 1,001-2,000 work hours 2,001-3,000 work hours 3,001-4,000 work hours	9/5/2013	\$38.02 \$33.16 \$34.14 \$35.11 \$37.05	\$48.88 \$41.59 \$43.06 \$44.51 \$47.43	\$59.74 X \$50.02 \$51.98 \$53.92 \$57.80	X

Official Request #: 887

Requestor: Wayne State University

Project Description: AAB Exterior Masonry Sill Restoration

Project Number: 062-240913 County: Wayne

#### **Official Rate Schedule**

Every contractor and subcontractor shall keep posted on the construction site, in a conspicuous place, a copy of all prevailing wage and fringe benefit rates prescribed in a contract.

Page 28 of 29

**Issue Date:** 5/28/2014

Contract must be awarded by: 8/26/2014

Page 29 of 29

Classification Name Description	Last Updated	Straight Tir Hourly	ne and a Half	Double Time	Overtime Provision =====
Underground Laborer Open Cut, Class VI Grouting man, top man assistant, audio visual television operations and all other operations in connection with closed circuit television inspection, pipe cleaning and pipe relining work and the installation and repair of water service pipe and appurtenances.	JC-Z1-6 9/5/2013	\$35.47	\$45.06	\$54.64 X X	X
Apprentice Rates 0-1,000 work hours 1,001-2,000 work I 2,001-3,000 work I 3,001-4,000 work I	s hours hours	\$31.25 \$32.10 \$32.94 \$34.63	\$38.73 \$40.00 \$41.26 \$43.79	\$46.20 \$47.90 \$49.58 \$52.96	
Underground Laborer Open Cut, Class VII Restoration laborer, seeding, sodding, planting, cutting, mulching and topsoil grading and the restoration of property such as replacing mail boxes, wood chips, planter boxes, flagstones etc.	JC-Z1-7 9/5/2013	\$32.09	\$39.99	\$47.88 X X	X
Apprentice Rates 0-1,000 work hours 1,001-2,000 work I 2,001-3,000 work I 3,001-4,000 work I	s hours hours	\$28.72 \$29.39 \$30.07 \$31.42	\$34.93 \$35.93 \$36.95 \$38.98	\$41.14 \$42.48 \$43.84 \$46.54	

Official Request #: 887

Requestor: Wayne State University

Project Description: AAB Exterior Masonry Sill Restoration

Project Number: 062-240913 County: Wayne Official Rate Schedule

Every contractor and subcontractor shall keep posted on the construction site, in a conspicuous place, a copy of all prevailing wage and fringe benefit rates

prescribed in a contract.

Page 29 of 29

# WAYNE STATE UNIVERSITY PAYMENT PACKAGE DOCUMENT REQUIREMENTS (Revised 5-06-2011):

Review and comply with Section 410 of Bid Front End Documents.

Review and comply with Article 15 of the Supplemental General Conditions.

#### AIA DOCUMENT G702 & G703 – (or facsimile thereof) Payment Application Checklist:

- Correct Project Name Found on your contract.
- Correct Project Number Found on your contract.
- o Purchase Order Number Required prior to beginning work.
- Correct Application Number. (i.e. 1, 2, 3, etc.)
- Correct Period Reporting Dates Applications support docs must be sequential and within application range.
- Approved & Executed Change Orders must be listed. (Cannot invoice for unapproved changes.)
- Schedule of values percentages and amounts match the approved Pencil Copy Review Signed by the Architect, Contractor, and University Project Manager.
- Correct Dates Back dating not accepted.
- Signed and Notarized.

#### SWORN STATEMENT - Checklist:

- o List all contractors, sub-contractors, suppliers... ≥ \$1000.00
- Ocontractor's Sworn Statement amounts must coincide with Column "C" of the schedule of values document. Any unassigned or uncommitted value of contract shall be shown on an entry "Contractor Unassigned" followed by the amount necessary to cause the "contracted to date" column of the sworn statement to equate with the schedule of value column totals.
- Current Date Back dating not accepted.
- Signed and Notarized.
  - A Sworn Statement is required from every Sub Contractor on the job with a material purchase or sub-subcontract of \$1,000 or more. (all the way down to the bottom tier)

# DEPT. of LABOR FORM WH-347 – Certified Payroll Checklist: (Union and Non-Union)

- For every contractor & sub-contractors work, for each week within the application for payment reporting period. (For every "boot" on the floor representing the weeks within the application period)
- Wayne State University Project Number Found on your contract.
- List ALL workers who have worked on the project site.
- o Make sure workers addresses are listed.
- o NO Social Security Numbers, if present they MUST be blackened out or listed in XXX-XX-1234 format.
- Work classifications based on the job specific Prevailing Wage Schedule descriptions. If you require rates for additional classifications, contact the Michigan Department of Consumer & Industry Services. (Refer to Section 410 of Bid Front End Documents.)
  - http://www.cis.state.mi.us/bwuc/bsr/wh/revised\_rates/whc\_tbl.htm
- o Apprenticeship program status proof of enrolled program and current completion required for any workers paid at Apprenticeship rates.
- Rate of Pay verified against the Prevailing Wage Schedule with an hourly costs breakdown of fringes paid. (Refer to attachment for State of Michigan instructions and example)
- Authorized signatures on affidavit.

# APPLICATION PACKAGE SUPPORTING DOCUMENTATION –

# Must accompany all package reporting periods: (Union and Non-Union) o Copies of Pay Stubs may be required for each Certified Payroll period reported – (Social Security Numbers MUST be

- Copies of Pay Stubs may be required for each Certified Payroll period reported (Social Security Numbers MUST be blackened out or listed in XXX-XX-1234 format. Pay stubs need to reflect claimed participation of fringes like Medical, Dental, Retirement or 1099 classification.)
- Proof of Ownership for any "Owner Operator" (Sole Proprietor) contractors not claiming their time under prevailing wage act. – (Must list their hours and dates worked on the WH-347 Form and enter EXEMPT on the income brackets.). The Owner Operator must provide copies of "DBA" registration form confirming status as exempt from prevailing wage requirements.

- o Proof of Stored Materials (Detailed Bill of Sale, certificate of insurance or endorsement page specifically insuring the stored materials, pictures, when large value. WSU reserves the right to on site verification of material. Stored material must be separated from ordinary inventory and labeled for WSU project.
- o Partial Unconditional Waivers Must release the accumulated amount paid for work and be immediately provided, or provided with the subsequent application for payment. Waivers shall be provided for contractors, sub-contractors, and suppliers listed on the Sworn Statements. (This is required at all tiers)
- Full Unconditional Waivers Prime Contractor must deliver fully executed Full Unconditional Waiver upon receipt of final payment. Full Unconditional waivers may be required of sub-contractors and suppliers in advance of final Contractor payment on bonded projects This requirement shall be determined on a project-by-project basis. Full Unconditional waivers shall be required in advance of or at the time of final payment on all non-bonded projects from all subcontractors and suppliers listed on Sworn Statements, or who have provided a notice of furnishing.
- Partial Conditional Waivers The Contractor shall provide a Partial Conditional Waivers covering the entire amount of the application for payment. For non-bonded Projects – A partial conditional waiver from all subcontractors must accompany any application for payment within which a subcontractor draw is included.
- Sworn Statements Required for all Sub Contractors, and Sub-subcontractors (etc.) with any contracts or purchases exceeding \$1,000.

#### FINAL PAYMENT EXCHANGE - Checklist:

- Clear and concise As-Built drawings.
- Operation and Maintenance Manuals.
- o Required training must be completed (if applicable).
- Warranty of work in accordance with project documents.
- o Certificate of Substantial Completion.
- Full Unconditional Waiver

The Project Manager may provide additional requirements as may apply to individual jobs

Revised 5-6-2011

# WAYNE STATE UNIVERSITY

Executed as of the \_\_\_\_\_ day of \_\_\_\_\_, 2014 by and between:

The Board of Governors, Wayne State University
Detroit, Michigan 48202
(The University))

and

CONTRACTOR'S\_NAME
CONTRACTOR'S\_ADDRESS

regarding

AAB Exterior Masonry Sill Restoration
5700 Cass Avenue
WSU Project No. 062-240913

In consideration of the mutual covenants and conditions contained herein, the Parties agree as follows:

#### Article 1 - Scope of Work

- 1.1 This Agreement provides for restoration of failing masonry sills, heads and jambs, located at 5700 Cass **Avenue**. The documents listed in Article 4 fully define the scope of work.
- 1.2 The Contractor shall furnish all the labor, materials, equipment, services, and supervision to perform all the work shown on the drawings and specifications listed in Article 18, including any addenda issued during the bid phase, and approved change orders issued during the construction phase.
- 1.3 The Contractor shall notify the University in writing within five (5) calendar days when the Contractor discovers any condition that will affect the contract amount or the completion date.

#### **Article 2 - Time of Completion**

2.1 The work to be performed under this Agreement shall commence upon the Contractor's receipt of a fullyexecuted Agreement, and substantial completion shall be achieved by September 26, 2014 (Base Scope), November 21, 2014 (Any Alternates).

#### Article 3 - The Contract Sum

- The University shall pay the Contractor a "lump sum/not-to-exceed (pick one)" amount of \$\$\$\$\$\$\$ ("Amount 3.1 in words 00" /100 dollars) for the performance of all work associated with the Contractor's Base Bid "and Alternates (List)".
- The University may, at its sole discretion, during the life of the contract, award the following alternates at the 3.2 amounts indicated: "(If section 3.2 is not used, delete all text and enter Deleted"

Description Amount Alternate #1 Alternate #2 Alternate #3

In the event additional work becomes necessary, the following unit prices will apply: 3.3 (If section 3.3 is not used, delete all text and enter Deleted)

- Work Item 1.
- 2.
- 3.

#### **Article 4 - The Contract Documents**

- The Contract Documents shall consist of this Agreement, the drawings and specifications as listed in Article 4.1 18, the General Conditions of the Contract for Construction as defined by AIA Document A201 1970 Edition, except as otherwise provided herein, and Wayne State University's Supplementary General Conditions 1997 Edition.
- 4.2 For any inconsistencies found among or between these Contract Documents, the language contained in this Agreement shall prevail over all other documents and the Supplementary General Conditions shall prevail over the General Conditions. In the event of a conflict between the Drawings and Specifications, the requirement for the higher quantity and/or higher quality shall prevail.

#### Article 5 - Examination of Premises

5.1 The Contractor acknowledges that the University provided the opportunity for a thorough examination of the project site and its surroundings and that the Contractor knows of no conditions preventing accomplishment

**Unit Price** 

of the full scope of work within the time and for the amount specified in this Agreement.

5.2 The University will deny all claims for additional time and/or cost for conditions that could have been reasonably discovered during such an examination.

#### Article 6 - The Architect/Engineer

6.1 The Architect/Engineer for this project is:

"(List the Architect and Engineer separately if appropriate)"

French Associates, Inc. 1600 Parkdale Road Rochester, MI 48307 (Architect Phone No / Fax No)

The University will appoint a Project Manager who will be the University's point of contact for all matters of contract administration including, but not limited to, interpretation of documents, defining the scope of work, approving work schedules, and approving contract payments.

#### **Article 7 - Additional Work**

- 7.1 The University reserves the right to let other Agreements in connection with this work. The Contractor will afford other Contractors or the University's own workforce reasonable opportunity for the delivery and storage of their material and for the performance of their work and shall properly connect and coordinate its work with theirs.
- 7.2 If any part of the Contractor's work depends for proper execution of results upon the work of another Contractor or the University's own workforce; the Contractor shall inspect and promptly report to the University's Project Manager any defects in such work that render it unsuitable for such proper execution and results. The Contractor's failure to so inspect and report shall constitute an acceptance of the work of others as fit and proper for reception of the Contractor's work and as a waiver of any claim or defense against the University or other contractor which relies in whole or in part upon the contention that such work was unsuitable for proper execution and resolution.

#### Article 8 - Dispute Resolution

- Jurisdiction over all claims, disputes, and other matters in question arising out of or relating to this contract or the preach thereof, shall rest in the Court of Claims of the State of Michigan. No provision of this agreement may be construed as Wayne State University's consent to submit any claim, dispute or other matter in question for dispute resolution pursuant to any arbitration or mediation process, whether or not provisions for dispute resolution are included in a document which has been incorporated by reference into this agreement. Specifically, all references to Arbitration contained in the General Conditions are superceded by this Article.
- In any claim or dispute by the Contractor against the University, which cannot be resolved by negotiation, the Contractor shall submit the dispute in writing for an administrative decision by the University's Vice President for Finance and Administration, within 30 days of the end of negotiations. Any decision of the Vice President shall be made within 45 days of receipt from the Contractor and is final unless it is challenged by the Contractor by filing a lawsuit in the Court of Claims of the State of Michigan within one year of the issuance of the decision. The Contractor agrees that appeal to the Vice President is a condition precedent to filing suit in the Michigan Court of Claims.
- 8.3 For purposes of this section, the "end of negotiations" shall be deemed to have occurred when:
  - 8.3.1 Either party informs the other that pursuant to this section, negotiations are at an impasse; or
  - 8.3.2 The Contractor submits the dispute in writing to the Vice President.

8.4 Unless otherwise agreed by the University in writing, and notwithstanding any other rights or obligations of either of the parties under any Contract Documents or Agreement, the Contractor shall continue with the performance of its services and duties during the pendency of any negotiations or proceedings to resolve any claim or dispute, and the University shall continue to make payments in accordance with the Contract Documents; however, the University shall not be required or obligated to make payments on or against any such claims or disputes during the pendency of any proceeding to resolve such claims or disputes.

#### **Article 9 - Termination for Convenience**

- 9.1 Upon thirty days written notice to the Contractor, the University may, without cause and without prejudice to any other right or remedy of the University, elect to terminate the contract. In such case, the Contractor shall only be paid (without duplication of any items), using a Close out Change Order, for the following:
  - 9.1.1 For completed and acceptable work executed in accordance with the Contract Documents prior to the effective date of termination, including fair and reasonable sums for overhead and profit on such Work;
  - 9.1.2 For expenses sustained prior to the effective date of termination in performing services and furnishing labor, materials, or equipment as required by the Contract Documents in connection with uncompleted work, including fair and reasonable sums for overhead and profit on such expenses.
- 9.2 The Contractor shall not be paid on account of loss of anticipated profits of revenue, delay or disruption, or other economic loss arising out of or resulting from such termination. For purposes of this section, "fair and reasonable sums for overhead and profit" shall be determined by reference to Michigan law, without reference to principles used for such determinations in arbitration.

#### Article 10 - Progress Payments

- On or before the 20th day of each month, the Contractor shall submit a written application for payment, using form AIA G702, to the Architect/Engineer and the University's Project Manager for review. The Architect/Engineer shall have ten (10) calendar days to accept or reject the Contractor's application for payment. Acceptable applications for payment shall then be submitted to the University for Payment of authorized amount(s) within thirty (30) calendar days of receipt by the University's Project Manager.
- The application for payment shall contain a full schedule of values organized and sorted by subcontractor, by Construction Specifications Institute standard work categories, or in another format acceptable to the University.
- Monthly progress payments shall show the percentage of work installed as of the date of the application, less amount previously installed and the amount due for the application period. The Contractor shall deduct a 10% retainage from the balance due for each progress payment and indicate the net amount due on each application.
- When 50% of the work associated with this Agreement is installed, the Contractor shall not deduct additional retainage from the balance due from the University. When substantial completion is achieved and acknowledged by the Architect/Engineer, the Contractor and the University in writing, the University shall remit to the Contractor all but 2% of the retainage. The remaining 2% shall be retained by the University until the final payment is authorized and remitted to the Contractor.

#### **Article 11 - Acceptance and Final Payments**

- Final payment shall be due thirty (30) days after the completion of the work, including all punch list items, provided the work is fully completed and the Agreement fully performed.
- 11.2 Upon receipt of written notice that the work is ready for final inspection and acceptance, the Architect/Engineer shall promptly inspect the work. When the Architect/Engineer concludes that the work is acceptable and the Agreement to be fully performed, the Architect/Engineer shall promptly issue a final certificate with an original signature, stating that the work provided is complete and acceptable and that the entire remaining balance found to be due the Contractor shall be remitted by the University once the final

application for payment is received.

If, after the work has been substantially completed, full completion thereof is materially delayed through no fault of the Contractor, and the Architect/Engineer so certifies, the University shall, upon certificate of the Architect/Engineer, and without terminating the Contract, make payments of the balance due for that portion of the work fully completed and accepted. Such payments shall be made under the terms and conditions governing final payment, except that it shall not constitute a waiver of claims.

#### Article 12 - Non-Discrimination

- 12.1 The Contractor agrees that it will not discriminate against any employee or applicant for employment, to be employed in the performance of this Agreement, with respect to hire, tenure, terms, conditions or privileges of employment or any matter directly or indirectly related to employment, because of race, color, religion, sex, age, national origin, or ancestry. Breach of this covenant may be regarded as material breach of this Agreement.
- The Contractor further agrees that it will, in all subcontracts relating to the performance of the work under this Agreement, provide in its subcontracts that the subcontractor will not discriminate against any employee or applicant for employment, to be employed in the performance of such contract, with respect to hire, tenure, terms, conditions or privileges of employment, or any matter directly or indirectly related to employment because of race, sex, age, color, religion, national origin or ancestry. Breach of this covenant may also be regarded as a material breach of this Agreement.

#### Article 13 - Laborers and Mechanics

- All laborers and mechanics must be covered by Worker's Compensation and Employer's Liability Insurance as required by Federal and Michigan law. The Contractor shall also require all of its Subcontractors to maintain this insurance coverage.
- The Contractor acknowledges and shall abide by the University's prohibition on use of 1099 independent contractors and owner / operator business entities. The Contractor shall ensure that all classifications of laborers and construction mechanics performing Work on the Project job site are employees of the Contractor or any Trade Contractor for any tier thereof, and that each worker is covered by workers compensation insurance.

#### Article 14 - Prevailing Wages

- The Contractor and each subcontractor shall pay to each class of mechanics and laborers not less than the wage and fringe benefit rates prevailing in the Detroit Metropolitan Area, as determined by the United States Department of Labor. The Contractor shall post on site, in a conspicuous place, a copy of all applicable wage and benefit rates, and shall provide the University with a copy of the applicable wage and benefit rates.
- The Contractor and each subcontractor shall keep an accurate record showing the name and occupation of and the actual benefits and wages paid to each laborer and mechanic employed in connection with this contract. The Contractor and each subcontractor shall make certified payroll records available to the University's representatives upon request.
- 14.3 If a Contractor or subcontractor fails to pay the prevailing rates of wages and fringe benefits and does not cure such failure within ten (10) days after notice to do so by the University, the University shall have the right, at its option, to do any or all of the following:
  - 14.3.1 Withhold all or any portion of payments due the Contractor as may be considered necessary by the University to pay laborers and mechanics the difference between the rates of wages and fringe benefits required by this Agreement and the actual wage and fringe benefits paid.
  - 14.3.2 Terminate part or all of this Agreement or any subagreement and proceed to complete the

Agreement or subagreement by separate agreement with another Contractor or otherwise, in which case the Contractor and its sureties shall be liable to the University for any excess costs incurred by the University.

14.4 The Contractor shall include terms identical or substantially similar to this section in any Agreement or subagreement pertaining to the project.

#### **Article 15 - Save Harmless**

The Contractor shall indemnify, defend and hold harmless the University, its agents and employees from any and all loss, damage, claims, and causes of action whatsoever, including all costs, expenses and attorneys' fees arising out of Contractor's performance of obligations under the terms and conditions of this agreement. Such responsibility shall not be construed as liability for damage caused by or resulting from the negligence of the University, its agents other than the Contractor, or its employees.

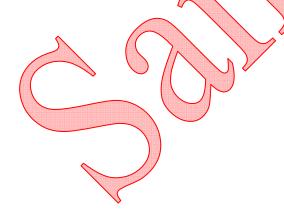
#### **Article 16 - Liquidated Damages**

It is understood and agreed that, if the project is not completed within the time specified in the Agreement plus any extension of time allowed pursuant thereto, the actual damages sustained by the University because of any such delay will be uncertain and difficult to ascertain, and it is agreed that the reasonable foreseeable value of the use of said project by the University would be the sum of \$100.00.00, One Hundred Dollars per day. Therefore, the Contractor shall pay as liquidated damages to the University the sum of \$100.00.00, One Hundred Dollars per day for each day's delay in substantially completing said project beyond the time specified in this Agreement and any extensions of time allowed thereunder.

"ENTER N/A FOR ABOVE AMOUNT IF NO LIQUIDATED DAMAGES

#### Article 17- Interpretation

- 17.1 This Agreement shall be interpreted and construed according to the laws of the State of Michigan.
- 17.2 If one part of this Agreement is found to be void by legal or legislative action, the remainder of the contract remains in full effect



## **Article 18 - Drawings and Specifications**

18.1 The Technical Specifications and the Project Manual dated **June 2, 2014,** and the following List of Drawings represents the scope of work as defined in the Contract Documents from Article 4.

DRAWINGS

Drawing No.: Description dated



**IN WITNESS WHEREOF** the parties to these presents have hereunto set their hands as of the day and year first written above.

Signed, sealed and delivered in the presence of:	CONTRACTOR'S NAME GOES HERE  By
	Please print name here
	Date signed
<del></del>	Title
Witness	THE BOARD OF GOVERNORS OF WAYNE STATE UNIVERSITY
	Richard V Nork, Vice President for Finance and Facilities
	Date signed
Form Contract Approved by OGC 06/13 – LG File_reference_here	

## **FORM OF GUARANTEE**

PROJECT: AAB Exterior Masonry Sill Restoration	on .
OWNER: BOARD OF GOVERNORS, WAYNE STAT	TE UNIVERSITY
CONTRACTOR:	
DATE:	
Know all men by these presents that, in consideration complete furnishing and installation of:	n of my (our) having been awarded the Contract or Subcontract fo
AAB Exterior Masonry Sill Restoration (062-2409	13)
For: <b>Board of Governors, Wayne State University</b> In conformity with drawings and specifications prepared	d by Architect or Engineer, <b>French Associates, Inc.</b> , and known as
etc., that I (we) will return to the buildings within three	that, should I (we) be notified that the said work has proved faulty (3) working days of the receipt of such notice, and will furnish the satisfaction of the Owner and without cost to the Owner.
The Agreement shall remain in full force and effect for	a one year period (DATE TBD)
WITNESS:	signed: Subcontractor by:
	address: city/state/zip:
	signed:

(THIS FORM TO BE FILED IN DUPLICATE.)

FORM OF GUARANTEE 00510 - 1

#### **GENERAL CONDITIONS** (Revised 10-2009)

- A. Although AIA Document A201 Twelfth Edition (April 1970) "General Conditions of the Contract for Construction" is not bound herein, it forms a part of these construction documents.
- B. A reference copy of AIA Document A201 Twelfth Edition (April 1970) "General Conditions of the Contract for Construction" is on file at the following location:

Wayne State University
Finance & Facilities Management
Procurement & Strategic Sourcing
Academic / Administrative Services Building
5700 Cass Avenue
Detroit Michigan 48202

GENERAL CONDITIONS 00700 - 1

#### SUPPLEMENTARY GENERAL CONDITIONS

OF

THE CONTRACT FOR CONSTRUCTION

Facilities Planning & Management - Design & Construction Services

Wayne State University

# WSU SUPPLEMENTARY GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION

NOTE:

The following items related to A.I.A. General Conditions, A.I.A. Document A-201 - Twelfth Edition (April 1970), by specific number being amended to. These items, as amendments, shall have precedence over the article being amended.

#### **ARTICLE 1 - CONTRACT DOCUMENTS**

1.1 DEFINITIONS
-----------------

1.1.5 The Agreement

The Agreement executed by the Contractor and the Owner.

- 1.2 EXECUTION, CORRELATION, INTENT, AND INTERPRETATIONS
- 1.2.6 "General Conditions and "Supplementary General Conditions" apply with equal force to all Contractors, Subcontractors work, and extra work required under this Contract.
- 1.2.7 Precedence of Drawings and Specifications.

The Agreement has precedence over WSU Supplementary General Conditions.

WSU Supplementary General Conditions have precedence over A.I.A. A-201 General Conditions of the Contract.

Specifications have precedence over drawings. Full-size drawings have precedence over scale drawings. Large-scale plans and details have precedence over small-scale plans and details. Figured dimensions have precedence over plans and elevations.

#### **ARTICLE 2 - ARCHITECT**

- 2.1 DEFINITION
- 2.1.1.1 The term Architect or Architect/Engineer as used in these specifications refers to Facilities Planning and Management Design Services, and/or Consulting Architect/Engineer.
- 2.2 ADMINISTRATION OF THE CONTRACT
- 2.2.16 The Architect will assign Field Representatives to make periodic visits to the project for the purpose of assisting the Architect in carrying out his field responsibilities at the site. The duties, responsibilities and limitations of authority of any such Field Representative shall be as follows:
  - a. Explain Contract Documents: Assist the Contractor via the Contractor's Superintendent to understand the intent of the Contract Documents.
  - Observations: Conduct on-site observations and spot checks of the work in progress as a
    basis for determining conformance of the work, material, and equipment with the Contract
    Documents.
  - c. Additional Information: Obtain from the Architect, additional details or information, if and when required, at the job site for proper execution of the work.
  - d. Modifications: Consider and evaluate suggestions or modifications that may be submitted by the Contractor and report them with recommendations to the Architect for final decision.
  - e. Construction Schedule and Completion: Be alert to the completion, and report same to the Architect. When the construction work has been completed in accordance with the Contract Documents, advise the Architect that the work is ready for general inspection and

acceptance.

- f. Job Conferences: Attend and report to the Architect on all required conferences held at the job site.
- g. Observe Tests: See that tests which are required by the Contract Documents are actually conducted; observe, record and report to the Architect all details relative to the test procedures; and advise the architect's office in advance of the schedules of tests.
- h. Inspection by Others: If inspectors, representing local, state or federal agencies having jurisdiction over the project, visit the job site, accompany such inspectors during their trips through the project, record the outcome of these inspections, and report same to the Architect's office.
- Shop Drawings: Do not permit the installation of any materials and equipment for which shop drawings are required unless such drawings have been duly approved and issued by the Architect.
- Contractor's Requisitions for Payment: Review and make recommendations to the Architect for disposition.
- k. List of Items for Correction: After substantial completion, make a list of items for correction before final inspection and check each item as it is corrected.
- I. Owner's Occupancy of the Building: If the Owner occupies (to any degree) the building prior to actual completion of the work by the Contractor, be especially alert to possibilities of claims for damage to completed work prior to the acceptance of the building.
- m. Owner Existing Operation: In the case of additions to or Demolitions of an existing facility, which must be maintained as an operational unit, be alert to conditions on the job site which may have an effect on the Owner's existing operation.
- Limitations of Authority: Do not become involved in any of the following areas of responsibility unless specific exceptions are established by written instructions issued by the Architect.
  - aa. Do not authorize deviations from the Contract Documents.
  - bb. Avoid conducting any test personally.
  - cc. Do not enter into the area of responsibility of the Contractor's field superintendent.
  - dd. Do not expedite job for Contractor unless so instructed by the Architect.
  - ee. Do not advise on or issue directions relative to any aspect of the building technique or sequence unless a specific technique or sequence is called for in the Specifications or by written instructions from the Architect.
  - ff. Do not approve shop drawings or samples.
  - gg. Do not authorize or advise the Owner to occupy the Project, in whole or in part, prior to the final acceptance of the building.
  - hh. Do not issue a Certificate for Payment.

#### **ARTICLE 3 - OWNER**

- 3.5 OWNER'S RIGHT TO DO WORK
- 3.5.1 The Owner may exercise his right, which is hereby acknowledged by the Contractor, to let independent of the Contract for the work herein specified, any other work on the premises even if of

like character and trades, and the Owner shall not be liable for any damage, loss or expense incurred by the Contractor through the fault of any other Contractor so employed by the Owner. The Contractor acknowledges the necessity of work by others, to be performed at approximately the same time as the work hereunder, and agrees to perform his work in full cooperation with the work of such other trades and/or Contractors, partially or entirely completed, by such other trades and/or Contractors, or by the Owner, when, in the opinion of the Architect, such access or use is necessary for the performance and completion of any portion or all of the work of others or of any work on the site.

#### 3.6 OWNER'S ACCESS AND PARTIAL OCCUPANCY

- 3.6.1 The Owner shall have access to the work at all times, and at his election, may from time to time (prior to the stipulated contract completion date) occupy any of the units or parts of the project as the work in connection therewith is complete to such a degree as will, in the opinion of the Owner, permit their temporary or permanent use. The Owner will, prior to any such partial occupancy, give notice to the Contractor thereof and such occupancy shall be upon the following terms:
  - a. Such occupancy shall not constitute an acceptance of work not performed in accordance with the Contract nor shall such occupancy relieve the Contractor of liability to perform any work by the Contract by not complete at the time of occupancy.
  - b. Except as otherwise provided by an agreement at the time of such partial occupancy, the Contractor shall be relieved of all maintenance costs on units or parts so occupied.
  - The Contractor shall not be responsible for wear and tear or damage resulting from partial occupancy.
  - The Owner shall assume risk of loss with respect to any unit or part so occupied.
  - e. The Contractor shall, if required by the Owner, furnish heat, light, water, or other such services to the units or parts occupied and the Owner shall make proper remuneration therefore to the Contractor.
  - The Contractor agrees that the Owner shall have the right, after seven (7) days' written notice to the Contractor, to place and install as much equipment and machinery during the progress of the work as is possible before the completion of the various parts of the work; and further agrees that such placing and installation of equipment shall not in any way evidence the completion of the work or any portion thereof, nor signify the Owner's acceptance of the work or any portion thereof. Should the Owner place or install such equipment and machinery with his own forces he shall be responsible for any damage to work of the Contractor caused by the Owner's work or workmen. Should the Owner have such placement or installation performed by another Contractor, then the Owner shall require said Contractor to be responsible for all such damage caused by his work, his workers, or his subcontractors.

#### **ARTICLE 4 - CONTRACTOR**

3.6.2

- 4.4 LABOR AND MATERIALS
- 4.4.3 All materials shall be so delivered, stored and handled to prevent the inclusion of foreign materials and the damage of materials by water or breakage. Packaged materials shall be delivered and stored in original packages until ready for use. Packages or materials showing evidence of water or other damage shall be rejected. All materials shall be of the respective qualities specified herein.
- 4.4.4 The Contractor shall be responsible for the proper care and protection of all his materials, equipment, etc., delivered at the site. Building materials, equipment, etc., may be stored on the premises subject to the approval of the Architect.
- 4.4.5 To insure timely availability of critical materials in case of national emergency, the Contractor may order his subcontractors to proceed with fabrication of the same earlier than required by normal sequence of construction. In the event storage facilities are not available on the site or at the source of fabrication, the Owner will endeavor to provide such storage space as may be available to care for same. Where this is necessary, the Contractor shall be paid for all stored material on the

Owner's property or on the properties approved by the Owner upon approval of certified invoices. It shall be the Contractor's obligation to pay for all handling costs and damage to this material. The Contractor shall protect this property against damage.

- 4.6 TAXES
- 4.6.1 The Bidder shall include in his proposal and make payment of all Federal, State, County and Municipal taxes including Michigan State Sales and Use Taxes, now in force or which may be enacted during the progress and completion of the work covered.
- 4.7 PERMITS, FEES AND NOTICES
- 4.7.3 The Contractor shall pay highway or DPW fees for damages to sidewalks, streets, or other public property or to any public utilities.
- 4.7.4 Permits and licenses of a temporary nature necessary for the execution of the work shall be secured and paid for by the Contractor.
- 4.7.5 Except for the General Building Permit (which is not required), the Contractor shall secure and pay for all other required permits, including the following:

Electrical - State of Michigan
Plumbing - State of Michigan
Mechanical - State of Michigan

Elevator- City of Detroit

- 4.7.6 The Contractor shall secure certificates of inspection and of occupancy that may be required by authorities having jurisdiction over the work. These certificates shall be delivered to the Architect upon completion of the work.
- 4.9 SUPERINTENDENT
- 4.9.2 The Contractor shall give sufficient supervision to the work, using his best skill and attention. He shall carefully study and compare all drawings, specifications, and other instructions, and shall at once report to the Architect any error, inconsistency, or omission which he may discover, but he shall not be held responsible for their existence or discovery.
- 4.9.3 The Contractor's superintendent shall periodically inspect the entire project to make certain that all of the stipulations of all of the articles of the General Conditions are being observed.
- 4.12 DRAWINGS AND SPECIFICATIONS AT THE SITE
- 4.12.1.1 Refer to Paragraph 4.12.1, of A.I.A. General Conditions of the Contract for Construction. Modify the last sentence of this paragraph to read:

"The Drawings, marked to record all changes made during construction, shall be incorporated in the Contractor's 'Informational Package'."

- 4.12.2 As a basic and interim step for the fulfillment of the "Informational Package", accurate records of all non-structural underground and concealed work shall be kept, including, but not limited to, all piping, conduit, equipment, and drainage and tunnel work. In addition, such records shall be available for review during various steps of the project.
- 4.13 SHOP DRAWINGS AND SAMPLES

- 4.13.9 Immediately before and as a condition of substantial completion, the Contractor shall provide the Owner an "Informational Package" and instructional sessions on the operation, maintenance, and service of the facility. The "Informational Package" shall include:
  - 1. One (1) set of transparency (sepia) of the approved shop drawings and descriptive material submitted during construction. Any shop documents unobtainable in sepia shall be supplied in three (3) sets.
  - One (1) set of transparency (sepia) of constructional shop drawings with all installation revisions incorporated to reflect the as-built condition. Examples of constructional shop drawings are dimensioned conduit, piping and ductwork layout drawings.
  - 3. Three (3) sets of instructional manuals on the installation, operation, maintenance and service of equipment and systems, including parts lists.

**Examples of Specific Information Required:** 

### 1. Electrical

- Conduit layout of light, power, and special systems, indicating dimensionally the locations and size of runs; circuit grouping and conductor size and number in conduit runs.
- System description and elementary diagrams, connection and interconnection diagrams, and device internal diagrams.

### 2. Mechanical

- Piping and ductwork layout indicating dimensionally the location and size of the runs.
- b. Description and diagrams of control systems.

Following the submittal of the "Informational Package", the Contractor shall schedule and provide, at the Owner's convenience, instructional sessions for Owner's personnel to acquaint them with the operation, maintenance, and service of the system.

### Elevators

 Elementary diagrams and description of sequence of operation of the system control components, connection and interconnection diagrams, and device internal diagrams.

### **ARTICLE 5 - SUBCONTRACTORS**

- 5.2 AWARD OF SUBCONTRACTS AND OTHER CONTRACTS FOR PORTIONS OF THE WORK
- 5.2.3 Delete Article 5.2.3 in its entirety.
- 5.2.4 Delete Article 5.2.4 in its entirety.

# ARTICLE 7 - MISCELLANEOUS PROVISIONS (Revised 6-13-2011)

- 7.5 PERFORMANCE BOND AND LABOR AND MATERIAL PAYMENT BOND
- 7.5.1 The successful Bidder will be required to furnish a Performance Bond and Labor and Material Payment bond in an amount equal to 100% of the contract award amount, and include such cost in the Proposal, complying with the laws of the State of Michigan. The graduated formula no longer applies.

- A. Performance Bond and Labor and Material Payment Bond shall be from a surety company acceptable to the Owner and made payable as follows:
  - (1) A Labor and Material Payment bond for 100% of the contract award amount to the Board of Governors of Wayne State University, and guaranteeing the payment of all subcontractors and all indebtedness incurred for labor, materials, or any cause whatsoever on account of the Contractor in accordance with the laws of the State of Michigan relating to such bonds.
  - (2) A Performance bond for 100% of the contract award amount to the Board of Governors of Wayne State University to guarantee and insure the completion of work according to the Contract.
- B. The only acceptable Performance Bond shall be the AIA A312 2010.
- C. The Contractor shall include with his bid evidence of his ability to obtain a Performance Bond in the amount of 100% of the bid amount, and in accordance with the terms and conditions outlined in this section, Such evidence shall be project specific and shall be submitted on a form provided by the Surety or Agent thereof.
- 7.7 ROYALTIES AND PATENTS
- 7.7.1 The Contractor hereby agrees to indemnify, protect and save harmless the Architect and the Owner from and against any and all liability, loss or damage, and to reimburse the Owner and the Architect for any expenses, including legal fees and disbursements to which the Owner or the Architect may be put because of claims of litigation on account of infringement or alleged infringement of any letters patent or patent rights by reason of the work or materials, equipment, or other items used by the Contractor in its performance.
- 7.9 INTEREST
- 7.9.1 Delete Article 7.9 in its entirety.

# **ARTICLE 8 - TIME**

- 8.1 DEFINITIONS
- 8.1.3 The Date of Substantial Completion of the Work is the Date certified by the Architect when construction of the entire work is sufficiently complete, in accordance with the Contract Documents, so the Owner may occupy the Work for the use for which it is intended. It is the beginning date for the guarantees on all the Project Work.
- 8.3.5 LIQUIDATED DAMAGES

It is understood that if said Contract is not completed within the time specified in the Contract plus any extension of time thereto, the Contractor shall pay Liquidated Damages to the Owner as set forth in Article 11 of the Agreement between Contractor and Owner for Construction.

### **ARTICLE 9 - PAYMENT AND COMPLETION**

- 9.3 PROGRESS PAYMENTS
- 9.3.1 On or before the 20th day of each month, the Contractor shall submit to the Architect on the Owner's Standard Form, a written application for payment showing the proportionate value of the work installed to date from which shall be deducted, a reserve of 10% and all previous payments, and the balance of the amount as approved by the Architect shall be due and payable to the Contractor on or about the 15th day of the succeeding month.
- 9.3.2.2 No payments will be made because of materials or equipment stored off the site, except as provided for in Subparagraph 4.4.5 of the Supplementary General Conditions or other special cases the Owner may approve.
- 9.6 FAILURE OF PAYMENT

9.6.1 Delete Article 9.6 in its entirety.

# ARTICLE 11 - INSURANCE (Revised 3-22-2012)

# 11.1 CONTRACTOR'S LIABILITY INSURANCE

11.1.2 The insurance required by Subparagraph 11.1.1 shall be written for not less than any limits of liability specified herein, or required by law, whichever is greater, and shall include contractual liability insurance as applicable to the Contractor's obligations under Paragraph 4.18.

During the life of the Contract, the Contractor shall maintain the following types of insurance:

# A. General Requirements

Type of Insurance	Minimum Requirement	
Comprehensive General     Liability	Bodily Injury	\$ 500,000 each person \$1,000,000 aggregate
	Property Damage	\$ 500,000 each occurrence \$1,000,000 aggregate or \$2,000,000 combined single limit (CSL)
2.Fire Legal Liability		\$ 100,000
3.Comprehensive Automobile Liability (including Hired and non-owned vehicles)	Bodily Injury Property Damage	\$ 500,000 each person \$1,000,000 each accident \$ 500,000 each accident
,		or \$2,000,000 combined single limit (CSL)
4.Workers'Compensation (Employer's Liability)	Statutory - Michigan \$100,000	\$2,000,000 combined single limit (CSL)
5.Property - All Risk	In an amount sufficient to cover the total value of the contractor's property in the care, custody or control of WSU.	

### B. Maximum Acceptable Deductibles

Type of Insurance		Maximum Deductible	
	Comprehensive General Liability Fire Legal Liability Comprehensive Automobile Liability Workers' Compensation Property - All Risk	\$5,000 \$5,000 -0- -0- \$ 500	
11.1.3	with respect to accidents arising out of the prepare a certificate of insurance which shades	The Board of Governors, Wayne State University, shall be named as an additional insured but only with respect to accidents arising out of the performance of said contract. The contractor shall prepare a certificate of insurance which shall name the "Office of Risk Management; 5700 Cass Avenue" as the Wayne State University certificate holder.	
11.1.3.1	The Contractor shall either 1) require each of his Subcontractors to procure and to maintain during the life of his subcontract, Subcontractors' Comprehensive General Liability, Automobile Liability and Property Damage Liability Insurance of the type and in the same amounts as specified in the Subparagraph, or 2) insure the activity of his subcontractors in his own policy.		
11.2	OWNER'S LIABILITY INSURANCE		

Delete Article 11.2 in its entirety.

### 11.3 PROPERTY INSURANCE

Delete Article 11.3 in its entirety and replace with the following:

- 11.3.1 The Contractor shall purchase and maintain property insurance upon the entire work at the site to the full insurable value thereof. This insurance shall include the interests of the Owner, the Contractor, Subcontractors, and sub-subcontractors in the work and shall insure against the perils of Fire, Extended Coverage, Vandalism, and Malicious Mischief.
- 11.3.2 The Owner and Contractor waive all rights against each other for damages caused by fires or other perils to the extent covered by insurance provided under Subparagraph 11.3.1. The Contractor shall require similar waivers by Subcontractors and sub-subcontractors in accordance with Clause 5.3.1.5.
- 11.3.3 Insurance must be issued by an insurance company with an "A rating as denoted in the AM Best Key Rating Guide".

# **ARTICLE 12 - CHANGES IN THE WORK**

- 12.1 CHANGE ORDERS
- 12.1.8 Percentage markups in pricing under Subparagraphs 12.1.3.1, 12.1.3.3, and 1.2.4 shall be as limited in the Contract Documents. Unit price of Subparagraph 12.1.3.2 shall represent total unit cost to the Owner and shall include the Contractor's markup for overhead and profit.

### **ARTICLE 14 - TERMINATION OF THE CONTRACT**

- 14.1 TERMINATION BY THE CONTRACTOR
- 14.1.1 If the work is stopped for a period of thirty days under any order of any court or other public authority having jurisdiction, or as a result of any act of government, such as a declaration of a national emergency making materials unavailable, through no act or fault of the contract or a subcontractor or their agents or employees or other persons performing any of the Work under a contract with the contractor, then the contractor may, upon seven days' written notice to the Owner and the Architect, terminate the contract and recover from the Owner payment for all Work executed and for any proven loss sustained upon any materials, equipment, tools, construction equipment, and machinery, including reasonable profit and damages.

### **ARTICLE 15 - ADDITIONAL CONDITIONS**

- 15.1 SUBSTITUTION OF MATERIALS AND EQUIPMENT
- 15.1.1 Whenever a material, article, or piece of equipment is identified on the Drawings or in the Specifications by reference to manufacturers' or vendors' names, trade names, catalog numbers, or the like, it is so identified for the purpose of establishing a standard, and any material, article, or piece of equipment of other manufacturers or vendors, which will perform adequately the duties imposed by the general design will be considered equally acceptable provided the material, article, or piece of equipment so proposed is, in the opinion of the Architect, of equal substance, appearance, and function. It shall not be purchased or installed by the Contractor without the Architect's written approval.
- 15.2 NON-DISCRIMINATION PROVISION AND WAGE AND HOUR ACT
- 15.2.1 During the performance of this contract, the Contractor agrees as follows:
- 15.2.1.1 The Contractor shall not discriminate against any employee or applicant for employment because of sex, race, creed, color, age, or national origin. The Contractor will take affirmative action to insure that applicants are employed, and that employees are treated during employment without regard to

their sex, race, age, creed, color, or national origin.

- Such action shall include but not be limited to, the following: employment; upgrading; demotion; or transfer; recruitment or recruitment advertising; layoff or terminations; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this non-discrimination clause.
- 15.2.1.3 The Contractor will, in all solicitations, or advertisements for employees, placed by or on behalf of the contractor, state that all qualified applicants will receive consideration for employment without regard to sex, race, creed, color, age or national origin.
- 15.2.1.4 The Contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice advising the labor union or worker's representative of the Contractor's commitments under Section 202 of Executive Order No. 11246 of October 27, 1965, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
- 15.2.1.5 The Contractor will comply with all provisions of the Executive Order No. 11246 of October 27, 1965, and of the rules, regulations and relevant orders of the Secretary of Labor or other government agency or authority having jurisdiction.
- 15.2.1.6 The Contractor will furnish all information and reports required by Executive Order No. 11246 of October 27, 1965, and by the rules, regulations, and orders of the Secretary of Labor or other government agency or authority having jurisdiction, and will permit access to his books, records, and accounts by the administrative agency and the Secretary of Labor for the purposes of investigation to ascertain compliance with such rules, regulations and orders.
- In the event of the Contractor's noncompliance with the non-discrimination clauses of this contract, or with any of the said rules, regulations, or orders, this Contract may be canceled, terminated or suspended in whole or in part, and the Contractor may be declared ineligible for further University contracts or federally-assisted contracts in accordance with procedure authorized in Executive Order No. 11246 of October 27, 1965, or by rule, regulation, or order of the Secretary of Labor or other government agency or authority having jurisdiction.
- 15.2.1.8 The Contractor will include in the provisions of Subparagraph 15.2.1.1 through 15.2.1.8 in every subcontract or purchase order unless exempted by rules, regulations or orders of the President's Committee on Equal Employment Opportunity issued pursuant to Section 204 of Executive Order No. 11246 of September 14, 1965, so that provisions will be binding upon each subcontractor or vendor. The Contractor will take such action with respect to any subcontract or purchase order as the administering agency may direct as a means of enforcing such provisions including sanctions for noncompliance: Provided, however, that in the event the Contractor becomes involved as a result of such direction by the administering agency, the Contractor may request the United States to enter into such litigation to protect the interest of the United States.
- 15.3 COMPLIANCE WITH COPELAND ANTI-KICKBACK ACT AND REGULATIONS
- 15.3.1 The Contractor shall comply with the Copeland Anti-Kickback Act and Regulations of the Secretary of Labor (29CFR, Part 3) which are herein incorporated by reference.
- 15.4 PREVAILING WAGES
- 15.4.1 Contractors and subcontractors shall pay all mechanics and laborers, including apprentices and trainees, no less than the wage and fringe benefit rates prevailing in the locality in which the work is performed. Wage and fringe benefit rates are determined by the Federal Government Department of Labor.
- 15.4.2 Classifications not provided in the schedule shall be determined prior to the award of the contract and shall be no less than the wage and fringe benefit rates determined by the Federal Department of Labor.

15.4.3 Contractors and subcontractors shall adhere to the ratios of apprentices to journey workers as determined by the Federal Department of Labor.
 15.4.4 Contractors and subcontractors shall keep a copy of the prescribed wage and benefit rates posted at the construction site in a conspicuous place.
 15.4.5 Contractors and subcontractors shall keep an accurate record of the name, occupation, and the actual benefits paid to each mechanic or laborer for the contract. This record shall be made available for reasonable inspection by the Federal Department of Labor and the Owner.

# **DRAWINGS**

The Technical Specifications dated **June 2**, **2014** and the following List of Drawings represent the scope of work as defined in the Contract Documents from Article 4.

# **DRAWINGS**

Drawing No.: Description

DRAWINGS 00850 - 1

### **GENERAL REQUIREMENTS**

### **GENERAL**

### A. CONTRACTOR'S RESPONSIBILITY

It is not the responsibility of the Architect/Engineer or Owner's Representative to notify the Contractor or subcontractors when to commence, to cease, or to resume work; nor in any way to superintend so as to relieve the Contractor of responsibility or of any consequences of neglect or carelessness by him or his subordinates. All material and labor shall be furnished at times best suited for all Contractors and subcontractors concerned, so that the combined work of all shall be properly and fully completed on the date fixed by the Contract.

The Contractor shall be responsible for all items contained in both the specifications and on the drawings for all trades. He shall be responsible for the proper division of labor according to current labor union agreements regardless of the division of responsibility implied in the contract documents.

### B. CODES AND STANDARDS

Reference to standard specifications for workmanship, apparatus, equipment and materials shall conform to the requirements of latest specifications of the organization referenced, i.e., American Society for Testing Materials (ASTM), Underwriters Laboratories, Inc. (UL), American National Standards Institute, Inc. (ANSI), and others so listed in the Technical Specifications.

### C. PERMITS, FEES AND NOTICES

See Supplementary General Conditions.

### D. **MEASUREMENTS**

Before proceeding with each Work Item, Contractor shall locate, mark and measure any quantity or each item and report quantities to Engineer. If measured quantities exceed Engineer's estimate, Contractor shall obtain written authorization to proceed from Owner before executing Work required for that Work Item.

Measurement of quantities for individual Work Items will be performed by Contractor and reviewed by Engineer. Coordinate measurements with inspection as required in Section "Coordination."

Cost of Work included in Work Item for quantities as indicated in Contract Documents shall be included in Base

 Additions to or deductions from lump sum price for quantities of each Work Item added to or deducted from Work respectively shall be at unit prices indicated in Bid Form and shall constitute payment or deductions in full for all material, equipment, labor, supervision and incidentals necessary to complete Work.

### E. CONTRACTOR'S MEASUREMENTS

Before ordering material, preparing Shop Drawings, or doing any work, each Contractor shall verify, at the building, all dimensions which may affect his work. He assumes full responsibility for the accuracy of his figures. No allowance for additional compensation will be considered for minor discrepancies between dimensions on the drawings and actual field dimensions.

# F. CONTINUITY OF SERVICE (Revised 3-26-2012)

Continuity of all existing services in the building shall be maintained throughout the construction period. Where it is necessary to tie into the existing electrical service, water or waste systems, it shall be done as directed by the Architect/Engineer. This Contract shall also provide temporary lines or bypasses that may be required to maintain continuous service in the building. All utility shutdowns must be approved by the Owners Representative / Project Manager, not less than **7 business days** prior to the event, so that proper notification can be posted.

### G. SUBMITTALS

All submittals (except Shop Drawings) and samples required by the Specifications shall be submitted in triplicate unless otherwise specified for a particular item under an individual Specification Section.

Each sample shall be clearly identified on a tag attached, showing the name of the Project Consultant, the project number and title, the names of the Contractor, manufacturer (and supplier if same is not the manufacturer), the brand name or number identification, pattern, color, or finish designation and the location in the work.

Each submittal shall be covered by a transmittal letter, properly identified with the project title and number and a brief description of the item being submitted.

Contractor shall be responsible for all costs of packing, shipping and incidental expenses connected with delivery of the samples to the Project Consultant or other designated address.

If the initial sample is not approved, prepare and submit additional sets until approval is obtained.

Materials supplied or installed which do not conform to the appearance, quality, profile, texture or other determinant of the approval samples will be rejected, and shall be replaced with satisfactory materials at the Contractor's expense.

# H. GENERAL/STANDARD ELECTRONIC EQUIPMENT AND INFRASTRUCTURE REQUIREMENTS (Revised 11-2008)

- 1. Compliance with WSU Standards for Communications Infrastructure
  - A. All applicable work, products, materials and methods shall comply with the latest version of the "WSU Standards for Communications Infrastructure" except as where noted.
  - B. This document is available at the following website/URL: http://networks.wayne.edu/WSU-Communications-Standards.pdf
- 2. Automation System Program Code
  - A. All automation system uncompiled and compiled program codes, source codes, custom modules, graphical user interface screen shots and any other automation system programming data and material (Program Code) shall be provided to the UNIVERSITY in hard copy and on CD Rom in an unencrypted format acceptable to the UNIVERSITY.
  - B. Copyright for the Program Code shall be assigned to the UNIVERSITY for purposes of system maintenance.

# PROTECTION OF OCCUPANCY (Revised 3-2006)

# A. FIRE PRECAUTIONS

Take necessary actions to eliminate possible fire hazards and to prevent damage to construction work, building materials, equipment, temporary field offices, storage sheds, and other property.

During the construction, provide the type and quantity of fire extinguishers and fire hose to meet safety and fire prevention practices by National Fire Protection Association (NFPA) Codes and Standards (available at http://www.nfpa.org/)

In the event that construction includes "hot work", the contractor shall provide the Owner's Representative with a copy of their hot work policy, procedures, or permit program. No hot work activity (temporary maintenance, renovation, or construction by operation of a gas or electrically powered equipment which produces flames, sparks or heat that is sufficient to start a fire or ignite combustible materials) shall be performed until such documents are provided. During such operations, all highly combustible or flammable materials shall be removed from the immediate working area, and if removal is impossible, same shall be protected with flame retardant shield.

Not more than one-half day's supply of flammable liquids such as gasoline, spray paint and paint solvent shall be brought into the building at any one time. Flammable liquids having a flash point of 100 degrees F. or below which must be brought into the building shall be confined in an Underwriters Laboratories (UL) labeled safety cans. The bulk supply of flammables shall be stored at least 75 feet from the building and other combustible materials. Spigots on drums containing flammable liquids are prohibited on the project site. Drums shall be equipped with approved vented pumps, and be grounded and bonded.

Only a reasonable working supply of combustible building materials shall be located inside the building.

All oil-soaked rags, papers, and other similar combustible materials shall be removed from the building at the close of each day's work, or more often if necessary, and placed in metal containers, with self-closing lids.

Materials and equipment stored in cardboard cartons, wood crates or other combustible containers shall be stored in an orderly manner and accessibly located, fire-fighting equipment of approved types shall be placed in the immediate vicinity of any materials or equipment stored in this type of crate or carton.

No gasoline, benzene, or like flammable materials shall be poured into sewers, manholes, or traps.

All rubbish shall be removed from the site and legally disposed of. Burning of rubbish, waste materials or trash on the site shall not be permitted.

The contractor shall be responsible for the conduct of employees relative to smoking and all smoking shall be in the area designated by the Architect/Engineer.

### B. GENERAL SAFETY AND BUILDING PRECAUTIONS

Provide and maintain in good repair barricades, railings, etc., as required by law for the protection of the Public. All exposed material shall be smoothly dressed.

At dangerous points throughout the work environment provide and maintain colored lights or flags in addition to above guardrails.

Isolate Owner's occupied areas from areas where demolition and alteration work will be done, with temporary, dustproof, weatherproof, and fireproof enclosures as conditions may require and as directed by the Architect/Engineer.

Cover and protect furniture, equipment and fixtures to remain from soiling, dust, dirt, or damage when demolition work is performed in rooms or areas from which such items have not been removed.

Protect openings made in the existing roofs, floors, and other construction with weatherproof coverings, barricades, and temporary fire rated partitions to prevent accidents.

Repair any damage done to existing work caused by the construction and removal of temporary partitions, coverings, and barricades.

The Contractor will be held responsible for all breakage or other damage to glass up to the time the work is completed.

Provide protection for existing buildings, interior and exterior, finishes, walls, drives, landscaping, lawns (see below), etc. All damages shall be restored to match existing conditions to the satisfaction of the Architect/Engineer.

The Contractor and Owner will define the anticipated area of lawn damage at the project Pre-Construction Meeting. Whether the lawn is sparse or fully developed, any lawn damaged due to the Contractor's work will be replaced with sod by the University. The University's unit cost of \$10.00 per square yard and landscaping at a rate of 1.5 times the cost of the sod repairs, the full cost of which will be assessed against the Contractor. At the completion of the project, a deductive Change Order reflecting this cost will be issued.

The Contractor is to include an allowance in his bid for this corrective work.

### C. INTERFERENCE WITH OWNER'S OPERATIONS

The Owner will be utilizing the Building Facilities to carry on his normal business operation during construction. The Contractor shall schedule performance of the work necessary to complete the project in such a way as to interfere as little as possible with the operation during construction. The Contractor shall schedule performance of the work necessary to complete the project in such a way as to interfere as little as possible with the operation of the Owner.

Work which will interfere with the Owner's occupancy, including interruptions to the Owner's mechanical and electrical services, and essentially noisy operations (such as jackhammering) shall be scheduled in advance. The schedule of alterations shall be approved by the Architect/Engineer and the work shall be done in accordance with the approved schedule.

It is understood that the work is to be carried through to completion with the utmost speed consistent with good workmanship and to meet the construction schedule.

The Contractor shall begin work under the Contract without delay upon receipt of the fully-executed contract and shall substantially complete the project ready for unobstructed occupancy and use of the Owner for the purposes intended within the completion time stated in the contract.

The Contractor shall, immediately upon award of contract, schedule his work and expedite deliveries of materials and performance of subcontractors to maintain the necessary pace to meet the construction schedule.

### **CONTRACTOR'S REPRESENTATION AND COORDINATION**

### A. FIELD SUPERINTENDENT

Contractor shall assign a full time project manager/superintendent for the duration of the project. This person shall be experienced and qualified in all phases of the work and shall be present at the site during Contractor's working hours. The project manager shall have Contractor's full authority to represent Contractor in all routine operations including payment, changes to the work, and scheduling. Contractor shall not re-assign this individual without prior written permission of the Owner.

# B. **MEETINGS**

When directed by the Architect/Engineer, meetings shall be held for the purpose of coordinating and expediting the work. The invited contractors or subcontractors will be required to have qualified representatives at these meetings, empowered to act in their behalf.

### C. COORDINATION

The Contractor shall also provide a staff adequate to coordinate and expedite the work properly and shall at all times maintain competent supervision of its own work and that of its subcontractors to insure compliance with contract requirements.

The Contractor shall be solely responsible for all construction means, methods, techniques, sequences, and procedures and for coordinating all portions of the work under the Contractor.

### D. CONSTRUCTION SCHEDULE

The Construction Schedule shall be prepared after the award of contract. Soon after, a pre-construction meeting is held with the Owner and the Architect/Engineer to determine the areas to which the Contractor will be allowed access at any one time.

The Contractor is alerted to the fact that areas in which he will be working will be occupied by students and employees of the University as well as the general public. The Contractor's access, to and from the project site, will be confined to limited areas so as not to unduly disrupt the normal activities of the University.

### **TEMPORARY FACILITIES**

### A. GENERAL

The following temporary facilities descriptions represent standard conditions. Verify accuracy with Architect/Engineer at time of bids.

### B. **CONTRACTOR'S OFFICE**

Provide field offices as required. Locate temporary field offices on site where directed by Architect/Engineer.

Appearance and location of field offices shall be approved by the Architect/Engineer.

Provide for all other administrative facilities and storage off the Owner's property.

### C. STORAGE OF MATERIALS

All materials shall be stored in areas designated by the Architect/Engineer. All stored materials shall be arranged for the minimum disruption to occupants and to allow full access to and throughout the building. Materials stored outdoors shall be neat and orderly and covered to prevent damage or vandalism.

### D. **PARKING**

### 1. **GENERAL**

University parking regulations will be strictly enforced.

Maintain Owner's parking areas free of dirt and debris resulting from operations under the contract.

### 2. STANDING AND UNLOADING/LOADING VEHICLES

All Contractors are to call Wayne State University Public Safety at 577-2222, and give at least 24 hours advance notice that they have vehicles that must be at the job site.

Vehicles will be permitted at the project site only as long as the vehicles are needed for loading/unloading, and must be immediately moved upon completion.

All unauthorized and/or unattended standing vehicles will be subject to ticketing and removal by University Police. Towed vehicles may be reclaimed by calling 577-2222, and paying any assessed charges.

### 3. COMPLIMENTARY PARKING

There is no complimentary parking for Contractor's employee vehicles.

# 4. WAYNE STATE UNIVERSITY PUBLIC/STUDENT PARKING AREAS

Public Parking, on a first-come first-served basis is available. Contact the office of the One Card System, at 313.577.9513 for information on availability of parking on a contractual basis.

### E. TOILET FACILITIES

The Owner's designated existing toilet facilities may be used by workers on the project. Contractor shall maintain such facilities in a neat and sanitary condition.

### F. **TELEPHONE USE**

If required, the Contractor shall provide and pay for a temporary telephone within the building for his use and that of his subcontractors.

No use of the Owner's telephone (except pay telephones) will be permitted.

### G. ACCESS DEVICES

The Contractor shall furnish and maintain temporary hoists, ladders, railings, scaffolds, runways, and the like as required for safe, normal access to the permanent construction until the permanent facilities are complete. Each trade shall furnish such additional means of access as may be required for the progress and completion of the work. Such temporary access devices shall meet all applicable local, state, and federal codes and regulations.

### H. **HEAT AND VENTILATION**

Provide cold weather protection and temporary heat and ventilation as required during construction to protect the work from freezing and frost damage.

Provide adequate ventilation as required to maintain reasonable interior building air conditions and temperatures, to prevent accumulation of excess moisture, and to remove construction fumes.

Tarpaulins and other materials used for temporary enclosures. Coverings and protection shall be flameproofed.

### I. WATER SERVICE

Sources of water are available at the site. The Owner will pay for <u>reasonable amounts</u> of water used for construction purposes.

The Contractor shall provide, at the earliest possible date, temporary connections to the water supply sources and maintain adequate distribution for all construction requirements. The Contractor shall protect sources against damage.

Methods of conveying this water shall be approved by the Architect/Engineer and shall not interfere with the Owner's operations.

### J. ELECTRICAL SERVICES

All charges for reasonable amounts of electrical power energy used for temporary lighting and power required for this work will be paid by the Owner.

The Contractor shall provide and maintain any temporary electrical lighting and power required for this work. At the completion of the work, all such temporary electrical facilities shall be removed and disposed of by the Contractor.

Temporary lighting and power shall comply with the regulations and requirements of the National Electrical Code

### **INSPECTIONS AND TESTS**

The Architect/Engineer shall at all times have access to the work wherever it is in preparation or in progress and the Contractor shall provide proper facilities for such access and for observation.

No failure of the Architect/Engineer, during the progress of the work, to discover or reject materials or work not in accordance with the Contract Specifications and Drawings shall be deemed an acceptance thereof nor a waiver of defects therein. Likewise, no acceptance or waiver shall be inferred or implied due to payments made to contractor or by partial or entire occupancy of the work, or installation of materials that are not strictly in accordance with the Contract Specifications and Drawings.

Where tests are specifically called for in the Specifications, the Owner shall pay all costs of such tests and engineering services unless otherwise stated in the contract.

Where tests are not specifically called for in the Specifications, but are required by the Architect/Engineer or Consultant, the Owner shall pay all costs of such tests and engineering services <u>unless</u> the tests reveal that the workmanship or materials used by the Contractor are not in conformity with the Drawings, Specifications, and/or approved shop drawings. In such event, the Contractor shall pay for the tests, shall remove all work and materials so failing to conform and replace with work and materials that are in full conformity.

### **CLEAN-UP**

The Contractor shall at all times keep the Owner's premises and the adjoining premises, driveways and streets clean of rubbish caused by the Contractor's operations and at the completion of the work shall remove all the rubbish, all of his tools, equipment, temporary work and surplus materials, from and about the premises, and shall leave the work clean and ready for use. If the contractor does not attend to such cleaning immediately upon request, the Architect/Engineer may cause such cleaning to be done by others and charge the cost of same to the Contractor.

The Contractor will be responsible for all damage from fire that originates in, or is propagated by, accumulations of rubbish or debris.

All rubbish and debris shall be disposed of off the Owner's property in an approved sanitary landfill site. No open burning of debris or rubbish will be permitted. Job site shall be left neat and clean at the completion of each day's operation.

### PROJECT CLOSE-OUT

### A. RECORD DRAWINGS

At beginning of job, provide one copy of Working Drawings, and record changes, between <u>Working Drawings</u> and "As Builts", including changes made by Addenda, Change Orders, Shop Drawings, etc. These shall be kept up to date. Update to indicate make of all mechanical and electrical equipment and fixtures installed. Keep these Record Prints in good condition and available for inspection by the Architect/Engineer.

Upon completion of the job, turn over to the Architect/Engineer Record Prints of Working Drawings showing all job changes.

### B. OPERATING AND MAINTENANCE DATA

Prepare and furnish to the Architect/Engineer three (3) bound copies of "Operating and Maintenance Manual" on all equipment installed under this Contract.

Manual shall include copies of all Manufacturers' "Operating and Service Instructions", including Parts List, Control Diagrams, Description of Control Systems, Operating, Electrical Wiring, and any other information needed to understand, operate and maintain the equipment. The names and addresses of all subcontractors shall be included. These instructions shall be custom-prepared for this job — catalog cuts will **not** be accepted. Equipment shall be cross-referenced to Section of Specifications and to location shown and scheduled on drawings.

Include Test-Adjust-Balance Report in the Manual.

### C. FINAL INSPECTION

Secure final inspections from the State of Michigan as soon as the work is completed and immediately submit such Certificates to the Architect/Engineer.

### D. GUARANTEES (See Sections 00510 and 01781)

Guarantees on material and labor from the General Contractor and his subcontractors shall be as required in Sections 00510 and 01781.

### E. SWORN STATEMENT AND WAIVER OF LIENS (revised 4-11-2012)

Prior to final payment, the General Contractor shall provide a Contractor's Sworn Statement and Full Unconditional Waivers of Liens from all subcontractors for material and labor and from all suppliers who provide materials exceeding \$1,000. Sworn Statements and signed waivers from all Subcontractors must accompany Pay Applications or they will be returned for such documentation prior to approval.

### **ASBESTOS HAZARD**

A. The contractor shall not start any work in any area that has not been inspected for asbestos by the Owner's Industrial Hygiene Department, or a qualified representative of the Owner and approval is given for work to be done. If asbestos is found, safety measures as recommended by the Owner's Industrial Hygiene Department, or a qualified representative of the Owner, shall be completed, or approval given for work to be done before work is started. The contractor shall not perform any asbestos removal or containment work under the contract.

### **KEYS**

A. The Owner shall provide the contractor keys on loan to have access to the various spaces in order to complete the contract. Contractor will sign for and be responsible for each key on loan, returnable to Owner upon completion of the contract. In case of any lost keys, the Owner will backcharge the contract \$250.00 for each core change. In the event that a Contractor wants access to a secured area, he shall give the Owner a minimum 48-hour notice.

# **SUMMARY OF WORK**

# **SUMMARY OF WORK**

**PROJECT: AAB Exterior Masonry Sill Restoration** 

WSU PROJECT NO.: 062-240913

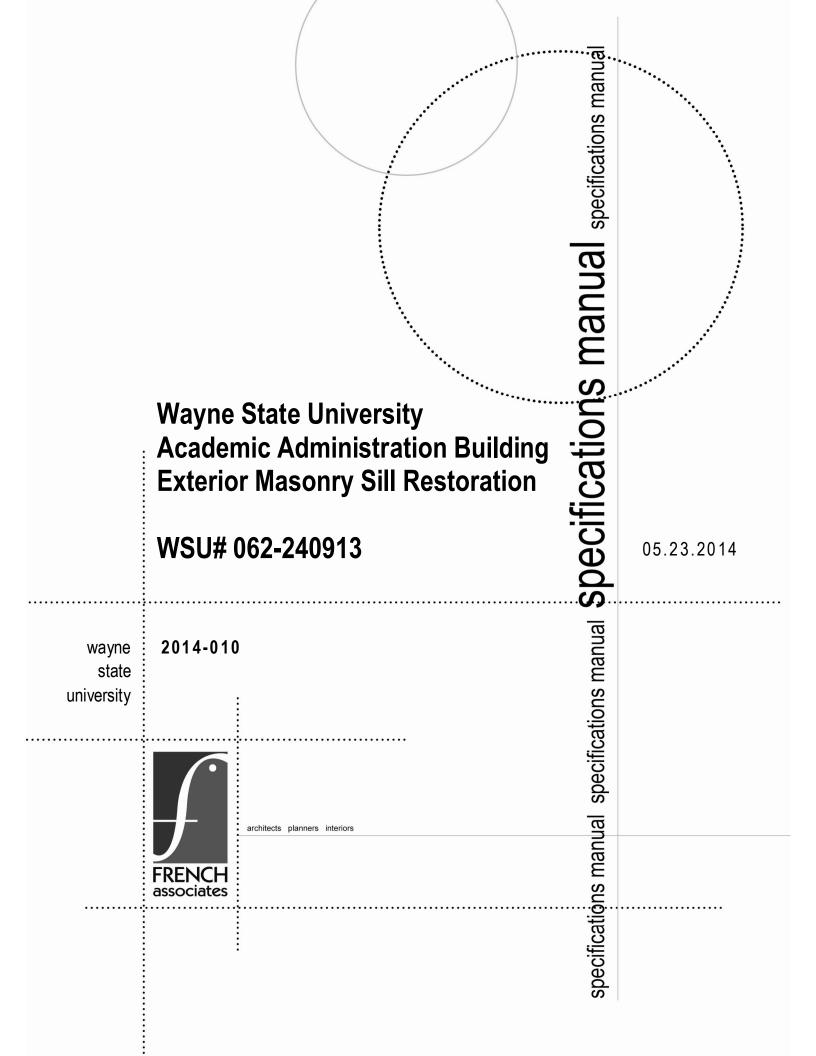
PROJECT MANAGER: Jason R. Davis

### 1. EXAMINATION

The Contractor shall visit the site and become familiar with conditions under which he will be working. Also meet with the project manager and review site access, storage areas, etc.

- 2. Description of Work Project includes restore cracking stone sills, jambs, and heads on exterior windows in the east, north and west building elevations.
- 3. The building is located at

Wayne State University **5700 Cass Avenue** Detroit, Michigan 48202



# **TABLE OF CONTENTS**

# **DIVISION 01 - GENERAL REQUIREMENTS**

01 0400	Coordination
01 1000	Summary
01 2300	Alternates
01 3100	Project Management and Coordination
01 3300	Submittal Procedures
01 4000	Quality Requirements
01 4200	References
01 6000	Product Requirements – Options and Substitutions
01 7300	Execution Requirements
01 7329	Cutting and Patching
01 7700	Closeout Procedures (Project records, Operation, Maintenance Manuals)

# **DIVISION 02 - EXISTING CONDITIONS**

02 4119 Selective Structure Demolition

### **DIVISION 04 - MASONRY**

04 2000 Unit Masonry

# **DIVISION 07 - THERMAL & MOISTURE PROTECTION**

07 1113 Bituminous Dampproofing 07 9200 Joint Sealants

END OF SPECIFICATION INDEX

WSU PROJECT NO. 062-240913

### SECTION 01 0400 - COORDINATION

### PART 1 - GENERAL

### 1.1 RELATED DOCUMENTS

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

### 1.2 SUMMARY

This Section includes administrative and supervisory requirements necessary for coordinating construction operations including, but not necessarily limited to, the following:

- 1. Generals project coordination procedures.
- 2. Administrative and supervisory personnel.
- 3. Coordination Drawings.
- 4. General installation provisions.
- 5. Cleaning and protection.
- 6. Coordination program.

### 1.3 COORDINATION

- A. Prepare and submit project schedule to owner and architect.
- B. Coordinate construction operations included in various Sections of these Specifications to assure efficient and orderly installation of each part of the Work. Coordinate construction operations included under different Sections that depend upon each other for proper installation, connection, and operation.
  - Schedule construction operations in the sequence required to obtain the best results where installation of one part of the Work depends on installation of other components, before or after its own installation.
  - 2. Coordinate installation of different components to assure maximum accessibility for required maintenance, service and repair.
  - 3. Make adequate provisions to accommodate items schedule for later installation.
- C. Where necessary, prepare memoranda for distribution to each party involved outlining special procedures required for coordination. Include such items as required notices, reports, and attendance at meetings.
  - 1. Prepare similar memoranda for the Owner and separate Contractors where coordination of their Work is required.
- D. Administrative Procedures: Coordinate scheduling and timing of required administrative procedures with other construction activities to avoid conflicts and ensure orderly progress of the Work. Such administrative activities include, but are not limited to, the following:
  - 1. Preparation of schedules.
  - 2. Installation and removal of temporary facilities.
  - 3. Delivery and processing of submittals.

- 4. Progress meetings.
- 5. Project closeout activities.

### 1.4 SUBMITTALS

- A. Staff Names: Within fifteen (15) calendar days of "Notice to Proceed," submit a list of the Contractor's principal staff assignments, including the Superintendent and other personnel in attendance at the site; identify individuals, their duties and responsibilities. List their addresses and telephone numbers.
  - 1. Post copies of the list in the Project meeting room, the temporary field office, and each temporary telephone.
- B. Other Project names, addresses and information:
  - 1. Lists of sub-contractors and erectors.
  - 2. List of suppliers and manufacturers.

PART 2 - PRODUCTS (Not applicable)

### PART 3 – EXECUTION

### 3.1 GENERAL INSTALLATION PROVISIONS

- A. Inspection of Conditions: Require the Installer of each component to inspect both the substrate and conditions under which Work is to be performed. Proceed when unsatisfactory conditions have been corrected.
- B. Coordinate temporary enclosures with required inspections and tests, to minimize the necessity of uncovering completed construction.

### 3.2 CLEANING AND PROTECTION

- A. Clean and protect construction in progress and adjoining materials in place, during handling and installation. Apply protective covering where required to assure protection from damage or deterioration at Substantial Completion.
- B. Clean and provide maintenance on completed construction as frequently as necessary through the remainder of the construction period. Adjust and lubricate operable components to ensure operability without damaging effects.

END OF SECTION 01 0400

### SECTION 01 1000 - SUMMARY

### PART 1 - GENERAL

### 1.1 RELATED DOCUMENTS

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

# 1.2 SUMMARY

- A. This Section includes the following:
  - Work covered by the Contract Documents.
  - 2. Type of the Contract.
  - 3. Work phases.
  - 4. Use of premises.
  - 5. Owner's occupancy requirements.
  - 6. Work restrictions.
  - 7. Specification formats and conventions.

### 1.3 WORK COVERED BY CONTRACT DOCUMENTS

- A. Project Identification: Academic Administration Building Exterior Masonry Sill Restoration
  - 1. WSU Project # 062-220142
  - 2. Project Location: 5700 Cass Avenue, Detroit, MI.
- B. Owner: Wayne State University
- C. Architect: French Associates, Inc.
- D. The Work consists of the following:
  - 1. Replacement of existing pre-cast sills and jambs with limestone pieces.

# 1.4 TYPE OF CONTRACT

A. Project will be constructed under a single prime contract.

# 1.5 USE OF PREMISES

- A. General: Each Contractor shall have limited use of premises for construction operations as indicated on Drawings by the Contract limits.
- B. Use of Site: Limit use of premises to **work in areas within the Contract limits** indicated. Do not disturb portions of Project site beyond areas in which the Work is indicated.

WSU PROJECT NO. 062-240913

- 1. Owner Occupancy: Allow for Owner occupancy of Project site and use by the public.
- 2. Driveways and Entrances: Keep driveways, **loading areas**, and entrances serving premises clear and available to Owner, Owner's employees, and emergency vehicles at all times. Do not use these areas for parking or storage of materials.
  - a. Schedule deliveries to minimize use of driveways and entrances.
  - b. Schedule deliveries to minimize space and time requirements for storage of materials and equipment on-site.
- C. The other areas of the building are occupied 7 days a week. Contractor shall make every effort to minimize noise and disruptions to the building occupants.

# 1.6 OWNER'S OCCUPANCY REQUIREMENTS

- A. Partial Owner Occupancy: Owner will occupy the premises during entire construction period, with the exception of areas under construction. Cooperate with Owner during construction operations to minimize conflicts and facilitate Owner usage. Perform the Work so as not to interfere with Owner's operations. Maintain existing exits, unless otherwise indicated.
  - 1. Maintain access to existing walkways, corridors, and other adjacent occupied or used facilities. Do not close or obstruct walkways, corridors, or other occupied or used facilities without written permission from Owner and authorities having jurisdiction.
  - 2. Provide not less than five (5) calendar days notice to Owner of activities that will affect Owner's operations.

# 1.7 WORK RESTRICTIONS

- A. On-Site Work Hours: Typical work hours are from 7 a.m. to 3:30 p.m., Monday through Friday, for Union trades. Other hours will need to be identified in advance by the contractor and coordinated through the WSU Project Manager.
- B. Existing Utility Interruptions: Do not interrupt utilities serving facilities occupied by Owner or others unless permitted under the following conditions and then only after arranging to provide temporary utility services according to requirements indicated:
  - 1. Notify **Owner** not less than seven days in advance of proposed utility interruptions.
  - 2. Do not proceed with utility interruptions without **Owner's** written permission.

### 1.8 ASBESTOS-FREE PRODUCT INSTALLATION

- A. Contractor shall be required to sign a certification statement ensuring that all products or materials installed or introduced into a building will be asbestos-free.
- B. No products/materials containing asbestos, including chrysotile, amosite, crocidolite, tremolite asbestos, anthophyllite asbestos, actinolite asbestos or any combination of these materials that have been chemically treated and/or altered shall be installed or introduced by the contractor or his employees, agents, subcontractors or other individuals or entities over whom the contractor has control.

C. Contractor shall also be required to furnish certified statements from the manufacturers of supplied materials used during construction verifying their products to be asbestos-free in accordance with the previous paragraph.

### 1.9 SPECIFICATION FORMATS AND CONVENTIONS

- A. Specification Format: The Specifications are organized into Divisions and Sections using the 50-division format and CSI/CSC's "MasterFormat" numbering system.
  - Section Identification: The Specifications use Section numbers and titles to help crossreferencing in the Contract Documents. Sections in the Project Manual are in numeric sequence; however, the sequence is incomplete because all available Section numbers are not used. Consult the table of contents at the beginning of the Project Manual to determine numbers and names of Sections in the Contract Documents.
  - 2. Division 01: Sections in Division 01 govern the execution of the Work of all Sections in the Specifications.
- B. Specification Content: The Specifications use certain conventions for the style of language and the intended meaning of certain terms, words, and phrases when used in particular situations. These conventions are as follows:
  - Abbreviated Language: Language used in the Specifications and other Contract Documents is abbreviated. Words and meanings shall be interpreted as appropriate. Words implied, but not stated, shall be inferred as the sense requires. Singular words shall be interpreted as plural, and plural words shall be interpreted as singular where applicable as the context of the Contract Documents indicates.
  - Imperative mood and streamlined language are generally used in the Specifications.
    Requirements expressed in the imperative mood are to be performed by Contractor.
    Occasionally, the indicative or subjunctive mood may be used in the Section Text for clarity to describe responsibilities that must be fulfilled indirectly by Contractor or by others when so noted.
    - a. The words "shall," "shall be," or "shall comply with," depending on the context, are implied where a colon (:) is used within a sentence or phrase.

### 1.10 MISCELLANEOUS PROVISIONS

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 01 1000

### SECTION 01 2300 - ALTERNATES

### PART 1 - GENERAL

### 1.1 RELATED DOCUMENTS

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

### 1.2 SUMMARY

- A. This Section includes administrative and procedural requirements for alternates as proposed by the Architect.
  - 1. Voluntary Alternates or Substitutions proposed by Bidders will not form the Base Bid Proposal Price.

### 1.3 DEFINITIONS

- A. Alternate: An amount proposed by bidders and stated on the Bid Form for certain work defined in the Bidding Requirements that may be added to or deducted from the Base Bid amount if Owner decides to accept a corresponding change either in the amount of construction to be completed or in the products, materials, equipment, systems, or installation methods described in the Contract Documents.
  - The cost or credit for each alternate is the net addition to or deduction from the Contract Sum to incorporate alternate into the Work. No other adjustments are made to the Contract Sum.
- B. Voluntary Alternates: Bidders proposed voluntary alternates and substitutions will not be recognized as part of the Base Bid Price opening. Owner may review voluntary proposals with the successful Bidder.

### 1.4 PROCEDURES

- A. Coordination: Modify or adjust affected adjacent work as necessary to completely integrate work of the alternate into Project.
  - 1. Include as part of each alternate, miscellaneous devices, accessory objects, and similar items incidental to or required for a complete installation whether or not indicated as part of alternate.
- B. Notification: Immediately following award of the Contract, notify each party involved, in writing, of the status of each alternate. Indicate if alternates have been accepted, rejected, or deferred for later consideration. Include a complete description of negotiated modifications to alternates.
- C. Execute accepted alternates under the same conditions as other work of the Contract.

# WSU PROJECT NO. 062-240913

D. Schedule: A Schedule of Alternates is included at the end of this Section. Specification Sections referenced in schedule contain requirements for materials necessary to achieve the work described under each alternate.

PART 2 - PRODUCTS (Not Used)

### PART 3 - EXECUTION

### 3.1 SCHEDULE OF ALTERNATES

- A. Alternate A-1: North Elevation replacement of precast sills, heads and jambs with limestone sills, heads and jambs.
- B. Alternate A-2: West Elevation replacement of precast sills, heads and jambs with limestone sills, heads and jambs
- C. Alternate A-3: East Elevation replacement of precast quoins with limestone quoins.
- D. Alternate A-4: North Elevation replacement of precast quoins with limestone quoins.
- E. Alternate A-5: West Elevation replacement of precast quoins with limestone quoins.

END OF SECTION 01 2300

### SECTION 01 3100 - PROJECT MANAGEMENT AND COORDINATION

### PART 1 - GENERAL

### 1.1 RELATED DOCUMENTS

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

### 1.2 SUMMARY

- A. This Section includes administrative provisions for coordinating construction operations on Project including, but not limited to, the following:
  - 1. Coordination Drawings.
  - 2. Administrative and supervisory personnel.
  - Project meetings.
  - 4. Requests for Interpretation (RFI). Form attached at end of Specification Section.
- B. Each contractor shall participate in coordination requirements. Certain areas of responsibility will be assigned to a specific contractor.
- C. Related Sections include the following:
  - 1. Division 01 3200 Section "Construction Progress Documentation" for preparing and submitting Contractor's Construction Schedule.
  - 2. Division 01 7300 Section "Execution Requirements" for procedures for coordinating general installation and field-engineering services, including establishment of benchmarks and control points.
  - 3. Division 01 7700 Section "Closeout Procedures" for coordinating closeout of the Contract.

### 1.3 DEFINITIONS

A. RFI (Request for Interpretation): Request from Contractors, Fabricators and others seeking interpretation or clarification of the Contract Documents.

### 1.4 COORDINATION

Prepare and submit project schedule to owner and architect.

- A. Coordination: Each contractor shall coordinate its construction operations with those of other contractors and entities to ensure efficient and orderly installation of each part of the Work. Each contractor shall coordinate its operations with operations, included in different Sections, that depend on each other for proper installation, connection, and operation.
  - Schedule construction operations in sequence required to obtain the best results where installation of one part of the Work depends on installation of other components, before or after its own installation.
  - 2. Coordinate installation of different components with other contractors to ensure maximum accessibility for required maintenance, service, and repair.

- 3. Make adequate provisions to accommodate items scheduled for later installation.
- 4. Where availability of space is limited, coordinate installation of different components to ensure maximum performance and accessibility for required maintenance, service, and repair of all components, including mechanical and electrical.
- B. Prepare memoranda for distribution to each party involved, outlining special procedures required for coordination. Include such items as required notices, reports, and list of attendees at meetings.
- C. Administrative Procedures: Coordinate scheduling and timing of required administrative procedures with other construction activities and activities of other contractors to avoid conflicts and to ensure orderly progress of the Work. Such administrative activities include, but are not limited to, the following:
  - 1. Preparation of Contractor's Construction Schedule.
  - 2. Preparation of the Schedule of Values.
  - 3. Installation and removal of temporary facilities and controls.
  - 4. Delivery and processing of submittals.
  - 5. Progress meetings.
  - 6. Preinstallation conferences.
  - 7. Project closeout activities.
  - 8. Startup and adjustment of systems.
  - 9. Project closeout activities.
  - 10. Agency Inspections.
- D. Conservation: Coordinate construction activities to ensure that operations are carried out with consideration given to conservation of energy, water, and materials.
  - 1. Salvage materials and equipment involved in performance of, but not actually incorporated into, the Work. Refer to other Sections for disposition of salvaged materials that are designated as Owner's property.

# 1.5 ADMINISTRATIVE AND SUPERVISORY PERSONNEL

- A. General: In addition to Project superintendent, provide other administrative and supervisory personnel as required for proper performance of the Work.
  - 1. Include special personnel required for coordination of operations with other contractors.

### 1.6 PROJECT MEETINGS

- A. General: Schedule and conduct meetings and conferences at Project site, unless otherwise indicated.
  - Attendees: Inform participants and others involved, and individuals whose presence is required, of date and time of each meeting. Notify Owner and Architect of scheduled meeting dates and times.
  - 2. Agenda: Prepare the meeting agenda. Distribute the agenda to all invited attendees.
  - 3. Minutes: Record significant discussions and agreements achieved. Distribute the meeting minutes to everyone concerned, including Owner and Architect, within five (5) calendar days of the meeting.

- B. Preconstruction Conference: Schedule a preconstruction conference before starting construction, at a time convenient to Owner and Architect, but no later than fifteen (15) calendar days after execution of the Agreement. Hold the conference at Project site or another convenient location. Conduct the meeting to review responsibilities and personnel assignments.
  - 1. Minutes: Owner will record and distribute meeting minutes for Preconstruction Conference.
- C. Progress Meetings: Conduct progress meetings at bi-weekly intervals (maximum).
  - Attendees: In addition to representatives of Owner and Architect, each contractor, subcontractor, supplier, and other entity concerned with current progress or involved in planning, coordination, or performance of future activities shall be represented at these meetings. All participants at the conference shall be familiar with Project and authorized to conclude matters relating to the Work.
  - Agenda: Review and correct or approve minutes of previous progress meeting. Review other items of significance that could affect progress. Include topics for discussion as appropriate to status of Project.
    - a. Contractor's Construction Schedule: Review progress since the last meeting. Determine whether each activity is on time, ahead of schedule, or behind schedule, in relation to Contractor's Construction Schedule. Determine how construction behind schedule will be expedited; secure commitments from parties involved to do so. Discuss whether schedule revisions are required to ensure that current and subsequent activities will be completed within the Contract Time.
  - 3. Minutes: the General Contractor will record the meeting minutes.
  - 4. Reporting: Distribute minutes of the meeting to each party present and to parties who should have been present.
    - a. Schedule Updating: Revise Contractor's Construction Schedule after each progress meeting where revisions to the schedule have been made or recognized. Issue revised schedule concurrently with the report of each meeting.

# 1.7 REQUESTS FOR INTERPRETATION (RFI)

- A. Procedure: Immediately on discovery of the need for interpretation of the Contract Documents, and if not possible to request interpretation at Project meeting, prepare and submit an RFI in the form specified.
  - 1. RFI shall originate with Contractor. RFI submitted by entities other than Contractor will be returned with no response.
  - 2. Coordinate and submit RFI in a prompt manner so as to avoid delays in Contractor's work or work of subcontractors.
- B. Content of the RFI: Include a detailed, legible description of item needing interpretation and the following:
  - 1. Project name.
  - 2. Date.
  - 3. Name of Contractor.
  - 4. Name of Architect and Owner.
  - 5. RFI number, numbered sequentially.

- 6. Specification Section number and title and related paragraphs, as appropriate.
- 7. Drawing number and detail references, as appropriate.
- 8. Field dimensions and conditions, as appropriate.
- 9. Contractor's suggested solution(s). If Contractor's solution(s) impact the Contract Time or the Contract Sum, Contractor shall state impact in the RFI.
- 10. Contractor's signature.
- 11. Attachments: Include drawings, descriptions, measurements, photos, Product Data, Shop Drawings, and other information necessary to fully describe items needing interpretation.
  - a. Supplementary drawings prepared by Contractor shall include dimensions, thicknesses, structural grid references, and details of affected materials, assemblies, and attachments.
- C. Software-Generated RFI: Software-generated form with each page of attachments identified with the RFI number and sequential page number.
  - 1. Attachments shall be electronic files in Adobe Acrobat PDF format.
- D. Architect's Action: Architect will review each RFI, determine action required, and return it. Allow seven (7) calendar days for Architect's response for each RFI.
  - 1. The following RFI will be returned without action:
    - a. Requests for approval of submittals.
    - b. Requests for approval of substitutions.
    - c. Requests for coordination information already indicated in the Contract Documents.
    - d. Requests for adjustments in the Contract Time or the Contract Sum.
    - e. Requests for interpretation of Architect's actions on submittals.
    - f. Incomplete RFI or RFI with numerous errors.
  - 2. Architect's action may include a request for additional information, in which case Architect's time for response will start again.
  - 3. Architect's action on RFI that may result in a change to the Contract Time or the Contract Sum may be eligible for Contractor to submit Change Proposal according to Division 01 Section "Contract Modification Procedures."
    - a. If Contractor believes the RFI response warrants change in the Contract Time or the Contract Sum, notify Architect and Owner in writing within five (5) calendar days of receipt of the RFI response.
- E. On receipt of Architect's action, update the RFI log and immediately distribute the RFI response to affected parties. Review response and notify Architect within five (5) calendar days if Contractor disagrees with response.
- F. RFI Log: Prepare, maintain, and submit a tabular log of RFI organized by the RFI number. Submit log weekly to include the following:
  - 1. Project name.
  - 2. Name and address of Contractor.
  - 3. Name and address of Architect and Owner.
  - 4. RFI number including RFI that were dropped and not submitted.
  - RFI description.
  - 6. Date the RFI was submitted.
  - 7. Date Architect's and Owner's response was received.

# WSU PROJECT NO. 062-240913

- 8. Identification of related Minor Change in the Work, Construction Change Directive, and Proposal Request, as appropriate.
- 9. Identification of related Field Order, Construction Change Directive, and Proposal Request (Bulletin), as appropriate.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 A. Copy of (RFI) "Request for Interpretation" form attached at end of Section.

END OF SECTION 01 3100

# REQUEST FOR INTERPRETATION (R.F.I.)

Page 1 of

Project Name	R.F.I. Number	
Architect's Project Number		
To French Associates	From CM/GC	
SubContr. Requesting Info.	SubContr. Ref. #	
Reference Specification Section	Drawings #	
Interpretation Request		
Requested by	Date	
A/E Response	Date Received	
Response by A/E	Date	
Signed by French Assoc: Copies To	Date Returned:	
A/E Response  Response by A/E  Signed by French Assoc: Copies To Const. Manager or Gen. Contr.	Date Received  Date  Date  Date Returned:	

### SECTION 01 3300 - SUBMITTAL PROCEDURES

### PART 1 - GENERAL

### 1.1 RELATED DOCUMENTS

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

### 1.2 SUMMARY

- A. This Section includes administrative and procedural requirements for submitting Shop Drawings, Product Data, Samples, and other miscellaneous submittals.
  - 1. Shop drawings and Samples
  - 2. Product data submittal procedures.
  - 3. Shop Drawing and Samples Transmittal Form.
  - Contract Close-out Deliverables Form.
- B. Related Sections include the following:
  - Divisions 02 0000 through 33 0000 Sections for specific requirements for submittals in those Sections.

### 1.3 DEFINITIONS

- A. Action Submittals (Shop Drawings, Samples, Product Data, Catalog Cuts, etc.): Written and graphic information that requires Architect's responsive action.
- B. Informational Submittals: Written information that does not require Architect's responsive action. Submittals may be rejected for not complying with requirements.

## 1.4 SUBMITTAL PROCEDURES

- A. General: Electronic copies of CAD Drawings of the Contract Drawings may be provided at Architect's discretion and at extra cost to Contractor for use in preparing submittals.
- B. Coordination: Coordinate preparation and processing of submittals with performance of construction activities.
  - 1. Coordinate each submittal with fabrication, purchasing, testing, delivery, other submittals, and related activities that require sequential activity.
  - 2. Coordinate transmittal of different types of submittals for related parts of the Work so processing will not be delayed because of need to review submittals concurrently for coordination.
    - a. Architect reserves the right to withhold action on a submittal requiring coordination with other submittals until related submittals are received.

- C. Processing Time: Allow enough time for submittal review, including time for resubmittals, as follows. Time for review shall commence on **Architect's** receipt of submittal. No extension of the Contract Time will be authorized because of failure to transmit submittals enough in advance of the Work to permit processing, including resubmittals.
  - 1. Initial Review: Allow twenty (20) calendar days for initial review of each submittal. Allow additional time if coordination with subsequent submittals is required. **Architect** will advise Contractor when a submittal being processed must be delayed for coordination.
  - 2. Resubmittal Review: Allow eighteen (18) calendar days for review of each resubmittal.
  - Sequential Review: Where sequential review of submittals by Architect's consultants, Owner, or other parties is indicated, allow twenty (20) calendar days for initial review of each submittal.
  - 4. Concurrent Consultant Review: Where the Contract Documents indicate that submittals may be transmitted simultaneously to Architect and to Architect's consultants, allow twenty (20) calendar days for review of each submittal.
- D. Shop Drawing Submittal Procedures: The procedures and quantity of drawings, catalog cuts, samples and other information for submittal are minimum. The Contractor and Architect will finalize format at the Project Kick-Off Meeting.
  - 1. Contractor to Architect
    - a. All submittals shall be sent as pdf files to the Architect via email.
    - b. Each submittal shall include one pdf that includes the Submittal Transmittal as provided in this specification (completely filled out) and all other 8.5 x 11 documents as a single pdf file.
    - c. Submittal documents that are not 8.5 x 11 shall be submitted as a separate pdf file for each size documents. For instance, 24" x 36" sheets shall be sent as a separate pdf. Always include the separate pdf file with the filled out transmittal with each submittal pdf.
  - 2. Architect to Contractor
    - a. A pdf file of each reviewed submittal will be sent to the contractor via email.
- E. Identification: Place a permanent label or title block on each submittal for identification.
  - 1. Indicate name of firm or entity that prepared each submittal on label or title block.
  - 2. Provide a space approximately 4 x 5 inches on label or beside title block to record Contractor's review and approval markings and action taken by Architect.
  - 3. Include the following information on label for processing and recording action taken:
    - a. Project name.
    - b. Date.
    - c. Name of Architect.
    - d. Name of Contractor.
    - e. Name and email address of subcontractor.
    - f. Name and email address of supplier.
    - g. Name and website address of manufacturer.
    - h. Contractor's Submittal number.
    - i. Number and title of appropriate Specification Section.
    - j. Drawing number and detail references, as appropriate.
    - k. Other necessary identification.
- F. Deviations: **Highlight and encircle**, or otherwise specifically identify deviations from the Contract Documents on submittals.

- G. Transmittal: Package each submittal item individually and appropriately for transmittal and handling. Do not group submittals related to different specification sections. Transmit each submittal using the official transmittal form. Architect received submittals from sources other than General Contractor will be discarded without review.
  - 1. Transmittal Form: Use submittal form included at the end of Specification.
  - 2. Form:
    - a. Project name.
    - b. Date.
    - c. Destination (To:).
    - d. Source (From:).
    - e. Names of subcontractor, manufacturer, and supplier.
    - f. Category and type of submittal.
    - g. Submittal purpose and description.
    - h. Specification Section number and title.
    - i. Drawing number and detail references, as appropriate.
    - j. Transmittal number, numbered consecutively.
    - k. Submittal and transmittal distribution record.
    - Remarks.
    - m. Signature of transmitter.
- H. Resubmittals: Make resubmittals in same form and number of copies as initial submittal.
  - 1. Note date and content of previous submittal.
  - Note date and content of revision in label or title block and clearly indicate extent of revision.
  - 3. Resubmit submittals until they are marked with Architect's "REVIEWED FOR CONSTRUCTION" or Architect's "REVIEWED AS NOTED" stamp
- I. Distribution: Furnish copies of final submittals to manufacturers, subcontractors, suppliers, fabricators, installers, authorities having jurisdiction, and others as necessary for performance of construction activities. Show distribution on transmittal forms.
- J. Use for Construction: Use only final submittals with mark indicating Architect's "REVIEWED FOR CONSTRUCTION" or "REVIEWED AS NOTED" stamp and Construction Manager's or General Contractor's release for construction stamp.
  - 1. DO NOT USE Shop Drawings noted "XRR = RETURNED FOR CORRECTIONS" for construction or fabrication.

### PART 2 - PRODUCTS

### 2.1 ACTION SUBMITTALS

- A. General: Prepare and submit Action Submittals required by individual Specification Sections.
  - 1. Submit electronic submittals directly to extranet specifically established for Project.
- B. Product Data: Collect information into a single submittal for each element of construction and type of product or equipment.

WSU PROJECT NO. 062-240913

- 1. If information must be specially prepared for submittal because standard printed data are not suitable for use, submit as Shop Drawings, not as Product Data.
- 2. Mark each copy of each submittal to show which products and options are applicable.
- 3. Include the following information, as applicable:
  - Manufacturer's written recommendations.
  - b. Manufacturer's product specifications.
  - c. Manufacturer's installation instructions.
  - d. Standard color charts.
  - e. Manufacturer's catalog cuts.
  - f. Wiring diagrams showing factory-installed wiring.
  - g. Printed performance curves.
  - h. Operational range diagrams.
  - i. Mill reports.
  - j. Standard product operating and maintenance manuals.
  - k. Compliance with specified referenced standards.
  - I. Testing by recognized testing agency.
  - m. Application of testing agency labels and seals.
  - n. Notation of coordination requirements.
- 4. Submit Product Data concurrent with Samples.
- C. Shop Drawings: Prepare Project-specific information, drawn accurately to scale. Do not base Shop Drawings on reproductions of the Contract Documents or standard printed data.
  - 1. Preparation: Fully illustrate requirements in the Contract Documents. Include the following information, as applicable:
    - a. Dimensions.
    - b. Identification of products.
    - c. Fabrication and installation drawings.
    - d. Roughing-in and setting diagrams.
    - e. Wiring diagrams showing field-installed wiring, power, signal, and control wiring.
    - f. Shop work manufacturing instructions.
    - g. Templates and patterns.
    - h. Schedules.
    - i. Design calculations.
    - j. Compliance with specified standards.
    - k. Notation of coordination requirements.
    - I. Notation of dimensions established by field measurement.
    - m. Relationship to adjoining construction clearly indicated.
    - n. Seal and signature of professional engineer if specified.
    - o. Wiring Diagrams: Differentiate between manufacturer-installed and field-installed wiring.
  - 2. Sheet Size: Except for templates, patterns, and similar full-size drawings, submit Shop Drawings on sheets at least 8-1/2 by 11 inches (215 by 280 mm) but no larger than 24 by 36 inches (750 by 1000 mm).
- D. Samples: Submit Samples for review of kind, color, pattern, and texture for a check of these characteristics with other elements and for a comparison of these characteristics between submittal and actual component as delivered and installed.
  - 1. Transmit samples that contain multiple, related components such as accessories together in one submittal package.

- 2. Identification: Attach label on unexposed side of Samples that includes the following:
  - a. Generic description of Sample.
  - b. Product name and name of manufacturer.
  - c. Sample source.
  - d. Number and title of appropriate Specification Section.
- 2. Disposition: Maintain sets of approved Samples at Project site, available for quality-control comparisons throughout the course of construction activity. Sample sets may be used to determine final acceptance of construction associated with each set.
  - a. Samples that may be incorporated into the Work are indicated in individual Specification Sections. Such Samples must be in an undamaged condition at time of use.
  - b. Samples not incorporated into the Work, or otherwise designated as Owner's property, are the property of Contractor.
- 3. Samples for Initial Selection: Submit manufacturer's color charts consisting of units or sections of units showing the full range of colors, textures, and patterns available.
  - a. Number of Samples: Submit one (1) full set(s) of available choices where color, pattern, texture, or similar characteristics are required to be selected from manufacturer's product line. Architect, **through Construction Manager**, will return submittal with options selected.
- 4. Samples for Verification: Submit full-size units or Samples of size indicated, prepared from same material to be used for the Work, cured and finished in manner specified, and physically identical with material or product proposed for use, and that show full range of color and texture variations expected. Samples include, but are not limited to, the following: partial sections of manufactured or fabricated components; small cuts or containers of materials; complete units of repetitively used materials; swatches showing color, texture, and pattern; color range sets; and components used for independent testing and inspection.
  - a. Number of Samples: Submit number of samples as indicated in Part 1.4 "Submittal Procedures".
    - 1. Submit a single Sample where assembly details, workmanship, fabrication techniques, connections, operation, and other similar characteristics are to be demonstrated.
    - 2. If variation in color, pattern, texture, or other characteristic is inherent in material or product represented by a Sample, submit at least three (3) sets of paired units that show approximate limits of variations.
- E. Product Schedule or List: As required in individual Specification Sections, prepare a written summary indicating types of products required for the Work and their intended location. Include the following information in tabular form:
  - 1. Type of product. Include unique identifier for each product.
  - 2. Room name, room number, space and location.
- F. Contractor's Construction Schedule: Comply with requirements specified in Division 01 Section "Construction Progress Documentation" for Construction Manager's action.

- G. Submittals Schedule: Comply with requirements specified in Division 01 Section "Construction Progress Documentation."
- H. Application for Payment: Comply with requirements specified in Division 01 Section "Payment Procedures."
- I. Schedule of Values: Comply with requirements specified in Division 01 Section "Payment Procedures."
- J. Subcontract List: Prepare a written summary identifying individuals or firms proposed for each portion of the Work, including those who are to furnish products or equipment fabricated to a special design. Include the following information in tabular form:
  - 1. Name, address, and telephone number of entity performing subcontract or supplying products.
  - Number and title of related Specification Section(s) covered by subcontract.
  - 3. Drawing number and detail references, as appropriate, covered by subcontract.
  - 4. Number of Copies: Submit two (2) copies of subcontractor list, unless otherwise indicated.

#### 2.2 INFORMATIONAL SUBMITTALS

- A. General: Prepare and submit Informational Submittals required by other Specification Sections.
  - 1. Number of Copies: Submit two (2) copies of each submittal, unless otherwise indicated. Architect will not return copies.
  - Certificates and Certifications: Provide a notarized statement that includes signature of entity responsible for preparing certification. Certificates and certifications shall be signed by an officer or other individual authorized to sign documents on behalf of that entity.
  - 3. Test and Inspection Reports: Comply with requirements in Division 01 4000 Section "Quality Requirements."
- B. Coordination Drawings: Comply with requirements specified in Division 01 3100 Section "Project Management and Coordination."
- C. Contractor's Construction Schedule: Comply with requirements in Division 01 3200 Section "Construction Progress Documentation."
- D. Qualification Data: Prepare written information that demonstrates capabilities and experience of firm or person. Include lists of completed projects with project names and addresses, names and addresses of architects and owners, and other information specified.
- E. Welding Certificates: Prepare written certification that welding procedures and personnel comply with requirements in the Contract Documents. Submit record of Welding Procedure Specification (WPS) and Procedure Qualification Record (PQR) on AWS forms. Include names of firms and personnel certified.
- F. Installer Certificates: Prepare written statements on manufacturer's letterhead certifying that Installer complies with requirements in the Contract Documents and, where required, is authorized by manufacturer for this specific Project.

- G. Manufacturer Certificates: Prepare written statements on manufacturer's letterhead certifying that manufacturer complies with requirements in the Contract Documents. Include evidence of manufacturing experience where required.
- H. Product Certificates: Prepare written statements on manufacturer's letterhead certifying that product complies with requirements in the Contract Documents.
- I. Material Certificates: Prepare written statements on manufacturer's letterhead certifying that material complies with requirements in the Contract Documents.
- J. Material Test Reports: Prepare reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting test results of material for compliance with requirements in the Contract Documents.
- K. Product Test Reports: Prepare written reports indicating current product produced by manufacturer complies with requirements in the Contract Documents. Base reports on evaluation of tests performed by manufacturer and witnessed by a qualified testing agency, or on comprehensive tests performed by a qualified testing agency.
- L. Research/Evaluation Reports: Prepare written evidence, from a model code organization acceptable to authorities having jurisdiction, that product complies with building code in effect for Project. Include the following information:
  - 1. Name of evaluation organization.
  - 2. Date of evaluation.
  - 3. Time period when report is in effect.
  - 4. Product and manufacturers' names.
  - 5. Description of product.
  - 6. Test procedures and results.
  - 7. Limitations of use.
- M. Schedule of Tests and Inspections: Comply with requirements specified in Division 01 4000 Section "Quality Requirements."
- N. Preconstruction Test Reports: Prepare reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of tests performed before installation of product, for compliance with performance requirements in the Contract Documents.
- O. Compatibility Test Reports: Prepare reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of compatibility tests performed before installation of product. Include written recommendations for primers and substrate preparation needed for adhesion.
- P. Field Test Reports: Prepare reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of field tests performed either during installation of product or after product is installed in its final location, for compliance with requirements.
- Q. Maintenance Data: Prepare written and graphic instructions and procedures for operation and normal maintenance of products and equipment. Comply with requirements specified in Division 01 7700 Section "Closeout Procedures" for Operation and Maintenance Data."
- R. Design Data: Prepare written and graphic information, including, but not limited to, performance and design criteria, list of applicable codes and regulations, and calculations. Include list of

assumptions and other performance and design criteria and a summary of loads. Include load diagrams if applicable. Provide name and version of software, if any, used for calculations. Include page numbers.

- S. Manufacturer's Instructions: Prepare written or published information that documents manufacturer's recommendations, guidelines, and procedures for installing or operating a product or equipment. Include name of product and name, address, and telephone number of manufacturer. Include the following, as applicable:
  - 1. Preparation of substrates.
  - 2. Required substrate tolerances.
  - 3. Sequence of installation or erection.
  - 4. Required installation tolerances.
  - 5. Required adjustments.
  - 6. Recommendations for cleaning and protection.
- T. Manufacturer's Field Reports: Prepare written information documenting factory-authorized service representative's tests and inspections. Include the following, as applicable:
  - 1. Name, address, and telephone number of factory-authorized service representative making report.
  - 2. Statement on condition of substrates and their acceptability for installation of product.
  - 3. Statement that products at Project site comply with requirements.
  - 4. Summary of installation procedures being followed, whether they comply with requirements and, if not, what corrective action was taken.
  - 5. Results of operational and other tests and a statement of whether observed performance complies with requirements.
  - 6. Statement whether conditions, products, and installation will affect warranty.
  - 7. Other required items indicated in individual Specification Sections.
- U. Insurance Certificates and Bonds: Prepare written information indicating current status of insurance or bonding coverage. Include name of entity covered by insurance or bond, limits of coverage, amounts of deductibles and term of the coverage.
- V. Material Safety Data Sheets (MSDSs): Submit information directly to Construction Manager; do not submit to Architect, **except as required in "Action Submittals Article.**"
  - Architect will not review submittals that include MSDSs and will return the entire submittal for resubmittal.

#### 2.3 DELEGATED DESIGN

- A. Performance and Design Criteria: Where professional design services or certifications by a design professional are specifically required of Contractor by the Contract Documents, provide products and systems complying with specific performance and design criteria indicated.
  - 1. If criteria indicated are not sufficient to perform services or certification required, submit a written request for additional information to Architect.
- B. Delegated-Design Submittal: In addition to Shop Drawings, Product Data, and other required submittals, submit three (3) copies of a statement, signed and sealed by the responsible design professional, for each product and system specifically assigned to Contractor to be designed or certified by a design professional.

 Indicate that products and systems comply with performance and design criteria in the Contract Documents. Include list of codes, loads, and other factors used in performing these services.

#### PART 3 - EXECUTION

## 3.1 CONTRACTOR'S REVIEW

- A. Review each submittal and check for coordination with other Work of the Contract and for compliance with the Contract Documents. Note corrections and field dimensions. Mark with Contractor's review approval stamp before submitting to Architect.
- B. Approval Stamp: Stamp each submittal with a uniform, approval stamp. Include Project name and location, submittal number, Specification Section title and number, name of reviewer, date of Contractor's approval, and statement certifying that submittal has been reviewed, checked, and approved for compliance with the Contract Documents.

#### 3.2 ARCHITECT'S ACTION

- A. General: Architect will not review submittals that do not bear Construction Manager's or General Contractor's review approval stamp and will return them without action.
- B. Action Submittals: Architect will review each submittal, make marks to indicate corrections or modifications required, and return it. Architect will stamp each submittal with an action stamp and will mark stamp appropriately to indicate action to be taken. Revisions to drawings as a result of the Architects mark-ups shall not be considered an extra and will not result in a change to the contract.
- C. Informational Submittals: Architect will review each submittal and will return it to the Construction Manager or General Contractor with review comments for their review.
- Partial submittals are not acceptable, will be considered nonresponsive, and will be returned without review.

## 3.3 ARCHITECT'S FORMS

A. Shop Drawings and Samples Transmittal form, attached at end of Section.

END OF SECTION 01 3300



## SHOP DRAWING AND SAMPLES TRANSMITTAL

FA Submittal No.

Project Name:			Architect's Projects No.:			Submittal Date:	
					Contr. Proj. No.		
FROM:			TO:	DATE:	OTV	COMMENTS:	
CM/CONTR. NAM	10		10.	DATE:	QTY:	COMMENTO.	
CM/CONTR. NAM				☐ UPS		_	
CM/CONTR. NAM				☐ COURIER		_	RECEIVED STAMP HERE
CIVI/CONTR. ADD	INLOS			☐ DELIVERY		_	
SIGNATURE:				☐ PICK-UP		4	
SIGNATURE.				□ Hok-oi		1	
FROM:			TO:	DATE:	QTY:	COMMENTS:	
				DATE.	QII.	33 <u>-</u> 111.5.	
				□ UPS		4	
				COURIER		4	RECEIVED STAMP HERE
				☐ DELIVERY		_	
SIGNATURE:				☐ PICK-UP		_	
OIOIVATORE.				I I IOIC-OI			
FROM:			TO:	DATE:	QTY:	COMMENTS:	
				DATE.	QII.		
				☐ UPS		-	
				☐ COURIER			RECEIVED STAMP HERE
				☐ DELIVERY			
SIGNATURE:				☐ PICK-UP		†	
0.				_ riok or			
FROM:			TO:	DATE:	QTY:	COMMENTS:	
				271121	ζ		
				☐ UPS		-	
				COURIER		-	RECEIVED STAMP HERE
				☐ DELIVERY		-	
SIGNATURE:				☐ PICK-UP		-	
						1	
Spec Section (not Bid Ctgy.)	CM / Contr. Submittal No.	Qty.	Description:( Drawings, Data	a, Cat, Samples)		Sub-Contractor Name, Supplier / Manu	facturer Name Architect Review Code
, 377							Gode
Contractor(s) certifie	s that the above subm	nitted info	rmation has been reviewed in detail and comply with the	ne Contract Documen	ts, except as indi	cated, and is submitted to the Archi-	RC = Reviewed for Construction
tect, " FOR REVIEW	AND COMMENTS O	NLY." The	e Architect's and Engineer's critique will not relieve the nformation and comments indicated in Shop Drawings.	Contractor(s) from co	ompliance with re	Architect Review Code Legend	KIN = Reviewed as Noted
ments. Contractor(s)	assumes responsibilit	ty for all II	mormation and comments indicated in Shop Drawings.	•		l	XRR = Returned for Corrections

#### SECTION 01 4000 - QUALITY REQUIREMENTS

#### PART 1 - GENERAL

### 1.1 RELATED DOCUMENTS

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

#### 1.2 SUMMARY

- A. This Section includes administrative and procedural requirements for quality assurance and quality control.
- B. Related Sections include the following:
  - 1. Division 01 7329 Section "Cutting and Patching" for repair and restoration of construction disturbed by testing and inspecting activities.

## 1.3 DEFINITIONS

- A. Quality-Assurance Services: Activities, actions, and procedures performed before and during execution of the Work to guard against defects and deficiencies and substantiate that proposed construction will comply with requirements.
- B. Quality-Control Services: Tests, inspections, procedures, and related actions during and after execution of the Work to evaluate that actual products incorporated into the Work and completed construction comply with requirements. Services do not include contract enforcement activities performed by Architect or Construction Manager.
- C. Mockups: Full-size, physical assemblies that are constructed on-site. Mockups are used to verify selections made under sample submittals, to demonstrate aesthetic effects and, where indicated, qualities of materials and execution, and to review construction, coordination, testing, or operation; they are not Samples. Approved mockups establish the standard by which the Work will be judged.
- D. Preconstruction Testing: Tests and inspections that are performed specifically for the Project before products and materials are incorporated into the Work to verify performance or compliance with specified criteria.
- E. Product Testing: Tests and inspections that are performed by an NRTL, an NVLAP, or a testing agency qualified to conduct product testing and acceptable to authorities having jurisdiction, to establish product performance and compliance with industry standards.
- F. Source Quality-Control Testing: Tests and inspections that are performed at the source, i.e., plant, mill, factory, or shop.

- G. Field Quality-Control Testing: Tests and inspections that are performed on-site for installation of the Work and for completed Work.
- H. Installer/Applicator/Erector: Contractor or another entity engaged by Contractor as an employee, Subcontractor, or Sub-subcontractor, to perform a particular construction operation, including installation, erection, application, and similar operations.

#### 1.4 CONFLICTING REQUIREMENTS

- A. General: If compliance with two or more standards is specified and the standards establish different or conflicting requirements for minimum quantities or quality levels, comply with the most stringent requirement. Refer uncertainties and requirements that are different, but apparently equal, to Architect for a decision before proceeding.
- B. Minimum Quantity or Quality Levels: The quantity or quality level shown or specified shall be the minimum provided or performed. The actual installation may comply exactly with the minimum quantity or quality specified, or it may exceed the minimum limits. To comply with these requirements, indicated numeric values are minimum or maximum, as appropriate, for the context of requirements.

#### 1.5 SUBMITTALS

- A. Qualification Data: For testing agencies specified in "Quality Assurance" Article to demonstrate their capabilities and experience. Include proof of qualifications in the form of a recent report on the inspection of the testing agency by a recognized authority.
- B. Reports: Prepare and submit certified written reports that include the following:
  - 1. Date of issue.
  - 2. Project title and number.
  - 3. Name, address, and telephone number of testing agency.
  - 4. Dates and locations of samples and tests or inspections.
  - 5. Names of individuals making tests and inspections.
  - 6. Description of the Work and test and inspection method.
  - 7. Identification of product and Specification Section.
  - 8. Test and inspection results and an interpretation of test results.
  - 9. Record of temperature and weather conditions at time of sample taking and testing and inspecting.
  - 10. Comments or professional opinion on whether tested or inspected Work complies with the Contract Document requirements.
  - 11. Name and signature of laboratory inspector.
  - 12. Recommendations on retesting and reinspecting.
- C. Permits, Licenses, and Certificates: For Owner's records, submit copies of permits, licenses, certifications, inspection reports, releases, jurisdictional settlements, notices, receipts for fee payments, judgments, correspondence, records, and similar documents, established for compliance with standards and regulations bearing on performance of the Work.

#### 1.6 QUALITY ASSURANCE

- A. General: Qualifications paragraphs in this Article establish the minimum qualification levels required; individual Specification Sections specify additional requirements.
- B. Installer Qualifications: A firm or individual experienced in installing, erecting, or assembling work similar in material, design, and extent to that indicated for this Project, whose work has resulted in construction with a record of successful in-service performance.
- C. Manufacturer Qualifications: A firm experienced in manufacturing products or systems similar to those indicated for this Project and with a record of successful in-service performance, as well as sufficient production capacity to produce required units.
- D. Fabricator Qualifications: A firm experienced in producing products similar to those indicated for this Project and with a record of successful in-service performance, as well as sufficient production capacity to produce required units.
- E. Professional Engineer Qualifications: A professional engineer who is legally qualified to practice in jurisdiction where Project is located and who is experienced in providing engineering services of the kind indicated. Engineering services are defined as those performed for installations of the system, assembly, or product that are similar to those indicated for this Project in material, design, and extent.
- F. Specialists: Certain sections of the Specifications require that specific construction activities shall be performed by entities who are recognized experts in those operations. Specialists shall satisfy qualification requirements indicated and shall be engaged for the activities indicated.
  - Requirement for specialists shall not supersede building codes and regulations governing the Work.
- G. Testing Agency Qualifications: An NRTL, or an independent agency with the experience and capability to conduct testing and inspecting indicated, as documented according to ASTM E 548; and with additional qualifications specified in individual Sections; and where required by authorities having jurisdiction, that is acceptable to authorities.
  - 1. NRTL: A nationally recognized testing laboratory according to 29 CFR 1910.7.
- H. Factory-Authorized Service Representative Qualifications: An authorized representative of manufacturer who is trained and approved by manufacturer to inspect installation of manufacturer's products that are similar in material, design, and extent to those indicated for this Project.
- I. Mockups: Before installing portions of the Work requiring mockups, build mockups for each form of construction and finish required to comply with the following requirements, using materials indicated for the completed Work:
  - 1. Build mockups in location and of size indicated or, if not indicated, as directed by Architect or Owner.
  - 2. Notify Architect and Owner seven (7) calendar days in advance of dates and times when mockups will be constructed.
  - 3. Demonstrate the proposed range of aesthetic effects and workmanship.
  - 4. Obtain Architect's and Owner's approval of mockups before starting work, fabrication, or construction.

- a. Allow seven (7) calendar days for initial review and each re-review of each mockup.
- 5. Maintain mockups during construction in an undisturbed condition as a standard for judging the completed Work.
- 6. Demolish and remove mockups when directed, unless otherwise indicated.
- J. Laboratory Mockups: Comply with requirements of preconstruction testing and those specified in individual Sections in Divisions 02 through Divisions 33.

#### 1.7 QUALITY CONTROL

- A. Manufacturer's Field Services: Where indicated, engage a factory-authorized service representative to inspect field-assembled components and equipment installation, including service connections. Report results in writing as specified in Division 01 3300 Section "Submittal Procedures."
- B. Retesting/Reinspecting: Regardless of whether original tests or inspections were Contractor's responsibility, provide quality-control services, including retesting and reinspecting, for construction that replaced Work that failed to comply with the Contract Documents.
- C. Testing Agency Responsibilities: Cooperate with Architect, Construction Manager, and Contractors in performance of duties. Provide qualified personnel to perform required tests and inspections.
  - 1. Notify Architect, Construction Manager, and Contractors promptly of irregularities or deficiencies observed in the Work during performance of its services.
  - 2. Determine the location from which test samples will be taken and in which in-situ tests are conducted.
  - 3. Conduct and interpret tests and inspections and state in each report whether tested and inspected work complies with or deviates from requirements.
  - 4. Submit a certified written report, in duplicate, of each test, inspection, and similar quality-control service through Contractor.
  - 5. Do not release, revoke, alter, or increase the Contract Document requirements or approve or accept any portion of the Work.
  - 6. Do not perform any duties of Contractor.
- D. Associated Services: Cooperate with agencies performing required tests, inspections, and similar quality-control services, and provide reasonable auxiliary services as requested. Notify agency sufficiently in advance of operations to permit assignment of personnel.
  - 1. Incidental labor and facilities necessary to facilitate tests and inspections.
  - 2. Adequate quantities of representative samples of materials that require testing and inspecting. Assist agency in obtaining samples.
  - 3. Facilities for storage and field curing of test samples.
  - 4. Delivery of samples to testing agencies.
  - 5. Preliminary design mix proposed for use for material mixes that require control by testing agency.
  - 6. Security and protection for samples and for testing and inspecting equipment at Project site.
- E. Coordination: Coordinate sequence of activities to accommodate required quality-assurance and -control services with a minimum of delay and to avoid necessity of removing and replacing construction to accommodate testing and inspecting.

1. Schedule times for tests, inspections, obtaining samples, and similar activities.

#### 1.8 SPECIAL TESTS AND INSPECTIONS

- A. Special Tests and Inspections: Owner may engage a qualified testing agency or special inspector to conduct special tests and inspections required by authorities having jurisdiction as the responsibility of Owner, and as follows:
- B. Special Tests and Inspections: Conducted by a qualified testing agency or special inspector as required by authorities having jurisdiction, as indicated in individual Specification Sections, and as follows:
  - 1. Verifying that manufacturer maintains detailed fabrication and quality-control procedures and reviewing the completeness and adequacy of those procedures to perform the Work.
  - 2. Notifying Architect, Construction Manager, and Contractors promptly of irregularities and deficiencies observed in the Work during performance of its services.
  - 3. Submitting a certified written report of each test, inspection, and similar quality-control service to Architect, Construction Manager, with copy to Contractors and to authorities having jurisdiction.
  - 4. Submitting a final report of special tests and inspections at Substantial Completion, which includes a list of unresolved deficiencies.
  - 5. Interpreting tests and inspections and stating in each report whether tested and inspected work complies with or deviates from the Contract Documents.
  - 6. Retesting and reinspecting corrected work.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

#### 3.1 INSPECTION LOG

- A. Prepare a record of inspections. Include the following:
  - 1. Date test or inspection was conducted.
  - 2. Description of the Work tested or inspected.
  - 3. Date test or inspection results were transmitted to Architect.
  - 4. Identification of testing agency or special inspector conducting test or inspection.
- B. Maintain log at Project site. Post changes and modifications as they occur. Provide access to test and inspection log for Architect's and Construction Manager's reference during normal working hours.

#### 3.2 REPAIR AND PROTECTION

A. General: On completion of testing, inspecting, sample taking, and similar services, repair damaged construction and restore substrates and finishes.

- 1. Provide materials and comply with installation requirements specified in other Specification Sections. Restore patched areas and extend restoration into adjoining areas with durable seams that are as invisible as possible.
- 2. Comply with the Contract Document requirements for Division 01 7329 Section "Cutting and Patching."
- B. Protect construction exposed by or for quality-control service activities.
- C. Repair and protection are Contractor's responsibility, regardless of the assignment of responsibility for quality-control services.

END OF SECTION 01 4000

#### SECTION 01 4200 - REFERENCES

#### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

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

#### 1.2 DEFINITIONS

- A. General: Basic Contract definitions are included in the Conditions of the Contract.
- B. "Approved": When used to convey Architect's action on Contractor's submittals, applications, and requests, "approved" is limited to Architect's duties and responsibilities as stated in the Conditions of the Contract.
- C. "Directed": A command or instruction by Architect. Other terms including "requested," "authorized," "selected," "approved," "required," and "permitted" have the same meaning as "directed."
- D. "Indicated": Requirements expressed by graphic representations or in written form on Drawings, in Specifications, and in other Contract Documents. Other terms including "shown," "noted," "scheduled," and "specified" have the same meaning as "indicated."
- E. "Regulations": Laws, ordinances, statutes, and lawful orders issued by authorities having jurisdiction, and rules, conventions, and agreements within the construction industry that control performance of the Work.
- F. "Furnish": Supply and deliver to Project site, ready for unloading, unpacking, assembly, installation, and similar operations.
- G. "Install": Operations at Project site including unloading, temporarily storing, unpacking, assembling, erecting, placing, anchoring, applying, working to dimension, finishing, curing, protecting, cleaning, and similar operations.
- H. "Provide": Furnish and install, complete and ready for the intended use.
- I. "Project Site": Space available for performing construction activities. The extent of Project site is shown on Drawings and may or may not be identical with the description of the land on which Project is to be built.

### 1.3 INDUSTRY STANDARDS

A. Applicability of Standards: Unless the Contract Documents include more stringent requirements, applicable construction industry standards have the same force and effect as if bound or copied directly into the Contract Documents to the extent referenced. Such standards are made a part of the Contract Documents by reference.

- B. Publication Dates: Comply with standards in effect as of date of the Contract Documents, unless otherwise indicated.
- C. Copies of Standards: Each entity engaged in construction on Project should be familiar with industry standards applicable to its construction activity. Copies of applicable standards are not bound with the Contract Documents.
  - 1. Where copies of standards are needed to perform a required construction activity, obtain copies directly from publication source.
- D. Abbreviations and Acronyms for Standards and Regulations: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the standards and regulations in the following list. Names, telephone numbers, and Web-site addresses are subject to change and are believed to be accurate and up-to-date as of the date of the Contract Documents.

ADAAG	Americans with Disabilities Act (ADA)	(800) 872- 2253
	Architectural Barriers Act (ABA) Accessibility Guidelines for Buildings and Facilities	(202) 272- 0080
	Available from Access Board www.access-board.gov	0000
CFR	Code of Federal Regulations	(888) 293-
	Available from Government Printing Office	6498 (202) 512- 1530
	www.gpoaccess.gov/cfr/index.html	.000
CRD	Handbook for Concrete and Cement	(601) 634-
	Available from Army Corps of Engineers Waterways Experiment Station www.wes.army.mil	2355
DOD	Department of Defense Military Specifications and Standards	(215) 697-
	Available from Department of Defense Single Stock Point www.dodssp.daps.mil	6257
DSCC	Defence Supply Center Columbus	
	Defense Supply Center Columbus (See FS)	
FED-STD		
FED-STD	(See FS) Federal Standard	(215) 697-
•	(See FS) Federal Standard (See FS)	(215) 697- 6257
•	(See FS)  Federal Standard (See FS)  Federal Specification  Available from Department of Defense Single Stock Point	

	Available from National Institute of Building Sciences	(202) 289- 7800
	www.nibs.org	
FTMS	Federal Test Method Standard (See FS)	
UFAS	Uniform Federal Accessibility Standards	(800) 872- 2253
	Available from Access Board	(202) 272- 0080
	www.access-board.gov	

#### ABBREVIATIONS AND ACRONYMS 1.4

- A. Industry Organizations: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the entities indicated in Gale Research's "Encyclopedia of Associations" or in Columbia Books' "National Trade & Professional Associations of the U.S."
- Industry Organizations: Where abbreviations and acronyms are used in Specifications or other B. Contract Documents, they shall mean the recognized name of the entities in the following list. Names, telephone numbers, and Web-site addresses are subject to change and are believed to be accurate and up-to-date as of the date of the Contract Documents.

AA	Aluminum Association, Inc. (The) www.aluminum.org	(202) 862-5100
AAADM	American Association of Automatic Door Manufacturers www.aaadm.com	(216) 241-7333
AABC	Associated Air Balance Council www.aabchq.com	(202) 737-0202
AAMA	American Architectural Manufacturers Association www.aamanet.org	(847) 303-5664
AASHTO	American Association of State Highway and Transportation Officials www.transportation.org	(202) 624-5800
ACI	ACI International (American Concrete Institute) www.aci-int.org	(248) 848-3700
ACPA	American Concrete Pipe Association www.concrete-pipe.org	(972) 506-7216
AGA	American Gas Association www.aga.org	(202) 824-7000
AGC	Associated General Contractors of America (The) www.agc.org	(703) 548-3118

Al	Asphalt Institute www.asphaltinstitute.org	(859) 288-4960
AIA	American Institute of Architects (The) www.aia.org	(800) 242-3837 (202) 626-7300
AISC	American Institute of Steel Construction www.aisc.org	(800) 644-2400 (312) 670-2400
AISI	American Iron and Steel Institute www.steel.org	(202) 452-7100
AITC	American Institute of Timber Construction www.aitc-glulam.org	(303) 792-9559
ALCA	Associated Landscape Contractors of America www.alca.org	(800) 395-2522 (703) 736-9666
ALSC	American Lumber Standard Committee, Incorporated www.alsc.org	(301) 972-1700
AMCA	Air Movement and Control Association International, Inc. www.amca.org	(847) 394-0150
ANSI	American National Standards Institute www.ansi.org	(202) 293-8020
APA	APA - The Engineered Wood Association www.apawood.org	(253) 565-6600
APA	Architectural Precast Association www.archprecast.org	(239) 454-6989
ARI	Air-Conditioning & Refrigeration Institute www.ari.org	(703) 524-8800
ARMA	Asphalt Roofing Manufacturers Association www.asphaltroofing.org	(202) 207-0917
ASCE	American Society of Civil Engineers www.asce.org	(800) 548-2723 (703) 295-6300
ASHRAE	American Society of Heating, Refrigerating and Air-Conditioning Engineers	(800) 527-4723
	www.ashrae.org	(404) 636-8400
ASME	ASME International (The American Society of Mechanical Engineers International) www.asme.org	(800) 843-2763 (212) 591-7722
ASSE	American Society of Sanitary Engineering www.asse-plumbing.org	(440) 835-3040
ASTM	ASTM International	(610) 832-9585

	(American Society for Testing and Materials International) www.astm.org	WSU PROJECT NO. 062-240913
AWI	Architectural Woodwork Institute www.awinet.org	(800) 449-8811 (703) 733-0600
AWPA	American Wood-Preservers' Association www.awpa.com	(334) 874-9800
AWS	American Welding Society www.aws.org	(800) 443-9353 (305) 443-9353
ВНМА	Builders Hardware Manufacturers Association www.buildershardware.com	(212) 297-2122
BIA	Brick Industry Association (The) www.bia.org	(703) 620-0010
CISPI	Cast Iron Soil Pipe Institute www.cispi.org	(423) 892-0137
CRSI	Concrete Reinforcing Steel Institute www.crsi.org	(847) 517-1200
CSI	Construction Specifications Institute (The) www.csinet.org	(800) 689-2900 (703) 684-0300
DHI	Door and Hardware Institute www.dhi.org	(703) 222-2010
EIMA	EIFS Industry Members Association www.eima.com	(800) 294-3462 (770) 968-7945
EJMA	Expansion Joint Manufacturers Association, Inc. www.ejma.org	(914) 332-0040
FM	Factory Mutual System (Now FMG)	
FMG	FM Global (Formerly: FM - Factory Mutual System) www.fmglobal.com	(401) 275-3000
GA	Gypsum Association www.gypsum.org	(202) 289-5440
GANA	Glass Association of North America www.glasswebsite.com	(785) 271-0208
НММА	Hollow Metal Manufacturers Association (Part of NAAMM)	
HPVA	Hardwood Plywood & Veneer Association www.hpva.org	(703) 435-2900
IEEE	Institute of Electrical and Electronics Engineers, Inc. (The)	(212) 419-7900

	****	WSU PROJECT NO. 062-24091
	www.ieee.org	
IESNA	Illuminating Engineering Society of North America www.iesna.org	(212) 248-5000
ILI	Indiana Limestone Institute of America, Inc. www.iliai.com	(812) 275-4426
LPI	Lightning Protection Institute www.lightning.org	(800) 488-6864 (847) 577-7200
MFMA	Maple Flooring Manufacturers Association www.maplefloor.org	(847) 480-9138
MFMA	Metal Framing Manufacturers Association www.metalframingmfg.org	(312) 644-6610
MIA	Marble Institute of America www.marble-institute.com	(440) 250-9222
NAAMM	National Association of Architectural Metal Manufacturers www.naamm.org	(312) 332-0405
NAGWS	National Association for Girls and Women in Sport	(800) 213-7193 ext. 453
	www.aahperd.org/nagws/	
NAIMA	North American Insulation Manufacturers Association (The) www.naima.org	(703) 684-0084
NBGQA	National Building Granite Quarries Association, Inc. www.nbgqa.com	(800) 557-2848
NCAA	National Collegiate Athletic Association (The) www.ncaa.org	(317) 917-6222
NCMA	National Concrete Masonry Association www.ncma.org	(703) 713-1900
NEBB	National Environmental Balancing Bureau www.nebb.org	(301) 977-3698
NECA	National Electrical Contractors Association www.necanet.org	(301) 657-3110
NeLMA	Northeastern Lumber Manufacturers' Association www.nelma.org	(207) 829-6901
NEMA	National Electrical Manufacturers Association www.nema.org	(703) 841-3200
NFHS	National Federation of State High School Associations www.nfhs.org	(317) 972-6900
NFPA	NFPA (National Fire Protection Association)	(800) 344-3555 (617) 770-3000

## www.nfpa.org

NGA	National Glass Association www.glass.org	(703) 442-4890
NHLA	National Hardwood Lumber Association www.natlhardwood.org	(800) 933-0318 (901) 377-1818
NOFMA	National Oak Flooring Manufacturers Association www.nofma.org	(901) 526-5016
NRCA	National Roofing Contractors Association www.nrca.net	(800) 323-9545 (847) 299-9070
NRMCA	National Ready Mixed Concrete Association www.nrmca.org	(888) 846-7622 (301) 587-1400
NSSGA	National Stone, Sand & Gravel Association www.nssga.org	(800) 342-1415 (703) 525-8788
NTMA	National Terrazzo & Mosaic Association, Inc. www.ntma.com	(800) 323-9736 (540) 751-0930
NTRMA	National Tile Roofing Manufacturers Association (Now TRI)	
NWWDA	National Wood Window and Door Association (Now WDMA)	
PCI	Precast/Prestressed Concrete Institute www.pci.org	(312) 786-0300
PTI	Post-Tensioning Institute www.post-tensioning.org	(602) 870-7540
SAE	SAE International www.sae.org	(724) 776-4841
SDI	Steel Deck Institute www.sdi.org	(847) 462-1930
SDI	Steel Door Institute www.steeldoor.org	(440) 899-0010
SEI	Structural Engineering Institute www.seinstitute.com	(800) 548-2723 (703) 295-6195
SGCC	Safety Glazing Certification Council www.sgcc.org	(315) 646-2234
SIA	Security Industry Association www.siaonline.org	(703) 683-2075
SJI	Steel Joist Institute www.steeljoist.org	(843) 626-1995

SMACNA	Sheet Metal and Air Conditioning Contractors' National Association www.smacna.org	(703) 803-2980
SPIB	Southern Pine Inspection Bureau (The) www.spib.org	(850) 434-2611
SWI	Steel Window Institute www.steelwindows.com	(216) 241-7333
SWRI	Sealant, Waterproofing, & Restoration Institute www.swrionline.org	(816) 472-7974
TCA	Tile Council of America, Inc. www.tileusa.com	(864) 646-8453
TIA/EIA	Telecommunications Industry Association/Electronic Industries Alliance www.tiaonline.org	(703) 907-7700
UL	Underwriters Laboratories Inc. www.ul.com	(800) 285-4476 (847) 272-8800
USGBC	U.S. Green Building Council www.usgbc.org	(202) 828-7422
USITT	United States Institute for Theatre Technology, Inc. www.usitt.org	(800) 938-7488 (315) 463-6463
WASTEC	Waste Equipment Technology Association www.wastec.org	(800) 424-2869 (202) 244-4700
WCLIB	West Coast Lumber Inspection Bureau www.wclib.org	(800) 283-1486 (503) 639-0651
WDMA	Window & Door Manufacturers Association (Formerly: NWWDA - National Wood Window and Door Association) www.wdma.com	(800) 223-2301 (847) 299-5200
WIC	Woodwork Institute of California (Now WI)	

C. Code Agencies: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the entities in the following list. Names, telephone numbers, and Web-site addresses are subject to change and are believed to be accurate and up-to-date as of the date of the Contract Documents.

BOCA International, Inc.

(See ICC)

CABO Council of American Building Officials

(See ICC
----------

	(066 100)	
IAPMO	International Association of Plumbing and Mechanical Officials	(909) 472- 4100
	www.iapmo.org	
ICBO	International Conference of Building Officials (See ICC)	
ICBO ES	ICBO Evaluation Service, Inc. (See ICC-ES)	
ICC	International Code Council	(703) 931-
	(Formerly: CABO - Council of American Building Officials) www.iccsafe.org	4533
ICC-ES	ICC Evaluation Service, Inc.	(800) 423-
	www.icc-es.org	6587 (562) 699- 0543
NES	National Evaluation Service (See ICC-ES)	
SBCCI	Southern Building Code Congress International, Inc. (See ICC)	

D. Federal Government Agencies: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the entities in the following list. Names, telephone numbers, and Web-site addresses are subject to change and are believed to be accurate and up-to-date as of the date of the Contract Documents.

-		
CE	Army Corps of Engineers www.usace.army.mil	
CPSC	Consumer Product Safety Commission www.cpsc.gov	(800) 638-2772 (301) 504-6816
DOC	Department of Commerce www.commerce.gov	(202) 482-2000
DOD	Department of Defense www.dodssp.daps.mil	(215) 697-6257
DOE	Department of Energy www.eren.doe.gov	(202) 586-9220
EPA	Environmental Protection Agency www.epa.gov	(202) 272-0167
FAA	Federal Aviation Administration www.faa.gov	(202) 366-4000
FCC	Federal Communications Commission www.fcc.gov	(888) 225-5322

FDA	Food and Drug Administration www.fda.gov	(888) 463-6332
GSA	General Services Administration www.gsa.gov	(800) 488-3111 (202) 501-1888
HUD	Department of Housing and Urban Development www.hud.gov	(202) 708-1112
LBL	Lawrence Berkeley National Laboratory www.lbl.gov	(510) 486-4000
MBC	Michigan Building Code	?????
NCHRP	National Cooperative Highway Research Program (See TRB)	
NIST	National Institute of Standards and Technology www.nist.gov	(301) 975-6478
OSHA	Occupational Safety & Health Administration www.osha.gov	(800) 321-6742 (202) 693-1999
PBS	Public Building Service (See GSA)	
PHS	Office of Public Health and Science http://phs.os.dhhs.gov	(202) 690-7694
RUS	Rural Utilities Service (See USDA)	(202) 720-9540
SD	State Department www.state.gov	(202) 647-4000
TRB	Transportation Research Board www.nas.edu/trb	(202) 334-2934
USDA	Department of Agriculture www.usda.gov	(202) 720-2791
USPS	Postal Service www.usps.com	(202) 268-2000

E. State Government Agencies: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the entities in the following list. Names, telephone numbers, and Web-site addresses are subject to change and are believed to be accurate and up-to-date as of the date of the Contract Documents.

MDH Michigan Department of Health

?????

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 01 4200

## SECTION 01 6000 - PRODUCT REQUIREMENTS - SUBSTITUTIONS AND OPTIONS

#### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

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

#### 1.2 SUMMARY

- A. This Section includes the following administrative and procedural requirements: selection of products for use in Project; product delivery, storage, and handling; manufacturers' standard warranties on products; special warranties; product substitutions; and comparable products.
  - 1. Substitutions Request Procedures.
  - 2. Product Substitutions and Options.
  - 3. Substitution Request Form. (included at end of this Specification Section)
- B. Related Sections include the following:
  - 1. Division 01 2300 Section "Alternates" for products selected under an alternate.
  - 2. Division 01 4200 Section "References" for applicable industry standards for products specified.
  - 3. Division 01 7700 Section "Closeout Procedures" for submitting warranties for contract closeout.
  - 4. Divisions 02 0000 through 33 0000 Sections for specific requirements for warranties on products and installations specified to be warranted.

#### 1.3 DEFINITIONS

- A. Products: Items purchased for incorporating into the Work, whether purchased for Project or taken from previously purchased stock. The term "product" includes the terms "material," "equipment," "system," and terms of similar intent.
  - 1. Named Products: Items identified by manufacturer's product name, including make or model number or other designation, shown or listed in manufacturer's published product literature, that is current as of date of the Contract Documents.
  - New Products: Items that have not previously been incorporated into another project or facility, except that products consisting of recycled-content materials are allowed, unless explicitly stated otherwise. Products salvaged or recycled from other projects are not considered new products.
  - 3. Comparable Product: Product that is demonstrated and approved through submittal process, or where indicated as a product substitution, to have the indicated qualities related to type, function, dimension, in-service performance, physical properties, appearance, and other characteristics that equal or exceed those of specified product.

- B. Substitutions (after selection of successful bidder): Changes in products, materials, equipment, and methods of construction from those required by the Contract Documents and proposed by Contractor.
- C. Basis-of-Design Product Specification: Where a specific manufacturer's product is named and accompanied by the words "basis of design," including make or model number or other designation, to establish the significant qualities related to type, function, dimension, in-service performance, physical properties, appearance, and other characteristics for purposes of evaluating comparable products of other named manufacturers.
- D. Manufacturer's Warranty: Preprinted written warranty published by individual manufacturer for a particular product and specifically endorsed by manufacturer to Owner.
- E. Special Warranty: Written warranty required by or incorporated into the Contract Documents, either to extend time limit provided by manufacturer's warranty or to provide more rights for Owner.

#### 1.4 SUBMITTALS

- A. Product List: Submit a list, in tabular from, showing specified products. Include generic names of products required. Include manufacturer's name and proprietary product names for each product.
  - Coordinate product list with Contractor's Construction Schedule and the Submittals Schedule.
  - 2. Form: Tabulate information for each product under the following column headings:
    - a. Specification Section number and title.
    - b. Generic name used in the Contract Documents.
    - c. Proprietary name, model number, and similar designations.
    - d. Manufacturer's name and address.
    - e. Supplier's name and address.
    - f. Installer's name and address.
    - g. Projected delivery date or time span of delivery period.
    - h. Identification of items that require early submittal approval for scheduled delivery date.
  - 3. Initial Submittal: Within thirty (30) calendar days after date of "Notice to Proceed," or date of commencement of work, submit three (3) copies of initial product list. Include a written explanation for omissions of data and for variations from Contract requirements.
    - a. At Contractor's option, initial submittal may be limited to product selections and designations that must be established early in Contract period.
  - 4. Completed List: Within sixty (60) calendar days after date of "Notice to Proceed," submit three (3) copies of completed product list. Include a written explanation for omissions of data and for variations from Contract requirements.
  - 5. Architect's Action: Architect will respond in writing to Contractor within fifteen (15) calendar days of receipt of completed product list. Architect's response will include a list of unacceptable product selections without explanation of reasons for this action. Architect's response, or lack of response, does not constitute a waiver of requirement that products comply with the Contract Documents.

- B. Substitution Requests Procedures: Submit three (3) copies of each request for consideration. Identify product or fabrication or installation method to be replaced. Include Specification Section number and title and Drawing numbers and titles.
  - 1. Substitution Request must be proposed and submitted only to the Construction Manager or General Contractor. Substitution Requests must not be sent directly to the Architect.
  - 2. Substitution Request Form: Use form provided at end of Section.
  - 3. Documentation: Show compliance with requirements for substitutions and the following, as applicable:
    - a. Statement indicating why specified material or product cannot be provided.
    - b. Coordination information, including a list of changes or modifications needed to other parts of the Work and to construction performed by Owner and other separate Contractors, that will be necessary to accommodate proposed substitution.
    - c. Detailed comparison of significant qualities of proposed substitution with those of the Work specified. Significant qualities may include attributes such as performance, weight, size, durability, visual effect, and specific features and requirements indicated.
    - d. Product Data, including drawings and descriptions of products and fabrication and installation procedures.
    - e. Samples, where applicable or requested.
    - f. List of similar installations for completed projects with project names and addresses and names and addresses of architects and owners.
    - g. Material test reports from a qualified testing agency indicating and interpreting test results for compliance with requirements indicated.
    - h. Research/evaluation reports evidencing compliance with building code in effect for Project, from a model code organization acceptable to authorities having jurisdiction.
    - i. Detailed comparison of Contractor's Construction Schedule using proposed substitution with products specified for the Work, including effect on the overall Contract Time. If specified product or method of construction cannot be provided within the Contract Time, include letter from manufacturer, on manufacturer's letterhead, stating lack of availability or delays in delivery.
    - j. Cost information, including a proposal of change, if any, in the Contract Sum.
    - k. Contractor's certification that proposed substitution complies with requirements in the Contract Documents and is appropriate for applications indicated.
    - Contractor's waiver of rights to additional payment or time that may subsequently become necessary because of failure of proposed substitution to produce indicated results.
  - 4. Architect/Engineer shall have right to reject proposed substitution without explanation.
  - 5. Architect's Action: If necessary, Architect will request additional information or documentation for evaluation within Seven (7) calendar days of receipt of a request for substitution. Architect will notify General Contractor or Construction Manager of acceptance or rejection of proposed substitution within Ten (10) calendar days of receipt of request, or Seven (7) calendar days of receipt of additional information or documentation, whichever is later.
    - a. Should the Architect not respond within Twelve (12) calendar days of the dated date of Request, the proposed substitution is considered REJECTED.
    - b. Form of Acceptance: Construction Change Directive (CCD).
    - c. Use product specified if Architect cannot make a decision on use of a proposed substitution within time allocated.
    - d. Owner or Architect <u>does not</u> have to give any reason for rejection of substitutions.

WSU PROJECT NO. 038-210433

C. Basis-of-Design Product Specification Submittal: Comply with requirements in Division 01 3300 Section "Submittal Procedures." Show compliance with requirements.

#### 1.5 QUALITY ASSURANCE

- A. Compatibility of Options: If Contractor is given option of selecting between two or more products for use on Project, product selected shall be compatible with products previously selected, even if previously selected products were also options.
  - 1. Each contractor is responsible for providing products and construction methods compatible with products and construction methods of other contractors.
  - 2. If a dispute arises between contractors over concurrently selectable but incompatible products, Architect will determine which products shall be used.

#### 1.6 PRODUCT DELIVERY, STORAGE, AND HANDLING

- A. Deliver, store, and handle products using means and methods that will prevent damage, deterioration, and loss, including theft. Comply with manufacturer's written instructions.
  - 1. Coordinate delivery with installation time to ensure minimum holding time for items that are flammable, hazardous, easily damaged, or sensitive to deterioration, theft, and other losses.
  - 2. Deliver products to Project site in an undamaged condition in manufacturer's original sealed container or other packaging system, complete with labels and instructions for handling, storing, unpacking, protecting, and installing.
  - 3. Inspect products on delivery to ensure compliance with the Contract Documents and to ensure that products are undamaged and properly protected.
  - 4. Store products to allow for inspection and measurement of quantity or counting of units.
  - 5. Store materials in a manner that will not endanger Project structure.
  - 6. Store products that are subject to damage by the elements, under cover in a weathertight enclosure above ground, with ventilation adequate to prevent condensation.
  - 7. Comply with product manufacturer's written instructions for temperature, humidity, ventilation, and weather-protection requirements for storage.
  - 8. Protect stored products from damage.
- B. Owner's Storage Area: Provide a secure location and enclosure at Project site for storage of materials and equipment by Owner's construction forces. Coordinate location with Owner.

#### 1.7 PRODUCT WARRANTIES

- A. Warranties specified in other Sections shall be in addition to, and run concurrent with, other warranties required by the Contract Documents. Manufacturer's disclaimers and limitations on product warranties do not relieve Contractor of obligations under requirements of the Contract Documents.
- B. Special Warranties: Prepare a written document that contains appropriate terms and identification, ready for execution. Submit a draft for approval before final execution.
  - 1. Manufacturer's Standard Form: Modified to include Project-specific information and properly executed.

- 2. Specified Form: Forms are included with the Specifications. Prepare a written document using appropriate form properly executed.
- 3. Refer to Divisions 02 0000 through Divisions 33 0000 Sections for specific content requirements and particular requirements for submitting special warranties.
- C. Submittal Time: Comply with requirements in the following:
  - 1. Division 01 3300 Section "Submittal Procedures."
  - 2. Division 01 7700 Section "Closeout Procedures."

#### PART 2 - PRODUCTS

## 2.1 PRODUCT OPTIONS and SUBSTITUTIONS

- A. General Product Requirements: Provide products that comply with the Contract Documents, that are undamaged, and unless otherwise indicated, that are new at time of installation.
  - 1. Provide products complete with accessories, trim, finish, fasteners, and other items needed for a complete installation and indicated use and effect.
  - 2. Standard Products: If available, and unless custom products or nonstandard options are specified, provide standard products of types that have been produced and used successfully in similar situations on other projects.
  - 3. Owner reserves the right to limit selection to products with warranties not in conflict with requirements of the Contract Documents.
  - 4. Where products are accompanied by the term "as selected," Architect will make selection.
  - 5. Where products are accompanied by the term "match sample," sample to be matched is Architect's.
  - 6. Descriptive, performance, and reference standard requirements in the Specifications establish "salient characteristics" of products.
  - 7. Or Equal: Where products are specified by name and accompanied by the term "or equal" or "or approved equal" or "or approved," comply with provisions in "Comparable Products" Article to obtain approval for use of an unnamed product acceptable to the Architect.
- B. Product Selection Procedures: Procedures for product selection include the following:
  - 1. Product: Where Specification paragraphs or subparagraphs titled "Product" name a single product and manufacturer, provide the product named.
    - The product is a single source item.
       Substitutions will not be considered.
  - 2. Manufacturer/Source: Where Specification paragraphs or subparagraphs titled "Manufacturer" or "Source" name single manufacturers or sources, provide a product by the manufacturer or from the source named that complies with requirements.
    - a. Substitutions may be considered.
  - 3. Manufacturer's Products: Where Specification paragraphs or subparagraphs titled "Products" introduce a list of names of both products and manufacturers, provide one of the products listed that complies with requirements.

- a. Substitutions will not be considered.
- 4. Manufacturers: Where Specification paragraphs or subparagraphs titled "Manufacturers" introduce a list of manufacturers' names, provide a product by one of the manufacturers listed that complies with requirements.
  - Substitutions by non-listed manufacturers will not be considered.
- 5. Product Options: Where Specification paragraphs titled "Product Options" indicate that size, profiles, and dimensional requirements on Drawings are based on a specific product or system, provide either the specific product or system indicated or a comparable product or system by a specified manufacturer. Comply with provisions in "Product Substitutions" Article.
- 6. Basis-of-Design Products: Where Specification paragraphs or subparagraphs titled "Basis-of-Design Product" are included and also introduce or refer to a list of manufacturers' names, provide either the specified product or a comparable product by one of the other named manufacturers. Drawings and Specifications indicate sizes, design profiles, dimensions, and other characteristics that are based on the product named.
  - a. Provide Basis-of Design product or by one of the listed manufacturers.
  - b. Substitutions of other products will <u>not</u> be considered.
- 7. Visual Matching Specification: Where Specifications require matching an established Sample, select a product (and manufacturer) that complies with requirements and matches Architect's sample. Architect's decision will be final on whether a proposed product matches satisfactorily.
  - a. If no product available within specified category matches satisfactorily and complies with other specified requirements, comply with provisions of the Contract Documents on "substitutions" for selection of a matching product.
- 8. Visual Selection Specification: Where Specifications include the phrase "as selected from manufacturer's colors, patterns, textures" or a similar phrase, select a product (and manufacturer) that complies with other specified requirements.
  - a. Standard Range: Where Specifications include the phrase "standard range of colors, patterns, textures" or similar phrase, Architect will select color, pattern, or texture from manufacturer's product line that does not include premium items.
  - b. Full Range: Where Specifications include the phrase "full range of colors, patterns, textures" or similar phrase, Architect will select color, pattern, or texture from manufacturer's product line that includes both standard and premium items.

#### 2.2 PRODUCT SUBSTITUTIONS CRITERIA

- A. Timing: Architect may consider requests for substitution if received within thirty (30) calendar days after the "Notice to Proceed" or before the first (1<sup>st</sup>) "Application for Payment." Requests received after that time may be considered or rejected at discretion of Architect without explanation.
- B. Conditions: Architect will consider Contractor's request for substitution when the following conditions are satisfied. If the following conditions are not satisfied, Architect will return requests without action or reason, except to record noncompliance with these requirements:

- Requested substitution offers Owner a substantial advantage in cost, time, energy conservation, or other considerations, after deducting additional responsibilities Owner must assume. Owner's additional responsibilities may include compensation to Architect for redesign and evaluation services, increased cost of other construction by Owner, and similar considerations.
- 2. Requested substitution does not require extensive revisions to the Contract Documents.
- 3. Requested substitution is consistent with the Contract Documents and will produce indicated results.
- 4. Substitution request is fully documented and properly submitted.
- Requested substitution will not affect work of other Trades Contractor's construction time schedule.
- 6. Requested substitution has received necessary approvals of authorities having jurisdiction.
- 7. Requested substitution is compatible with other portions of the Work.
- 8. Requested substitution has been coordinated with other portions of the Work.
- 9. Requested substitution provides specified warranty.
- 10. If requested substitution involves more than one contractor, requested substitution has been coordinated with other portions of the Work, is uniform and consistent, is compatible with other products, and is acceptable to all contractors involved.

#### 2.3 COMPARABLE PRODUCTS

- A. Where products or manufacturers are specified by name (except noted as "basis-of-design), submit the following, in addition to other required submittals, to obtain approval of an unnamed product:
  - 1. Evidence that the proposed product does not require revisions to the Contract Documents, that it is consistent with the Contract Documents and will produce the indicated results, and that it is compatible with other portions of the Work.
  - 2. Detailed comparison of significant qualities of proposed product with those named in the Specifications. Significant qualities include attributes such as performance, weight, size, durability, visual effect, and specific features and requirements indicated.
  - 3. Evidence that proposed product provides specified warranty.
  - 4. List of similar installations for completed projects with project names and addresses and names and addresses of architects and owners, if requested.
  - 5. Samples, if requested.

#### PART 3 - EXECUTION (Not Used)

3.1 Architect's "Substitution Request" form included at end of this Specification Section.

END OF SECTION 01 6000



# Substitution request

Project:	Substitution Request Number:  From:			
To:	Date:			
	A/E Project Number:			
Re:				
Specification Title:	Description:			
Section: Page:	Article/Paragraph:			
Proposed Substitution:				
Manufacturer: Address:	Phone:			
Trade Name:	Model No.:			
Installer: Address:	Phone:			
History: ☐ New product ☐ 2-5 years old ☐ 5-10	) yrs old			
Differences between proposed substitution and specifier	d product:			
Point-by-point comparative data attached - < REQUIF				
Similar Installation:				
Project:	Architect:			
Address:	Owner:			
	Date Installed:			
Proposed substitution affects other parts of Work: No	Yes; explain			
Savings to Owner for accepting substitution (if applicable	e):(\$).			
Proposed substitution changes Contract Time:    No	Yes [Add] [Deduct]days.			
Supporting Data Attached: Drawings Proceed Proceeds Proceeds Proceeds Drawings Proceeds Proceedings Drawings Dr	duct Data Samples Tests Reports			

## SUBSTITUTION REQUEST (CONT'D)

The Undersigned certifies:

CC:

**Technical Specifications Committee** 

- Proposed substitution has been fully investigated and determined to be equal or superior in all respects to specified product.
- Same warranty will be furnished for proposed substitution as for specified product.
- Same maintenance service and source of replacement parts, as applicable, is available.
- Proposed substitution will have no adverse effect on other trades and will not affect or delay progress schedule.
- Cost data as stated above is complete. Claims for additional costs related to accepted substitution which may subsequently become apparent are to be waived.
- Proposed substitution does not affect dimensions and functional clearances.
- Payment will be made for changes to building design, including A/E design, detailing, and construction costs caused by the substitution.
- Coordination, installation, and changes in the Work as necessary for accepted substitution will be complete in all respects.

Submitted by:					
Signed by:					
Firm:					
Address:					
Telephone:					
Attachments:					
substitution is considerable.  Substitution appro Substitution appro Substitution rejecte	ered rejected. ved - Make submitta ved as noted - Make ed - Use specified ma	thin Twelve (12) calendards in accordance with Se submittals in accordanarderials.  - Use specified materials	pecification Section s	on 01330.	proposed
Signed by:				Date:	
Printed name:				Title:	
Additional Comments:	☐ Contractor	Subcontractor	Supplier	☐ Manufacturer	☐ A/E

#### SECTION 01 7300 - EXECUTION

#### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

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

#### 1.2 SUMMARY

- A. This Section includes general procedural requirements governing execution of the Work including, but not limited to, the following:
  - 1. Construction layout.
  - 2. Field engineering and surveying.
  - 3. General installation of products.
  - 4. Progress cleaning.
  - 5. Starting and adjusting.
  - 6. Protection of installed construction.
  - 7. Correction of the Work.
- B. Related Sections include the following:
  - 1. Division 01 3100 Section "Project Management and Coordination" for procedures for coordinating field engineering with other construction activities.
  - 2. Division 01 3300 Section "Submittal Procedures" for submitting surveys.
  - 3. Division 01 7329 Section "Cutting and Patching" for procedural requirements for cutting and patching necessary for the installation or performance of other components of the Work.

#### PART 2 - PRODUCTS (Not Used)

### PART 3 - EXECUTION

#### 3.1 EXAMINATION

- A. Existing Conditions: The existence and location of site improvements, utilities, and other construction indicated as existing are not guaranteed. Before beginning work, investigate and verify the existence and location of mechanical and electrical systems and other construction affecting the Work.
  - 1. Before construction, verify the location and points of connection of utility services.
- B. Existing Utilities: N/A

- C. Acceptance of Conditions: Examine substrates, areas, and conditions, with Installer or Applicator present where indicated, for compliance with requirements for installation tolerances and other conditions affecting performance. Record observations.
  - 1. Verify compatibility with and suitability of substrates, including compatibility with existing finishes or primers.
  - 2. Examine roughing-in for mechanical and electrical systems to verify actual locations of connections before equipment and fixture installation.
  - 3. Examine walls, floors, and roofs for suitable conditions where products and systems are to be installed.
  - 4. Proceed with installation only after unsatisfactory conditions have been corrected. Proceeding with the Work indicates acceptance of surfaces and conditions.

## 3.2 PREPARATION

- A. Existing Utility Information: N/A
- B. Field Measurements: Take field measurements as required to fit the Work properly. Recheck measurements before installing each product. Where portions of the Work are indicated to fit to other construction, verify dimensions of other construction by field measurements before fabrication. Coordinate fabrication schedule with construction progress to avoid delaying the Work.
- C. Existing Utility Interruptions: N/A
- D. Space Requirements: Verify space requirements and dimensions of items shown diagrammatically on Drawings.
- E. Review of Contract Documents and Field Conditions: Immediately on discovery of the need for clarification of the Contract Documents, submit a request for information to Architect. Include a detailed description of problem encountered, together with recommendations for changing the Contract Documents.

## 3.3 PROTECTION OF EXISTING FACILITIES

- A. Contractor must take care to protect the existing building and finishes to ensure no damage occurs as a result of construction related activities. This includes but is not limited to the following:
  - 1. Existing sidewalks and exterior pavement.
  - 2. Existing lawn areas and landscaping.
  - 3. Existing exterior brick and masonry.
  - 4. Existing window frames and glazing
  - 5. Interior walls, paint and drywall.
- B. Protection of these existing materials and finishes is subject to the Owner's review and approval. Additional protection may be required by Wayne State University.
- C. Any damaged materials or finishes must be repaired and/or replaced in a manner satisfactory to the Owner.
- D. The Contractor is responsible to repair or replace any damaged materials or finishes. This includes but is not limited to the following:

- 1. Existing sidewalks and exterior pavement.
- 2. Existing lawn areas and landscaping.
- 3. Existing exterior brick and masonry.
- 4. Existing window frames and glazing
- 5. Interior walls, paint and drywall.

#### 3.4 CONSTRUCTION LAYOUT

- A. Verification: Before proceeding to lay out the Work, verify layout information shown on Drawings. If discrepancies are discovered, notify Architect and promptly.
- B. General: N/A
- C. Site Improvements: N/A

#### 3.5 FIELD ENGINEERING

A. N/A

#### 3.6 INSTALLATION

- A. General: Locate the Work and components of the Work accurately, in correct alignment and elevation, as indicated.
  - 1. Make vertical work plumb and make horizontal work level.
  - 2. Where space is limited, install components to maximize space available for maintenance and ease of removal for replacement.
  - 3. Conceal pipes, ducts, and wiring in finished areas, unless otherwise indicated.
  - 4. N/A
- B. Comply with manufacturer's written instructions and recommendations for installing products in applications indicated.
- C. Install products at the time and under conditions that will ensure the best possible results. Maintain conditions required for product performance until Substantial Completion.
- D. Conduct construction operations so no part of the Work is subjected to damaging operations or loading in excess of that expected during normal conditions of occupancy.
- E. Tools and Equipment: Do not use tools or equipment that produce harmful noise levels.
- F. Templates: Obtain and distribute to the parties involved templates for work specified to be factory prepared and field installed. Check Shop Drawings of other work to confirm that adequate provisions are made for locating and installing products to comply with indicated requirements.
- G. Anchors and Fasteners: Provide anchors and fasteners as required to anchor each component securely in place, accurately located and aligned with other portions of the Work.
  - 1. Mounting Heights: Where mounting heights are not indicated, mount components at heights directed by Architect.

- 2. Allow for building movement, including thermal expansion and contraction.
- Coordinate installation of anchorages. Furnish setting drawings, templates, and directions for installing anchorages, including sleeves, concrete inserts, anchor bolts, and items with integral anchors, that are to be embedded in concrete or masonry. Deliver such items to Project site in time for installation.
- H. Joints: Make joints of uniform width. Where joint locations in exposed work are not indicated, arrange joints for the best visual effect. Fit exposed connections together to form hairline joints.
- I. Hazardous Materials: Use products, cleaners, and installation materials that are not considered hazardous.

#### 3.7 OWNER-INSTALLED PRODUCTS AND MATERIALS

- A. Site Access: Provide access to Project site for Owner's construction forces.
- B. Coordination: Coordinate construction and operations of the Work with work performed by Owner's construction forces.

#### 3.8 PROGRESS CLEANING

- A. General: Coordinate progress cleaning for joint-use areas where more than one installer has worked. Enforce requirements strictly. Dispose of materials lawfully.
- B. Site: Maintain Project site free of waste materials and debris.
- C. Work Areas: Clean areas where work is in progress to the level of cleanliness necessary for proper execution of the Work.
- D. Installed Work: Keep installed work clean. Clean installed surfaces according to written instructions of manufacturer or fabricator of product installed, using only cleaning materials specifically recommended. If specific cleaning materials are not recommended, use cleaning materials that are not hazardous to health or property and that will not damage exposed surfaces.
- E. Concealed Spaces: Remove debris from concealed spaces before enclosing the space.
- F. Exposed Surfaces in Finished Areas: Clean exposed surfaces and protect as necessary to ensure freedom from damage and deterioration at time of Substantial Completion.
- G. Waste Disposal: Burying or burning waste materials on-site will not be permitted. Washing waste materials down sewers or into waterways will not be permitted.
- H. During handling and installation, clean and protect construction in progress and adjoining materials already in place. Apply protective covering where required to ensure protection from damage or deterioration at Substantial Completion.
- Clean and provide maintenance on completed construction as frequently as necessary through the remainder of the construction period. Adjust and lubricate operable components to ensure operability without damaging effects.

J. Limiting Exposures: Supervise construction operations to assure that no part of the construction, completed or in progress, is subject to harmful, dangerous, damaging, or otherwise deleterious exposure during the construction period.

#### 3.9 STARTING AND ADJUSTING

A. N/A

#### 3.10 PROTECTION OF INSTALLED CONSTRUCTION

- A. Provide final protection and maintain conditions that ensure installed Work is without damage or deterioration at time of Substantial Completion.
- B. Comply with manufacturer's written instructions for temperature and relative humidity.

## 3.11 CORRECTION OF THE WORK

- A. Repair or remove and replace defective construction. Restore damaged substrates and finishes. Comply with requirements in Division 01 7329 Section "Cutting and Patching."
  - 1. Repairing includes replacing defective parts, refinishing damaged surfaces, touching up with matching materials, and properly adjusting operating equipment.
- B. Restore permanent facilities used during construction to their specified condition.
- C. Remove and replace damaged surfaces that are exposed to view if surfaces cannot be repaired without visible evidence of repair.
- D. Repair components that do not operate properly. Remove and replace operating components that cannot be repaired.
- E. Remove and replace chipped, scratched, and broken glass or reflective surfaces.

END OF SECTION 01 7300

# WSU PROJECT NO. 062-240913

#### SECTION 01 7329 - CUTTING AND PATCHING

## PART 1 - GENERAL

## 1.1 RELATED DOCUMENTS

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

## 1.2 SUMMARY

- A. This Section includes procedural requirements for cutting and patching of items indicated but not limited to the following:
  - 1. Architectural work.

#### 1.3 DEFINITIONS

- Cutting: Removal of in-place construction necessary to permit installation or performance of other Work.
- B. Patching: Fitting and repair work required to restore surfaces to original conditions after installation of other Work.

#### 1.4 QUALITY ASSURANCE

- A. Structural Elements: Do not cut and patch structural elements in a manner that could change their load-carrying capacity or load-deflection ratio.
- B. Operational Elements: Do not cut and patch operating elements and related components in a manner that results in reducing their capacity to perform as intended or results that increase maintenance or decreased operational life or safety.
- C. Miscellaneous Elements: Do not cut and patch miscellaneous elements or related components in a manner that could change their load-carrying capacity, that results in reducing their capacity to perform as intended, or that results in increased maintenance or decreased operational life or safety.
- D. Visual Requirements: Do not cut and patch construction in a manner that results in visual evidence of cutting and patching. Do not cut and patch construction exposed on the exterior or in occupied spaces in a manner that would, in Architect's opinion, reduce the building's aesthetic qualities. Remove and replace construction that has been cut and patched in a visually unsatisfactory manner.

#### 1.5 WARRANTY

A. Existing Warranties: Remove, replace, patch, and repair materials and surfaces cut or damaged during cutting and patching operations, by methods and with materials so as not to void existing warranties.

#### PART 2 - PRODUCTS

## 2.1 MATERIALS

- A. General: Comply with requirements specified in other Sections.
- B. In-Place Materials: Use materials identical to in-place materials. For exposed surfaces, use materials that visually match in-place adjacent surfaces to the fullest extent possible.
  - If identical materials are unavailable or cannot be used, use materials that, when installed, will match the visual and functional performance of in-place materials.

# PART 3 - EXECUTION

#### 3.1 EXAMINATION

- A. Examine surfaces to be cut and patched and conditions under which cutting and patching are to be performed.
  - 1. Compatibility: Before patching, verify compatibility with and suitability of substrates, including compatibility with in-place finishes or primers.
  - 2. Proceed with installation only after unsafe or unsatisfactory conditions have been corrected.

## 3.2 PREPARATION

- A. Temporary Support: Provide temporary support of Work to be cut and adjacent materials affected by work to be cut.
- B. Protection: Protect in-place construction during cutting and patching to prevent damage. Provide protection from adverse weather conditions for portions of Project that might be exposed during cutting and patching operations.
- C. Adjoining Areas: Avoid interference with use of adjoining areas or interruption of free passage to adjoining areas.

#### 3.3 PERFORMANCE

A. General: Employ skilled workers to perform cutting and patching. Proceed with cutting and patching at the earliest feasible time, and complete without delay.

- 1. Cut in-place construction to provide for installation of other components or performance of other construction, and subsequently patch as required to restore surfaces to their original condition.
- B. Cutting: Cut in-place construction by sawing, drilling, breaking, chipping, grinding, and similar operations, including excavation, using methods least likely to damage elements retained or adjoining construction. If possible, review proposed procedures with original Installer; comply with original Installer's written recommendations.
  - 1. In general, use hand or small power tools designed for sawing and grinding, not hammering and chopping. Cut holes and slots as small as possible, neatly to size required, and with minimum disturbance of adjacent surfaces. Temporarily cover openings when not in use.
  - 2. Finished Surfaces: Cut or drill from the exposed or finished side into concealed surfaces.
  - 3. Proceed with patching after construction operations requiring cutting are complete.
- C. Patching: Patch construction by filling, repairing, refinishing, closing up, and similar operations following performance of other Work. Patch with durable seams that are as invisible as possible. Provide materials and comply with installation requirements specified in other Sections.
  - 1. Inspection: Where feasible, test and inspect patched areas after completion to demonstrate integrity of installation.
  - 2. Exposed Finishes: Restore exposed finishes of patched areas and extend finish restoration into retained adjoining construction in a manner that will eliminate evidence of patching and refinishing.
    - Clean piping, conduit, and similar features before applying paint or other finishing materials.
    - b. Restore damaged pipe covering to its original condition.
- D. Replace any materials that are broken or damaged during construction.
  - 1. Replace windows or glazing that is damaged during construction.
  - 2. Clean existing brick impacted by replacement of sills and trim units.
  - 3. Replace concrete pavement and landscaping that is damaged during construction operations.
- E. Cleaning: Clean areas and spaces where cutting and patching are performed. Completely remove paint, mortar, oils, putty, and similar materials.
  - 1. Clean interior and exterior areas that are impacted by construction and construction operations. This includes but is not limited to:
    - a. Building elevators and stairways
    - b. Interior finishes (walls, floors and ceiling).
    - c. Exterior finishes including brick, windows and glazing.

END OF SECTION 01 7329

## SECTION 01 7700 - CLOSEOUT PROCEDURES

#### PART 1 - GENERAL

## 1.1 RELATED DOCUMENTS

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

#### 1.2 SUMMARY

- A. This Section includes administrative and procedural requirements for contract closeout, including, but not limited to, the following:
  - 1. Substantial Completion and Inspection procedures.
  - 2. Final Completion and Inspection Procedures.
  - Warranties.
  - 4. List of incomplete items (punch list).
  - 5. Payment Procedures.
  - 6. Project Record Documents.
  - 7. Final Cleaning.

#### 1.3 SUBSTANTIAL COMPLETION

- A. Preliminary Procedures: Before requesting inspection for determining date of Substantial Completion, complete the following. List items below that are incomplete in request.
  - 1. Prepare a list of items to be completed and corrected (punch list), the value of items on the list, and reasons why the Work is not complete.
  - 2. Advise Owner of pending insurance changeover requirements.
  - 3. Submit specific warranties, workmanship bonds, maintenance service agreements, final certifications, and similar documents.
  - 4. Obtain and submit releases permitting Owner unrestricted use of the Work and access to services and utilities. Include occupancy permits, operating certificates, and similar releases.
  - 5. Prepare and submit Project Record Documents, operation and maintenance manuals, Final Completion construction photographs, damage or settlement surveys, property surveys, and similar final record information.
  - 6. Deliver tools, spare parts, extra materials, and similar items to location designated by Owner. Label with manufacturer's name and model number where applicable.
  - 7. Make final changeover of permanent locks and deliver keys to Owner. Advise Owner's personnel of changeover in security provisions.
  - 8. Complete startup testing of systems.
  - 9. Submit test/adjust/balance records.
  - 10. Terminate and remove temporary facilities from Project site, along with mockups, construction tools, and similar elements.
  - 11. Advise Owner of changeover in heat and other utilities.
  - 12. Submit changeover information related to Owner's occupancy, use, operation, and maintenance.

- 13. Complete final cleaning requirements, including touchup painting.
- 14. Touch up and otherwise repair and restore marred exposed finishes to eliminate visual defects.
- B. Inspection: Submit a written request for inspection for Substantial Completion. On receipt of request, Architect and Owner will either proceed with inspection or notify Contractor of unfulfilled requirements. Architect will prepare the Certificate of Substantial Completion after inspection or will notify Contractor of items, either on Contractor's list or additional items identified by Architect, that must be completed or corrected before certificate will be issued.
  - 1. Reinspection: Request reinspection when the Work identified in previous inspections as incomplete is completed or corrected.
  - 2. Results of completed inspection will form the basis of requirements for Final Completion.

#### 1.4 FINAL COMPLETION

- A. Preliminary Procedures: Before requesting final inspection for determining date of Final Completion, complete the following:
  - 1. Submit a final Application for Payment according to Division 01 Section "Payment Procedures."
  - Submit certified copy of Architect's Substantial Completion inspection list of items to be completed or corrected (punch list), endorsed and dated by Architect. The certified copy of the list shall state that each item has been completed or otherwise resolved for acceptance.
  - 3. Submit evidence of final, continuing insurance coverage complying with insurance requirements.
  - 4. Submit pest-control final inspection report and warranty.
  - 5. Instruct Owner's personnel in operation, adjustment, and maintenance of products, equipment, and systems.
- B. Inspection: Submit a written request for final inspection for acceptance. On receipt of request, Architect and Owner will either proceed with inspection or notify Contractor of unfulfilled requirements. Architect will prepare a final Certificate for Payment after inspection or will notify Contractor of construction that must be completed or corrected before certificate will be issued.
  - 1. Reinspection: Request reinspection when the Work identified in previous inspections as incomplete is completed or corrected.

#### 1.5 WARRANTIES

- A. Submittal Time: Submit written warranties on request of Architect for designated portions of the Work where commencement of warranties other than date of Substantial Completion is indicated.
- B. Partial Occupancy: Submit properly executed warranties within fifteen (15) calendar days of completion of designated portions of the Work that are completed and occupied or used by Owner during construction period by separate agreement with Contractor.
- C. Organize warranty documents into an orderly sequence based on the table of contents of the Project Manual.

- 1. Bind warranties and bonds in heavy-duty, 3-ring, vinyl-covered, loose-leaf binders, thickness as necessary to accommodate contents, and sized to receive 8-1/2-by-11-inch (215-by-280-mm) paper.
- 2. Provide heavy paper dividers with plastic-covered tabs for each separate warranty. Mark tab to identify the product or installation. Provide a typed description of the product or installation, including the name of the product and the name, address, and telephone number of Installer.
- 3. Identify each binder on the front and spine with the typed or printed title "WARRANTIES," Project name, and name of Contractor.
- D. Provide additional copies of each warranty to include in operation and maintenance manuals.

# 1.6 LIST OF INCOMPLETE ITEMS (PUNCH LIST)

- A. Preparation: Submit two (2) copies of list. Include name and identification of each space and area affected by construction operations for incomplete items and items needing correction including, if necessary, areas disturbed by Contractor that are outside the limits of construction.
  - 1. Organize list of spaces in sequential order, starting with exterior areas first and proceeding from lowest floor to highest floor.
  - 2. Organize items applying to each space by major element, including categories for ceiling, individual walls, floors, equipment, and building systems.
  - 3. Include the following information at the top of each page:
    - a. Project name.
    - b. Date.
    - c. Name of Architect and Owner.
    - d. Name of Contractor.
    - e. Page number.

#### 1.7 CLOSEOUT DOCUMENTS

- A. Wayne State University requires 3 copies of all closeout documents in 3 separate 3-ring binders.
  - 1. Each 3-ring binder must include copies of all warranties, as-built drawings and O&M manuals.

## PART 2 - PRODUCTS

## 2.1 MATERIALS

A. Cleaning Agents: Use cleaning materials and agents recommended by manufacturer or fabricator of the surface to be cleaned. Do not use cleaning agents that are potentially hazardous to health or property or that might damage finished surfaces.

# PART 3 - EXECUTION

#### 3.1 FINAL CLEANING

WSU PROJECT NO. 062-240913

A. General: Provide final cleaning. Conduct cleaning and waste-removal operations to comply with local laws and ordinances and Federal and local environmental and antipollution regulations and all other governing agencies having jurisdiction on the project.

END OF SECTION 01 7700

## SECTION 02 4119 - SELECTIVE STRUCTURE DEMOLITION

#### PART 1 - GENERAL

## 1.1 RELATED DOCUMENTS

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

## 1.2 SUMMARY

- A. This Section includes the following:
  - 1. Demolition and removal of selected portions of building.
- B. Related Sections include the following:
  - 1. Division 01 7329 Section "Cutting and Patching" for cutting and patching procedures.

## 1.3 DEFINITIONS

- A. Remove: Detach items from existing construction and legally dispose of them off-site, unless indicated to be removed and salvaged or removed and reinstalled.
- B. Remove and Salvage: Detach items from existing construction and deliver them to Owner ready for reuse.
- C. Remove and Reinstall: Detach items from existing construction, prepare them for reuse, and reinstall them where indicated.
- D. Existing to Remain: Existing items of construction that are not to be removed and that are not otherwise indicated to be removed, removed and salvaged, or removed and reinstalled.

## 1.4 MATERIALS OWNERSHIP

- A. Historic items, relics, and similar objects including, but not limited to, cornerstones and their contents, commemorative plaques and tablets, antiques, and other items of interest or value to Owner that may be encountered during selective demolition remain Owner's property. Carefully remove and salvage each item or object in a manner to prevent damage and deliver promptly to Owner.
  - 1. Coordinate with Owner's representative, who will establish procedures for removal and salvage.

#### 1.5 PROJECT CONDITIONS

- A. Owner will occupy portions of building immediately adjacent to selective demolition area. Conduct selective demolition so Owner's operations will not be disrupted.
  - 1. Comply with requirements specified in Division 01 1000 Section "Summary."

## 1.6 WARRANTY

A. Existing Warranties: Remove, replace, patch, and repair materials and surfaces cut or damaged during selective demolition, by methods and with materials so as not to void existing warranties.

PART 2 - PRODUCTS (Not Used)

#### PART 3 - EXECUTION

## 3.1 EXAMINATION

- A. Verify that utilities have been disconnected and capped.
- B. Survey existing conditions and correlate with requirements indicated to determine extent of selective demolition required.
- C. Inventory and record the condition of items to be removed and reinstalled and items to be removed and salvaged.
- D. When unanticipated mechanical, electrical, or structural elements that conflict with intended function or design are encountered, investigate and measure the nature and extent of conflict. Promptly submit a written report to Architect.

## 3.2 PREPARATION

- A. Temporary Shoring: Provide and maintain shoring, bracing, and structural supports as required to preserve stability and prevent movement, settlement, or collapse of construction and finishes to remain, and to prevent unexpected or uncontrolled movement or collapse of construction being demolished.
  - 1. Strengthen or add new supports when required during progress of selective demolition.

# 3.3 SELECTIVE DEMOLITION, GENERAL

A. General: Demolish and remove existing construction only to the extent required by new construction and as indicated. Use methods required to complete the Work within limitations of governing regulations and as follows:

WSU PROJECT NO. 062-240913

- 1. Proceed with selective demolition systematically, from higher to lower level. Complete selective demolition operations above each floor or tier before disturbing supporting members on the next lower level.
- Neatly cut openings and holes plumb, square, and true to dimensions required. Use cutting methods least likely to damage construction to remain or adjoining construction. Use hand tools or small power tools designed for sawing or grinding, not hammering and chopping, to minimize disturbance of adjacent surfaces. Temporarily cover openings to remain.
- 3. Cut or drill from the exposed or finished side into concealed surfaces to avoid marring existing finished surfaces.
- 4. Do not use cutting torches until work area is cleared of flammable materials. At concealed spaces, such as duct and pipe interiors, verify condition and contents of hidden space before starting flame-cutting operations. Maintain fire watch and portable fire-suppression devices during flame-cutting operations.
- 5. Maintain adequate ventilation when using cutting torches.
- 6. Remove decayed, vermin-infested, or otherwise dangerous or unsuitable materials and promptly dispose of off-site.
- 7. Locate selective demolition equipment and remove debris and materials so as not to impose excessive loads on supporting walls, floors, or framing.
- B. Existing Items to Remain: Protect construction indicated to remain against damage and soiling during selective demolition. When permitted by Architect, items may be removed to a suitable, protected storage location during selective demolition and cleaned and reinstalled in their original locations after selective demolition operations are complete.

END OF SECTION 02 4119

#### SECTION 04 2000 - UNIT MASONRY

#### PART 1 - GENERAL

## 1.1 RELATED DOCUMENTS

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

## 1.2 SUMMARY

- A. This Section includes unit masonry assemblies consisting of the following:
  - 1. Stone trim units.
  - 2. Mortar and grout.
  - 3. Embedded flashing.
  - 4. Miscellaneous masonry accessories.
- B. Related Sections include the following:
  - 1. Division 07 Section "Bituminous Dampproofing" for dampproofing applied to cavity face of backup wythes of cavity walls.
  - 2. Division 07 Section "Joint Sealants" for sealing control and expansion joints in unit masonry.

## 1.3 PERFORMANCE REQUIREMENTS

- A. Provide structural unit masonry that develops indicated net-area compressive strengths  $(f'_m)$  at 28 days.
- B. Determine net-area compressive strength (f'<sub>m</sub>) of masonry from average net-area compressive strengths of masonry units and mortar types (unit-strength method) according to Tables 1 and 2 in ACI 530.1/ASCE 6/TMS 602.

# 1.4 SUBMITTALS

- A. Product Data: For each type of product indicated.
- B. Shop Drawings: For the following:
  - 1. Stone Trim Units: Show sizes, profiles, and locations of each stone trim unit required.
  - 2. Reinforcing Steel: Detail bending and placement of unit masonry reinforcing bars. Comply with ACI 315, "Details and Detailing of Concrete Reinforcement."
  - 3. Fabricated Flashing: Detail corner units, end-dam units, and other special applications.
- C. Samples for Verification: For each type and color of the following:
  - Stone trim.
- D. Material Certificates: Include statements of material properties indicating compliance with requirements including compliance with standards and type designations within standards. Provide for each type and size of the following:

- 1. Masonry units.
  - a. Include material test reports substantiating compliance with requirements.
  - b. For masonry units used in structural masonry, include data and calculations establishing average net-area compressive strength of units.
- 2. Cementitious materials. Include brand, type, and name of manufacturer.
- 3. Preblended, dry mortar mixes. Include description of type and proportions of ingredients.
- Anchors, ties, and metal accessories.
- E. Mix Designs: For each type of mortar and grout. Include description of type and proportions of ingredients.
  - 1. Include test reports, per ASTM C 780, for mortar mixes required to comply with property specification.
  - 2. Include test reports, per ASTM C 1019, for grout mixes required to comply with compressive strength requirement.
- F. Statement of Compressive Strength of Masonry: For each combination of masonry unit type and mortar type, provide statement of average net-area compressive strength of masonry units, mortar type, and resulting net-area compressive strength of masonry determined according to Tables 1 and 2 in ACI 530.1/ASCE 6/TMS 602.

## 1.5 QUALITY ASSURANCE

- A. Source Limitations for Masonry Units: Obtain exposed masonry units of a uniform texture and color, or a uniform blend within the ranges accepted for these characteristics, through one source from a single manufacturer for each product required.
- B. Source Limitations for Mortar Materials: Obtain mortar ingredients of a uniform quality, including color for exposed masonry, from a single manufacturer for each cementitious component and from one source or producer for each aggregate.
- C. Preinstallation Conference: Conduct conference at Project site to comply with requirements in Division 01 Section "Project Management and Coordination."

## 1.6 DELIVERY, STORAGE, AND HANDLING

- A. Store masonry units on elevated platforms in a dry location. If units are not stored in an enclosed location, cover tops and sides of stacks with waterproof sheeting, securely tied. If units become wet, do not install until they are dry.
- B. Store cementitious materials on elevated platforms, under cover, and in a dry location. Do not use cementitious materials that have become damp.
- C. Store aggregates where grading and other required characteristics can be maintained and contamination avoided.
- D. Store masonry accessories, including metal items, to prevent corrosion and accumulation of dirt and oil

#### 1.7 PROJECT CONDITIONS

- A. Stain Prevention: Prevent grout, mortar, and soil from staining the face of masonry to be left exposed or painted. Immediately remove grout, mortar, and soil that come in contact with such masonry.
  - 1. Protect base of walls from rain-splashed mud and from mortar splatter by spreading coverings on ground and over wall surface.
  - 2. Protect sills, ledges, and projections from mortar droppings.
  - 3. Protect surfaces of window and door frames, as well as similar products with painted and integral finishes, from mortar droppings.
  - 4. Turn scaffold boards near the wall on edge at the end of each day to prevent rain from splashing mortar and dirt onto completed masonry.

## PART 2 - PRODUCTS

## 2.1 MANUFACTURERS

- A. In other Part 2 articles where titles below introduce lists, the following requirements apply to product selection:
  - 1. Products: Subject to compliance with requirements, provide one of the products specified.
  - 2. Manufacturers: Subject to compliance with requirements, provide products by one of the manufacturers specified.

# 2.2 MASONRY UNITS, GENERAL

- A. Defective Units: Referenced masonry unit standards may allow a certain percentage of units to exceed tolerances and to contain chips, cracks, or other defects exceeding limits stated in the standard. Do not uses units where such defects, including dimensions that vary from specified dimensions by more than stated tolerances, will be exposed in the completed Work or will impair the quality of completed masonry.
- B. Provide "Integral Water Repellent" masonry units where CMU's are located or indicated on exterior locations as single-wythe walls.
- C. Provide penetrating water repellent coating at the following locations:
  - Install 2 coats at all exposed limestone units.

#### 2.3 STONE TRIM UNITS

- A. Limestone: ASTM C 568, Classification **II Medium**-Density.
  - 1. Variety and Sources: Indiana oolitic limestone quarried in Lawrence, Monroe, or Owen Counties, Indiana.
    - a. Grade and Color: **Standard, buff**, according to grade and color classification established by ILI. Field verify to match existing limestone on south building elevation.

- B. Finish: Smooth.
- C. Provide stone units accurately shaped, with exposed faces dressed true, and with beds and joints at right angles to faces.
  - 1. For limestone, comply with recommendations in ILI's "Indiana Limestone Handbook."

#### 2.4 MORTAR AND GROUT MATERIALS

- A. Portland Cement: ASTM C 150, Type I or II, except Type III may be used for cold-weather construction. Provide natural color or white cement as required to produce mortar color indicated.
- B. Hydrated Lime: ASTM C 207, Type S.
- C. Portland Cement-Lime Mix: Packaged blend of portland cement complying with ASTM C 150, Type I or Type III, and hydrated lime complying with ASTM C 207, Type S.
- D. Mortar Cement: ASTM C 1329.
- E. Aggregate for Mortar: ASTM C 144.
  - For mortar that is exposed to view, use washed aggregate consisting of natural sand or crushed stone.
  - 2. For joints less than 1/4 inch thick, use aggregate graded with 100 percent passing the No. 16 sieve.
- F. Aggregate for Grout: ASTM C 404.
- G. Water-Repellent Admixture: Liquid water-repellent mortar admixture for use with concrete masonry units, containing integral water repellent by same manufacturer.
  - 1. Products:
    - a. Addiment Incorporated; Mortar Tite.
    - b. Grace Construction Products, a unit of W. R. Grace & Co. Conn.; Dry-Block Mortar Admixture.
    - c. Master Builders, Inc.; Rheomix Rheopel.
- H. Water: Potable.

## 2.5 TIES AND ANCHORS

- A. Materials: Provide ties and anchors specified in subsequent paragraphs that are made from materials that comply with eight subparagraphs below, unless otherwise indicated.
  - 1. Mill-Galvanized, Carbon-Steel Wire: ASTM A 82; with ASTM A 641/A 641M, Class 1 coating.
  - Hot-Dip Galvanized, Carbon-Steel Wire: ASTM A 82; with ASTM A 153/A 153M, Class B-2 coating.
  - 3. Galvanized Steel Sheet: ASTM A 653/A 653M, Commercial Steel, G60 zinc coating.
  - 4. Steel Sheet, Galvanized after Fabrication: ASTM A 1008/A 1008M, Commercial Steel, hot-dip galvanized after fabrication to comply with ASTM A 153/A 153M.

- 5. Steel Plates, Shapes, and Bars: ASTM A 36/A 36M.
- B. Wire Ties, General: Unless otherwise indicated, size wire ties to extend at least halfway through veneer but with at least 5/8-inch cover on outside face. Outer ends of wires are bent 90 degrees and extend 2 inches parallel to face of veneer.
- C. Adjustable Anchors for Connecting to Structure: Provide anchors that allow vertical or horizontal adjustment but resist tension and compression forces perpendicular to plane of wall.
  - 1. Anchor Section for Welding to Steel Frame: Crimped 1/4-inch- diameter, hot-dip galvanized steel wire. Mill-galvanized wire may be used at interior walls, unless otherwise indicated.
  - 2. Tie Section for Steel Frame: Triangular-shaped wire tie, sized to extend within 1 inch of masonry face, made from 0.188-inch- diameter, hot-dip galvanized steel wire. Mill-galvanized wire may be used at interior walls, unless otherwise indicated.
- D. Stone Anchors: Fabricate dowels, cramps, and other stone anchors from stainless steel.

#### 2.6 EMBEDDED FLASHING MATERIALS

- A. Rubberized-Asphalt Flashing: Manufacturer's composite flashing of adhesive-set rubberized-asphalt compound, bonded to high-density, cross-laminated polyethylene film. Note: Use only where flashing is fully concealed in masonry.
  - 1) Dur-O-Barrier; Dur-O-Wall, Inc.
  - 2) Perm-A-Barrier Wall Flashing, W.R. Grace & Co.
  - Other Manufacturer's Product acceptable to the Architect.
- B. Adhesives, Primers, and Seam Tapes for Flashings: Flashing manufacturer's standard products or products recommended by flashing manufacturer for bonding flashing sheets to each other and to substrates.

#### 2.7 MISCELLANEOUS MASONRY ACCESSORIES

- A. Compressible Filler: Premolded filler strips complying with ASTM D 1056, Grade 2A1; compressible up to 35 percent; of width and thickness indicated; formulated from **neoprene**.
- B. Preformed Control-Joint Gaskets: Made from styrene-butadiene-rubber compound, complying with ASTM D 2000, Designation M2AA-805 and designed to fit standard sash block and to maintain lateral stability in masonry wall; size and configuration as indicated.
- C. Bond-Breaker Strips: Asphalt-saturated, organic roofing felt complying with ASTM D 226, Type I (No. 15 asphalt felt).
- D. Weep/Vent Products: Use[ one of] the following, unless otherwise indicated:
  - 1. Cellular Plastic Weep/Vent: One-piece, flexible extrusion made from UV-resistant polypropylene copolymer, full height and width of head joint and depth 1/8 inch less than depth of outer wythe, in color selected from manufacturer's standard.
    - a. Products:
      - 1) Advanced Building Products Inc.; Mortar Maze weep vent.

## WSU PROJECT NO. 062-240913

- 2) Dayton Superior Corporation, Dur-O-Wal Division; Cell Vents.
- 3) Heckmann Building Products Inc.; No. 85 Cell Vent.
- 4) Hohmann & Barnard, Inc.; Quadro-Vent.
- 5) Wire-Bond; Cell Vent.

## 2.8 MASONRY CLEANERS

- A. Proprietary Acidic Cleaner: Manufacturer's standard-strength cleaner designed for removing mortar/grout stains, efflorescence, and other new construction stains from new masonry without discoloring or damaging masonry surfaces. Use product expressly approved for intended use by cleaner manufacturer and manufacturer of masonry units being cleaned.
  - 1. Manufacturers:
    - a. Diedrich Technologies, Inc.
    - b. EaCo Chem, Inc.
    - c. ProSoCo, Inc.

## 2.9 MORTAR AND GROUT MIXES

- A. General: Do not use admixtures, including pigments, air-entraining agents, accelerators, retarders, water-repellent agents, antifreeze compounds, or other admixtures, unless otherwise indicated.
  - 1. Do not use calcium chloride in mortar or grout.
  - 2. Limit cementitious materials in mortar for exterior and reinforced masonry to portland cement, mortar cement, and lime.
  - 3. Add cold-weather admixture (if used) at same rate for all mortar that will be exposed to view, regardless of weather conditions, to ensure that mortar color is consistent.
- B. Pre-blended, Dry Mortar Mix: Furnish dry mortar ingredients in form of a preblended mix. Measure quantities by weight to ensure accurate proportions, and thoroughly blend ingredients before delivering to Project site.
- C. Mortar for Unit Masonry: Comply with ASTM C 270, Property Specification. Provide the following types of mortar for applications stated unless another type is indicated or needed to provide required compressive strength of masonry.
  - 1. For exterior, above-grade, load-bearing and non-load-bearing walls and parapet walls; for interior load-bearing walls; for interior non-load-bearing partitions; and for other applications where another type is not indicated, use Type N.

## 2.10 FIELD APPLIED WATER REPELLENTS ON EXTERIOR MASONRY SURFACES

- A. Provide penetrating water repellent coating at the following locations:
  - 1. Install 2 coats at all exposed CMU exterior masonry surface.
  - 2. Other areas where indicated.
- B. General: Provide clear penetrating water repellents on masonry surfaces in compliance with manufacturer's written instructions. Water repellents shall be Silanes or Siloxanes products with at least 20% solids that can be applied to slightly damp surfaces.
  - 1. Provide a water repellent with at least a ten (10) year warranty.

- C. Manufacturers:
- 1. Advanced Chemical Technologies, Inc.
- 2. ChemMasters
- Dayton/Richmond Concrete Accessories Dayton Superior Corp.
- 4. Sonneborn Building Products
- ProSoCo, Inc.
- 6. Grand Blanc Cement Products.

## 2.11 MISCELLANEOUS MASONRY ACCESSORIES

- A. Compressible Filler: Pre-molded filler strips complying with ASTM D 1056, Grade 2A1; compressible up to 35 percent; of width and thickness indicated; formulated from urethane.
- F.B. Weep Hole Vent Inserts: Provide only where noted or indicated on Drawings.
  - 2.1. Stone Work Locations: Provide Cotton rope, ¼ inch to 3/8 inch diameter, in length required to extend at least 3 inches upward inside the cavity space and protruding at least 1 inch from the finished stone face. Remove cotton wick at completion of stone work.
    - a. Locate cotton weeps at intersection of grout joints and elsewhere recommended for cavity relief according to Stone Work industry standards.

#### PART 3 - EXECUTION

## 3.1 EXAMINATION

- A. Examine conditions, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of work.
  - 1. Verify that foundations are within tolerances specified.
  - 2. Verify that reinforcing dowels are properly placed.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

#### 3.2 INSTALLATION, GENERAL

- A. Use full-size units without cutting if possible. If cutting is required to provide a continuous pattern or to fit adjoining construction, cut units with motor-driven saws; provide clean, sharp, unchipped edges. Allow units to dry before laying unless wetting of units is specified. Install cut units with cut surfaces and, where possible, cut edges concealed.
- B. Matching Existing Masonry: Match coursing, bonding, color, and texture of existing masonry.
- C. Comply with construction tolerances in ACI 530.1/ASCE 6/TMS 602 and with the following:
  - 1. For conspicuous vertical lines, such as external corners, door jambs, reveals, and expansion and control joints, do not vary from plumb by more than 1/8 inch in 10 feet, 1/4 inch in 20 feet, or 1/2 inch maximum.
  - 2. For vertical alignment of exposed head joints, do not vary from plumb by more than 1/4

- inch in 10 feet, or 1/2 inch maximum.
- 3. For conspicuous horizontal lines, such as lintels, sills, parapets, and reveals, do not vary from level by more than 1/8 inch in 10 feet, 1/4 inch in 20 feet, or 1/2 inch maximum.
- 4. For exposed bed joints, do not vary from thickness indicated by more than plus or minus 1/8 inch, with a maximum thickness limited to 1/2 inch. Do not vary from bed-joint thickness of adjacent courses by more than 1/8 inch.
- 5. For exposed head joints, do not vary from thickness indicated by more than plus or minus 1/8 inch. Do not vary from adjacent bed-joint and head-joint thicknesses by more than 1/8 inch.
- 6. For faces of adjacent exposed masonry units, do not vary from flush alignment by more than 1/16 inch except due to warpage of masonry units within tolerances specified for warpage of units.
- 7. For exposed bed joints and head joints of stacked bond, do not vary from a straight line by more than 1/16 inch from one masonry unit to the next.

## 3.3 LAYING MASONRY WALLS

- A. Lay out walls in advance for accurate spacing of surface bond patterns with uniform joint thicknesses and for accurate location of openings, movement-type joints, returns, and offsets. Avoid using less-than-half-size units, particularly at corners, jambs, and, where possible, at other locations.
- B. Where built-in items are to be embedded in cores of hollow masonry units, place a layer of metal lath, wire mesh, or plastic mesh in the joint below and rod mortar or grout into core.

#### 3.4 MORTAR BEDDING AND JOINTING

- A. Set stone or cast-stone trim units in full bed of mortar raked out with sealant bead on exterior surface.
- B. Vertical joints to be control joints filled with sealant and backer rod.with full vertical joints. Fill dowel, anchor, and similar holes.
  - 1. Tool exposed joints slightly concave when thumbprint hard, using a jointer larger than joint thickness, unless otherwise indicated. Clean soiled surfaces with fiber brush and soap powder and rinse thoroughly with clear water.
  - 2. Allow cleaned surfaces to dry before setting.
  - 3. Wet joint surfaces thoroughly before applying mortar.

## 3.5 ANCHORING MASONRY VENEERS

- A. Anchor masonry veneers to masonry backup with masonry-veneer anchors to comply with the following requirements:
  - 1. Fasten anchors to concrete and masonry backup with metal fasteners of type indicated. Use two fasteners unless anchor design only uses one fastener.
  - 2. Embed tie sections connector sections and continuous wire in masonry joints. Provide not less than 2 inches of air space between back of masonry veneer and face of sheathing.
  - Locate anchor sections to allow maximum vertical differential movement of ties up and down.

#### WSU PROJECT NO. 062-240913

4. Space anchors as indicated, but not more than 16 inches o.c. vertically and 24 inches o.c. horizontally with not less than 1 anchor for each 2.67 sq. ft. of wall area. Install additional anchors within 12 inches of openings and at intervals, not exceeding 36 inches, around perimeter.

## 3.6 CONTROL AND EXPANSION JOINTS

- A. General: Install control and expansion joint materials in unit masonry as masonry progresses. Do not allow materials to span control and expansion joints without provision to allow for inplane wall or partition movement.
- B. Form control joints using one of the following methods:
  - Fit bond-breaker strips into hollow contour in ends of concrete masonry units on one side
    of control joint. Fill resultant core with grout and rake out joints in exposed faces for
    application of sealant.
  - 2. Install interlocking units designed for control joints. Install bond-breaker strips at joint. Keep head joints free and clear of mortar or rake out joint for application of sealant.
  - 3. Install temporary foam-plastic filler in head joints and remove filler when unit masonry is complete for application of sealant.

# 3.7 FLASHING, WEEP HOLES, CAVITY DRAINAGE, AND VENTS

- A. General: Install embedded flashing and weep holes in masonry at shelf angles, lintels, ledges, other obstructions to downward flow of water in wall, and where indicated.
- B. Install flashing as follows, unless otherwise indicated:
  - 1. Prepare masonry surfaces so they are smooth and free from projections that could puncture flashing. Where flashing is within mortar joint, place through-wall flashing on sloping bed of mortar and cover with mortar. Before covering with mortar, seal penetrations in flashing with adhesive, sealant, or tape as recommended by flashing manufacturer.
- C. Install weep holes in head joints in exterior wythes of first course of masonry immediately above embedded flashing and as follows:
  - 1. Use **specified weep/vent products** to form weep holes.
- D. Place pea gravel in cavities as soon as practical to a height equal to height of first course above top of flashing, but not less than 2 inches, to maintain drainage.
  - Option: Place cavity drainage material in cavities to comply with configuration requirements for cavity drainage material in Part 2 "Miscellaneous Masonry Accessories" Article.

## 3.8 FIELD QUALITY CONTROL

- A. Testing Agency: Owner will engage a qualified independent testing and inspecting agency to perform field tests and inspections indicated below and prepare test reports:
  - 1. Payment for these services will be made by Owner.

- 2. Retesting of materials failing to comply with specified requirements shall be done at Contractor's expense.
- B. Mortar Test (Property Specification): For each mix provided, per ASTM C 780. Test mortar for mortar air content and compressive strength.

#### 3.9 REPAIRING, POINTING, AND CLEANING

- A. Remove and replace masonry units that are loose, chipped, broken, stained, or otherwise damaged or that do not match adjoining units. Install new units to match adjoining units; install in fresh mortar, pointed to eliminate evidence of replacement.
- B. Pointing: During the tooling of joints, enlarge voids and holes, except weep holes, and completely fill with mortar. Point up joints, including corners, openings, and adjacent construction, to provide a neat, uniform appearance. Prepare joints for sealant application, where indicated.
- C. In-Progress Cleaning: Clean unit masonry as work progresses by dry brushing to remove mortar fins and smears before tooling joints.
- D. Final Cleaning: After mortar is thoroughly set and cured, clean exposed masonry as follows:
  - 1. Remove large mortar particles by hand with wooden paddles and nonmetallic scrape hoes or chisels.
  - 2. Test cleaning methods on sample wall panel; leave one-half of panel uncleaned for comparison purposes. Obtain Architect's approval of sample cleaning before proceeding with cleaning of masonry.
  - 3. Protect adjacent stone and nonmasonry surfaces from contact with cleaner by covering them with liquid strippable masking agent or polyethylene film and waterproof masking tape.
  - 4. Wet wall surfaces with water before applying cleaners; remove cleaners promptly by rinsing surfaces thoroughly with clear water.
  - 5. Clean brick by bucket-and-brush hand-cleaning method described in BIA Technical Notes 20.
  - 6. Clean masonry with a proprietary acidic cleaner applied according to manufacturer's written instructions.
  - 7. Clean concrete masonry by cleaning method indicated in NCMA TEK 8-2A applicable to type of stain on exposed surfaces.
  - 8. Clean stone trim to comply with stone supplier's written instructions.
  - 9. Clean limestone units to comply with recommendations in ILI's "Indiana Limestone Handbook."

# 3.10 MASONRY WASTE DISPOSAL

A. Excess Masonry Waste: Remove excess clean masonry waste and legally dispose of off Owner's property.

END OF SECTION 04 2000

## SECTION 07 1113 - BITUMINOUS DAMPPROOFING

#### PART 1 - GENERAL

## 1.1 RELATED DOCUMENTS

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

#### 1.2 SUMMARY

- A. This Section includes Asphalt damp-proofing for foundation walls:
  - 1. Cold-applied, emulsified-asphalt dampproofing.
- B. Related Sections include the following:
  - 1. Division 04 2000 Section "Unit Masonry." For water repellents.

## 1.3 SUBMITTALS

- A. Product Data: For each type of product indicated. Include recommendations for method of application, primer, number of coats, coverage or thickness, and protection course.
- B. Material Certificates: For each product, signed by manufacturers.

## 1.4 QUALITY ASSURANCE

A. Source Limitations: Obtain primary dampproofing materials and primers through one source from a single manufacturer. Provide secondary materials recommended by manufacturer of primary materials.

## 1.5 PROJECT CONDITIONS

- A. Weather Limitations: Proceed with installation only when existing and forecasted weather conditions permit dampproofing to be performed according to manufacturers' written instructions.
- B. Ventilation: Provide adequate ventilation during application of dampproofing in enclosed spaces. Maintain ventilation until dampproofing has cured.

#### PART 2 - PRODUCTS

## 2.1 MANUFACTURERS

- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
  - 1. ChemMasters Corp.
  - 2. Degussa Building Systems; Sonneborn Brand Products.
  - 3. Gardner Gibson, Inc.
  - 4. Henry Company.
  - 5. Karnak Corporation.
  - 6. Koppers, Inc.
  - 7. Malarkey Roofing Products.
  - 8. Meadows, W.R., Inc.
  - 9. Tamms Industries, Inc.

## 2.2 COLD-APPLIED, EMULSIFIED-ASPHALT DAMPPROOFING

- A. Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include the manufacturers listed in this section.
- B. Trowel Coats: ASTM D 1227, Type II, Class 1.
- C. Fibered Brush and Spray Coats: ASTM D 1227, Type II, Class 1.
- D. Brush and Spray Coats: ASTM D 1227, Type III, Class 1.

#### 2.6 MISCELLANEOUS MATERIALS

- A. Emulsified-Asphalt Primer: ASTM D 1227, Type III, Class 1, except diluted with water as recommended by manufacturer.
- C. Asphalt-Coated Glass Fabric: ASTM D 1668, Type I.
- D. Patching Compound: Epoxy or latex-modified repair mortar or manufacturer's fibered mastic of type recommended by dampproofing manufacturer.

# PART 3 - EXECUTION

#### 3.1 EXAMINATION

- A. Examine substrates, with Installer present, for compliance with requirements for surface smoothness and other conditions affecting performance of work.
  - 1. Proceed with dampproofing application only after substrate construction and penetrating work have been completed and unsatisfactory conditions have been corrected.
  - 2. Test for surface moisture according to ASTM D 4263.

#### 3.2 PREPARATION

- A. Protection of Other Work: Mask or otherwise protect adjoining exposed surfaces from being stained, spotted, or coated with dampproofing. Prevent dampproofing materials from entering and clogging weep holes and drains.
- B. Clean substrates of projections and substances detrimental to work; fill voids, seal joints, and apply bond breakers if any, as recommended by prime material manufacturer.
- C. Apply patching compound for filling and patching tie holes, honeycombs, reveals, and other imperfections; cover with asphalt-coated glass fabric.

#### 3.3 APPLICATION, GENERAL

- A. Comply with manufacturer's written recommendations unless more stringent requirements are indicated or required by Project conditions to ensure satisfactory performance of dampproofing.
  - 1. Apply additional coats if recommended by manufacturer or if required to achieve coverages indicated.
  - 2. Allow each coat of dampproofing to cure twelve (12) hours before applying subsequent coats.
  - 3. Allow forty-eight (48) hours drying time prior to earth fill backfilling.
- B. Apply dampproofing to provide continuous plane of protection on interior face of above-grade, limestone units.
- C. Odor Elimination: Provide dampproofing material warranted by manufacturer to be substantially odor free after drying for 24 hours under normal conditions.

## 3.4 COLD-APPLIED, EMULSIFIED-ASPHALT DAMPPROOFING

A. On Interior Face of Exterior Limestone Units: Apply 1 brush or spray coat at not less than 1 gal./100 sq. ft. (0.4 L/sq. m).

## 3.8 CLEANING

A. Remove dampproofing materials from surfaces not intended to receive dampproofing.

END OF SECTION 07 1113

## SECTION 07 9200 - JOINT SEALANTS

#### PART 1 - GENERAL

## 1.1 RELATED DOCUMENTS

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

## 1.2 SUMMARY

- A. This Section includes joint sealants for the following applications:
  - Exterior joints in, but not limited to the following vertical surfaces and horizontal nontraffic surfaces:
    - a. Control and expansion joints in unit masonry.
    - b. Perimeter joints between frames of doors, windows, and louvers.
  - 2. Interior joints in, but not limited to the following vertical surfaces and horizontal non-traffic surfaces:
    - a. Perimeter joints of exterior openings.
    - b. Perimeter joints between interior wall surfaces and frames of interior doors, windows, and elevator entrances.
    - c. All joints between dissimilar materials.
- B. Related Sections include the following:
  - Division 04 2000 Section "Unit Masonry" for masonry control and expansion joint fillers and gaskets.

# 1.3 PERFORMANCE REQUIREMENTS

- A. Provide elastomeric joint sealants that establish and maintain watertight and airtight continuous joint seals without staining or deteriorating joint substrates.
- B. Provide joint sealants for interior applications that establish and maintain airtight and water-resistant continuous joint seals without staining or deteriorating joint substrates.

# 1.4 SUBMITTALS

- A. Product Data: For each joint-sealant product indicated.
- B. Samples for Verification: For each type and color of joint sealant required, provide Samples with joint sealants in 1/2-inch- (13-mm-) wide joints formed between two 6-inch- (150-mm-) long strips of material matching the appearance of exposed surfaces adjacent to joint sealants.
- C. Warranties: Special warranties specified in this Section.

#### 1.5 QUALITY ASSURANCE

- A. Installer Qualifications: Manufacturer's authorized Installer in continuous business at least three
   (3) years who is approved or licensed for installation of elastomeric sealants required for this Project.
- B. Source Limitations: Obtain each type of joint sealant through one source from a single manufacturer.

## 1.6 PROJECT CONDITIONS

- A. Do not proceed with installation of joint sealants under the following conditions:
  - When ambient and substrate temperature conditions are outside limits permitted by jointsealant manufacturer or are below 40 deg F (5 deg C).
  - 2. When joint substrates are wet.
  - 3. Where joint widths are less than those allowed by joint-sealant manufacturer for applications indicated.
  - 4. Contaminants capable of interfering with adhesion have not yet been removed from joint substrates.

## 1.7 WARRANTY

- A. Special Installer's Warranty: Installer's standard form in which Installer agrees to repair or replace elastomeric joint sealants that do not comply with performance and other requirements specified in this Section within specified warranty period.
  - 1. Warranty Period: Five (5) years from date of Substantial Completion.
- B. Special Manufacturer's Warranty: Manufacturer's standard form in which elastomeric sealant manufacturer agrees to furnish elastomeric joint sealants to repair or replace those that do not comply with performance and other requirements specified in this Section within specified warranty period.
  - 1. Warranty Period: Ten (10) years from date of Substantial Completion.

## PART 2 - PRODUCTS

## 2.1 MANUFACTURERS

- A. Manufacturer's Products: Subject to compliance with requirements, products that may be incorporated into the Work include, but are not limited to, products listed in other Part 2 articles.
  - Manufacturer's sealant products are indicated for Manufacturer's "Basis of Design" only.
     Other manufacturer's products complying to specified criteria comparable to the Basis of Design Product will be reviewed for acceptability.
- B. Silicone Sealants (Low-Modulus)
  - 1. Dow Corning Corp.
  - 2. GE Silicones
  - 3. Pecora

# C. Polyurethane Sealants

- 1. Sika Corp.
- 2. Pecora
- 3. Sonneborn Building Products
- 4. Tremco

## 2.2 MATERIALS, GENERAL

- A. Compatibility: Provide joint sealants, backings, and other related materials that are compatible with one another and with joint substrates under conditions of service and application, as demonstrated by sealant manufacturer, based on testing and field experience.
- B. Colors of Exposed Joint Sealants: As selected by Architect from manufacturer's full range.
  - Vertical Joint Sealant Color: Provide color to match as closely as possible the brick or Masonry unit (CMU) color. Where two brick colors are in the same façade, provide sealant colors to closely match each brick area. Submit samples for selection by Architect.
  - 2. Horizontal Joint Sealant Color: Provide color to match the grout color.

## 2.3 ELASTOMERIC JOINT SEALANTS

- A. Elastomeric Sealants: Comply with ASTM C 920 and other requirements indicated for each liquid-applied chemically curing sealant specified, including those referencing ASTM C 920 classifications for type, grade, class, and uses related to exposure and joint substrates.
- B. Stain-Test-Response Characteristics: Where elastomeric sealants are specified to be nonstaining to porous substrates, provide products that have undergone testing according to ASTM C 1248 and have not stained porous joint substrates indicated for Project.
- C. Suitability for Immersion in Liquids. Where elastomeric sealants are indicated for Use I for joints that will be continuously immersed in liquids, provide products that have undergone testing according to ASTM C 1247 and qualify for the length of exposure indicated by reference to ASTM C 920 for Class 1 or 2. Liquid used for testing sealants is deionized water, unless otherwise indicated.
- D. Suitability for Contact with Food: Where elastomeric sealants are indicated for joints that will come in repeated contact with food, provide products that comply with 21 CFR 177.2600.

## 2.4 SEALANT TYPES

- A. Manufacturer's products indicated are Basis of Design. Other manufacturers products complying to specified criteria will be considered.
- B. Silicone Sealant for Exterior: ASTM C 920, Grade NS, Class 25, Uses NT, A, G, M, O; single component, neutral curing, non-sagging, non-staining, fungus resistant, non-bleeding.
  - 1. Product: 790 manufactured by Dow Corning Building Sealant.
  - 2. Movement Capability: Plus 100 percent, minus 25 percent.
  - 3. Service Temperature Range: -65 to 180 degrees F (-54 to 82 degrees C).

- 4. Shore A Hardness Range: 15 to 35.
- 5. Location Applications:
  - a. Exterior joints.
  - b. Control, expansion and soft joints in masonry.
  - c. Joints between concrete and other materials.
  - d. Joints between metal frames and other materials.
  - e. Butt glazing.
  - f. Joints between precast architectural and precast structural concrete joints with precast concrete and other materials.
- C. General Purpose Interior Sealant: Acrylic emulsion latex; ASTM C 834, single component, paintable.
  - 1. Product: Sonolac manufactured by Sonneborn Building Products Div.
  - 2. Product: Tremco Acrylic Latex 834 manufactured by Tremco Inc.
  - 3. Product: AC-20 manufactured by Pecora Corp.
  - 4. Location Applications:
    - a. Interior wall and ceiling control joints.
    - b. Joints between door and window frames and wall surfaces.
    - c. Joints between casework and adjacent surfaces.
    - d. Other interior joints for which no other type of sealant is indicated.

## 2.5 PREFORMED JOINT SEALANTS

- A. Preformed Silicone-Sealant System: Manufacturer's standard system consisting of precured low-modulus silicone extrusion, in sizes to fit joint widths indicated, combined with a neutral-curing silicone sealant for bonding extrusions to substrates.
  - 1. Manufacturer's Products:
    - a. Dow Corning Corporation; 123 Silicone Seal.
    - b. GE Silicones; UltraSpan US1100.
    - c. Pecora Corporation; Sil-Span.
    - d. Tremco; Spectrem Ez Seal.
- B. Preformed Foam Sealant: Manufacturer's standard preformed, precompressed, open-cell foam sealant that is manufactured from high-density urethane foam impregnated with a nondrying, water-repellent agent; is factory produced in precompressed sizes in roll or stick form to fit joint widths indicated; is coated on one side with a pressure-sensitive adhesive and covered with protective wrapping; develops a watertight and airtight seal when compressed to the degree specified by manufacturer; and complies with the following:
  - 1. Manufacturer's Products:
    - a. EMSEAL Joint Systems, Ltd.; Emseal 25V.
    - b. illbruck Sealant Systems, Inc.; Wilseal 600.
    - c. Polytite Manufacturing Corporation; Polytite B.
    - d. Polytite Manufacturing Corporation; Polytite Standard.
    - e. Sandell Manufacturing Co., Inc.; Polyseal.
  - 2. Properties: Permanently elastic, mildew resistant, nonmigratory, nonstaining, and compatible with joint substrates and other joint sealants.

a. Density: Manufacturer's standard.

## 2.6 PREFORMED TAPE SEALANTS

- A. Back-Bedding Mastic Tape Sealant: Preformed, butyl-based elastomeric tape sealant with a solids content of 100 percent; nonstaining and nonmigrating in contact with nonporous surfaces; with or without spacer rod as recommended in writing by tape manufacturers for application indicated; packaged on rolls with a release paper backing; and complying with ASTM C 1281 and AAMA 800.
- B. Expanded Cellular Tape Sealant: Closed-cell, PVC foam tape sealant; factory coated with adhesive on both surfaces; packaged on rolls with release liner protecting adhesive; and complying with AAMA 800.

## 2.7 JOINT-SEALANT BACKING (BACKER ROD)

- A. General: Provide sealant backings of material and type that are nonstaining; are compatible with joint substrates, sealants, primers, and other joint fillers; and are approved for applications indicated by sealant manufacturer based on field experience and laboratory testing.
- B. Cylindrical Sealant Backings: ASTM C 1330, Type C (closed-cell material with a surface skin), O (open-cell material), B (bicellular material with a surface skin), or any of the preceding types, as approved in writing by joint-sealant manufacturer for joint application indicated, and of size and density to control sealant depth and otherwise contribute to producing optimum sealant performance:
- C. Elastomeric Tubing Sealant Backings: Neoprene, butyl, EPDM, or silicone tubing complying with ASTM D 1056, nonabsorbent to water and gas, and capable of remaining resilient at temperatures down to minus 26 deg F (minus 32 deg C). Provide products with low compression set and of size and shape to provide a secondary seal, to control sealant depth, and to otherwise contribute to optimum sealant performance.
- D. Bond-Breaker Tape: Polyethylene tape or other plastic tape recommended by sealant manufacturer for preventing sealant from adhering to rigid, inflexible joint-filler materials or joint surfaces at back of joint where such adhesion would result in sealant failure. Provide selfadhesive tape where applicable.

## 2.8 MISCELLANEOUS MATERIALS

- A. Primer: Material recommended by joint-sealant manufacturer where required for adhesion of sealant to joint substrates indicated, as determined from preconstruction joint-sealant-substrate tests and field tests.
- B. Cleaners for Nonporous Surfaces: Chemical cleaners acceptable to manufacturers of sealants and sealant backing materials, free of oily residues or other substances capable of staining or harming joint substrates and adjacent nonporous surfaces in any way, and formulated to promote optimum adhesion of sealants to joint substrates.
- C. Masking Tape: Nonstaining, nonabsorbent material compatible with joint sealants and surfaces adjacent to joints.

#### PART 3 - EXECUTION

#### 3.1 EXAMINATION

- A. Examine joints indicated to receive joint sealants, with Installer present, for compliance with requirements for joint configuration, installation tolerances, and other conditions affecting joint-sealant performance.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

#### 3.2 PREPARATION

- A. Surface Cleaning of Joints: Clean out joints immediately before installing joint sealants to comply with joint-sealant manufacturer's written instructions and the following requirements:
  - 1. Remove all foreign material from joint substrates that could interfere with adhesion of joint sealant, including dust, paints (except for permanent, protective coatings tested and approved for sealant adhesion and compatibility by sealant manufacturer), old joint sealants, oil, grease, waterproofing, water repellents, water, surface dirt, and frost.
  - 2. Clean porous joint substrate surfaces by brushing, grinding, blast cleaning, mechanical abrading, or a combination of these methods to produce a clean, sound substrate capable of developing optimum bond with joint sealants. Remove loose particles remaining after cleaning operations above by vacuuming or blowing out joints with oil-free compressed air.
  - 3. Remove laitance and form-release agents from concrete.
  - 4. Clean nonporous surfaces with chemical cleaners or other means that do not stain, harm substrates, or leave residues capable of interfering with adhesion of joint sealants. Nonporous joint substrates.
- B. Joint Priming: Prime joint substrates, where required, based on preconstruction joint-sealant-substrate tests or prior experience. Apply primer to comply with joint-sealant manufacturer's written instructions. Confine primers to areas of joint-sealant bond; do not allow spillage or migration onto adjoining surfaces.
- C. Masking Tape: Use masking tape where required to prevent contact of sealant with adjoining surfaces that otherwise would be permanently stained or damaged by such contact or by cleaning methods required to remove sealant smears. Remove tape immediately after tooling without disturbing joint seal.

#### 3.3 INSTALLATION OF JOINT SEALANTS

- A. General: Comply with joint-sealant manufacturer's written installation instructions for products and applications indicated, unless more stringent requirements apply.
- B. Sealant Installation Standard: Comply with recommendations in ASTM C 1193 for use of joint sealants as applicable to materials, applications, and conditions indicated.
- C. Install sealant backings of type indicated to support sealants during application and at position required to produce cross-sectional shapes and depths of installed sealants relative to joint widths that allow optimum sealant movement capability.

- D. Install bond-breaker tape behind sealants where sealant backings are not used between sealants and backs of joints.
- E. Install sealants using proven techniques that comply with the following and at the same time backings are installed:
  - 1. Place sealants so they directly contact and fully wet joint substrates.
  - 2. Completely fill recesses in each joint configuration.
  - 3. Produce uniform, cross-sectional shapes and depths relative to joint widths that allow optimum sealant movement capability.
- F. Tooling of Nonsag Sealants: Immediately after sealant application and before skinning or curing begins, tool sealants according to requirements specified below to form smooth, uniform beads of configuration indicated; to eliminate air pockets; and to ensure contact and adhesion of sealant with sides of joint.
  - 1. Remove excess sealant from surfaces adjacent to joints.
  - 2. Use tooling agents that are approved in writing by sealant manufacturer and that do not discolor sealants or adjacent surfaces.
  - 3. Provide concave joint, unless otherwise indicated.
- G. Installation of Preformed Foam Sealants: Install each length of sealant immediately after removing protective wrapping, taking care not to pull or stretch material, producing seal continuity at ends, turns, and intersections of joints. For applications at low ambient temperatures where expansion of sealant requires acceleration to produce seal, apply heat to sealant in compliance with sealant manufacturer's written instructions.

## 3.4 CLEANING

A. Clean off excess sealant or sealant smears adjacent to joints as the Work progresses by methods and with cleaning materials approved in writing by manufacturers of joint sealants and of products in which joints occur.

# 3.5 PROTECTION

A. Protect joint sealants during and after curing period from contact with contaminating substances and from damage resulting from construction operations or other causes so sealants are without deterioration or damage at time of Substantial Completion. If, despite such protection, damage or deterioration occurs, cut out and remove damaged or deteriorated joint sealants immediately so installations with repaired areas are indistinguishable from original work.

END OF SECTION 07 9200