



Division of Finance and Business Operations

Wayne State University
Linsell Roof Replacement
WSU Project Number 017-188580
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:

Nancy Milstein, Project Manager
Facilities Planning & Management
Design & Construction Services
5454 Cass
Wayne State University
Detroit, Michigan 48202

Consultant:

Quinn Evans Architects
71 Garfield, Suite 160-B
Detroit, MI 48201

April 30, 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

Technical Specifications**Division 06 - Wood, Plastics and Composites**

061053	Miscellaneous Rough Carpentry
061600	Sheathing
064600	Wood Trim

Division 07 - Thermal and Moisture Protection

070150.19	Preparation for Re-Roofing
073113	Asphalt Shingles
076200	Sheet Metal Flashing and Trim
077100	Roof Specialties
079200	Joint Sealants

Division 09 - Finishes

099113	Exterior Painting
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INFORMATION FOR BIDDERS

OWNER: Board of Governors
Wayne State University

PROJECT: **Linsell Roof Replacement**
Project No. **017-188580**

LOCATION: Wayne State University
5104 Gullen Mall
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: **Nancy Milstein, Project Manager**
Facilities Planning & Management
Design & Construction Services
Wayne State University
5454 Cass Avenue
Detroit, Michigan 48202

Architect: **Quinn Evans Architects**
71 Garfield, Suite 160-B
Detroit, MI 48201

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: April 30, 2014

BIDDING: Bidding documents may be obtained by vendors from the University Purchasing Web Site at http://www.forms.purchasing.wayne.edu/Adv_bid/Adv_bid.html beginning **April 30, 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.

MANDATORY Pre-Bid Conference: **10:00 a.m., local time, May 16, 2014** to be held at Wayne State University – **5104 Gullen Mall, Conference Room**, Detroit, MI, 48202. Late Arrivals may not be permitted to submit bids.

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

DUE DATE FOR QUESTIONS: Due Date for questions shall be **May 21, 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 **Robert Kuhn, Senior Buyer**.

Bids Due: 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 **May 30, 2014**, until 2:00 p.m. (local time).

No public bid opening will be held.

Bid Qualification Meeting: 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

http://www.forms.purchasing.wayne.edu/Adv_bid/Adv_bid.html.

Information that is not posted to the website is not available/not known

INSTRUCTIONS TO BIDDERS

OWNER: Board of Governors
Wayne State University

PROJECT: **Linsell Roof Replacement**
Project No. **017-188580**

LOCATION: Wayne State University
5104 Gullen Mall,
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 these 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. INTERPRETATION OF CONTRACT DOCUMENTS

- 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 **April 30, 2014** through Wayne State University Procurement & Strategic Sourcing's Website for Advertised Bids: **http://www.forms.purchasing.wayne.edu/Adv_bid/Adv_bid.html**. 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 **http://www.forms.purchasing.wayne.edu/Adv_bid/Adv_bid.html**, and click on the "Join our Listserve" link at the top of the page.

NOTICE OF MANDATORY PRE-BID CONFERENCE

PROJECT: **Linsell Roof Replacement,**

PROJECT NOS.: **WSU PROJECT NO. 017-188580**

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
5104 Gullen Mall, Conference Room
Detroit MI 48202

10:00 a.m., local time, May 16, 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

http://www.forms.purchasing.wayne.edu/Adv_bid/Adv_bid.html.

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 http://www.forms.purchasing.wayne.edu/Adv_bid/Adv_Bid_Listserve.html 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 **May 21, 2014, 12:00 noon**.
- IV. Proposal Due Date- **May 30, 2014, 2:00 p.m.**
- V. Final Comments
- VI. Adjourn

VENDOR NAME _____

GENERAL CONTRACT - PROPOSAL FORM (revised 1 - 2011)

Please Note – Vendors must Pre-qualify themselves when responding to this bid opportunity. Our Prequalification questions can be found on page 4 of this section.

OWNER: Board of Governors
Wayne State University

PROJECT: Linsell Roof Replacement

PROJECT NO.: WSU PROJECT NO. 017-188580

PROJECT TYPE: Roofing 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: Nancy Milstein, 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 work of the **Linsell Roof Replacement** project (WSU Project No. 017-188580) in accordance with the Bidding Documents for the following amounts:

_____ \$ _____ Dollars

UNIT PRICES

In the event additional work becomes necessary, the following unit prices will apply:

1. Roof Sheathing Replacement: Provide unit price for replacing deteriorated wood roof decking, for Work not otherwise indicated on the Drawings or included in the base bid. Unit price shall include removal of wood sheathing found to be deteriorated, and replaced with roof sheathing in accordance with Section 061600 "Sheathing". Unit of Measurement: Square Foot. _____/s.f.

2. Outrigger Eave Framing Replacement: Provide unit price for replacing deteriorated wood outrigger framing, for Work not otherwise indicated on the Drawings or included in the base bid. Unit price shall include removal of 2x4 wood outriggers found to be deteriorated behind eaves, and replaced with framing in accordance with Section 061053 "Miscellaneous Rough Carpentry". Unit of Measurement: Linear Foot. _____/l.f.
3. Wood Trim Replacement: Provide unit price for replacing deteriorated exterior wood trim, for Work not otherwise indicated on the Drawings or included in the base bid. Unit price shall include removal of wood trim found to be deteriorated at the cornice line, and replaced with painted wood trim, to match existing, in accordance with Section 064600 "Wood Trim" and Section 099113 "Exterior Painting". Unit of Measurement: Linear Foot. _____/l.f.

Alternate #1:

In lieu of base scope, identified in Drawings, remove all existing aluminum drip flashing at eave edge, around entire perimeter of asphalt shingled roof areas. Provide new pre-finished aluminum drip flashing at eave, around entire perimeter of asphalt shingled roof areas, s detailed in Drawings.

add \$_____

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 CHANGEORDERS: (revised 4-01-2011)

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

1. For subcontract work, Contractor's markup for handling, overhead, profit and bonding on subcontractors sell price, shall not exceed **5%**.
 - 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**
2. 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 **August 28, 2014.**

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 **\$250.00, Two Hundred and Fifty Dollars per day**, and therefore the contractor shall pay as liquidated damages to the Owner the sum of **\$250.00, Two Hundred and Fifty 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: **Roofing 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

** Withdrawal of a bid is subject to the University suspension policy, for a period up to one year.

Contractors must complete the following information to determine their eligibility to participate in this bid. 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.

Check one of the following on the makeup of your company:

_____ Corporation

_____ Individual

_____ Partnership

_____ Joint Venture

_____ Other (Explain)

1. How many years has your organization been in business as a contractor? _____

2. How many years has your organization been in business under its present business name? _____

3. List states in which your organization is legally qualified to do business. _____

4. Provide the Name and Address of your Liability Insurance Carrier. _____

5. What is your current EMR Rating? _____

The minimum requirement is an EMR Rating of 1.0 or less for all projects. Bidders with a rating higher than 1.0 understand that their bid may be disqualified, at the sole discretion of the University.

6. What percentage of work performed on projects are by company employees; excluding any hired subcontracting and outsourced relationships, for the bid submitted? _____ %

7. What percentage of work performed on your companies behalf are by subcontracted business relationships; disallowing 1099 contracting work forces, for the bid submitted? _____ %

8. Have you ever failed to complete any work awarded to you? If so, attach a separate sheet of explanation. Include the name of the Project, the customer, the dates of the work, and the amount of the contract?

9. Have you withdrawn a bid after a University bid opening and/or refused to enter into a contract with the University upon notification of award within the last 3 years? If so, state the Project Name and Number, and the date of bid submission below.

10. Has any officer or partner of your organization ever been an officer or partner of another organization that failed to complete a construction contract? If so, attach a separate sheet of explanation.

11. List the construction experience of the principals and superintendents of your company.

Name: _____ Title: _____

Name: _____ Title: _____

Name: _____ Title: _____

12. List the construction Projects, and approximate 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: _____

13. List the construction Projects, and approximate dates, when you performed work similar in Dollar Amount to this project.

Project: _____ Owner: _____

Contract Amount: _____ Date Completed: _____

Project: _____ Owner: _____

Contract Amount: _____ Date Completed: _____

Project: _____ Owner: _____

Contract Amount: _____ Date Completed: _____

14. Is your Company "bondable"? Yes _____ No _____

15. What is your present bonding capacity? \$ _____

16. Who is your bonding agent?

NAME: _____

ADDRESS: _____

PHONE: (_____) _____

CONTACT: _____

17. Does your company agree to provide financial reports to the University upon request? Failure to agree may result in disqualification of your bid. Yes _____ No _____

18. Does your company agree that all of the Terms and Conditions of this RFP and Vendor's Response Proposal become part of any ensuing agreement? Yes _____ No _____

19. Does your company agree to execute a contract containing the clauses shown in Section 00500 "Agreement Between Contractor and Owner for Construction"? Yes _____ No _____

If "No", clearly note any exceptions to any information contained in the contract documents and include with your proposal.

20. Did your company quote based upon **Prevailing Wage Rates**? Yes _____ No _____

Note: Contractors submitting proposals for this project may, at the discretion of the University, be required to submit references including contact information to be 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 that the bid will be disqualified if the Prequalification information above is not completed in its entirety.

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;
2. 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 <http://purchasing.wayne.edu/docs/appm28.pdf>

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 #: 502**Requestor:** Wayne State University**Project Description:** Linsell Building - Roof Replacement**Project Number:** 017-188580**Wayne County****Official 2014 Prevailing Wage Rates for State Funded Projects****Issue Date:** 4/2/2014**Contract must be awarded by:** 7/1/2014**Page 1 of 29**

<u>Classification</u>			<u>Last</u>	<u>Straight Time and a</u>	<u>Double</u>	<u>Overtime</u>	
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 D Y
4 ten hour days @ straight time allowed Monday-Saturday, must be consecutive calendar days			8/14/2013				
Asbestos & Lead Abatement, Hazardous Material Handler							
Asbestos and Lead Abatement, Hazardous Material Handler	AS207			\$39.75	\$53.08	\$66.40	H H H X X X D Y
			9/16/2013				
4 ten hour days @ straight time allowed Monday-Saturday,							
Boilermaker							
Boilermaker	BO169			\$54.70	\$81.08	\$107.45	H H H H H H D Y
			8/14/2009				
Apprentice Rates:							
1st 6 months				\$40.31	\$59.49	\$78.67	
2nd 6 months				\$41.45	\$61.21	\$80.95	
3rd 6 months				\$42.57	\$62.88	\$83.19	
4th 6 months				\$43.69	\$64.57	\$85.43	
5th 6 months				\$44.81	\$66.24	\$87.67	
6th 6 months				\$49.53	\$73.40	\$97.26	
7th 6 months				\$49.32	\$73.01	\$96.69	
8th 6 months				\$51.58	\$76.40	\$101.21	

Official Request #: 502

Requestor: Wayne State University

Project Description: Linsell Building - Roof Replacement

Project Number: 017-188580

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.

Official 2014 Prevailing Wage Rates for State Funded Projects

Issue Date: 4/2/2014

Contract must be awarded by: 7/1/2014

Page 2 of 29

Classification		Last Updated	Straight Time and a Half	Double Time	Overtime Provision
Name	Description				
=====					
Bricklayer					
Bricklayer, stone mason, pointer, cleaner, caulker	BR1	9/3/2013	\$51.93	\$77.90	\$103.86 H H D H D D D N

Between October 1 and April 30, if lost time occurs due to inclement weather, Saturday may be worked as a make-up day @ straight time until forty hours are worked.

Apprentice Rates:

First 6 months	\$31.54	\$47.32	\$63.08
2nd 6 months	\$33.39	\$50.10	\$66.78
3rd 6 months	\$35.24	\$52.87	\$70.48
4th 6 months	\$37.09	\$55.64	\$74.18
5th 6 months	\$38.94	\$58.42	\$77.88
6th 6 months	\$40.79	\$61.20	\$81.58
7th 6 months	\$42.64	\$63.97	\$85.28
8th 6 months	\$44.49	\$66.74	\$88.98

Carpenter

Diver	CA 687 D	10/9/2013	\$63.30	\$91.30	\$119.29 X X H X X H H D Y
Four 10s allowed M-Sat; double time due when over 12 hours worked per day					

Carpet and Resilient Floor Layer, (does not include installation of prefabricated formica & parquet flooring which is to be paid carpenter rate)	CA1045	11/6/2013	\$48.14	\$68.71	\$89.27 X X H X X X X D Y
--	--------	-----------	---------	---------	---------------------------

Apprentice Rates:

1st 6 months	\$23.56	\$31.84	\$40.11
2nd 6 months	\$27.57	\$37.85	\$48.13
3rd 6 months	\$29.64	\$40.96	\$52.27
4th 6 months	\$31.69	\$44.03	\$56.37
5th 6 months	\$33.75	\$47.12	\$60.49
6th 6 months	\$35.80	\$50.20	\$64.59
7th 6 months	\$37.86	\$53.28	\$68.71
8th 6 months	\$39.91	\$56.36	\$72.81

Official Request #: 502

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Project Description: Linsell Building - Roof Replacement

Project Number: 017-188580

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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

Official 2014 Prevailing Wage Rates for State Funded Projects

Issue Date: 4/2/2014

Contract must be awarded by: 7/1/2014

Page 3 of 29

Classification Name Description	Last Updated	Straight Time and Hourly	a Half	Double Time	Overtime Provision
=====					
Carpenter-four 10s allowed Mon-Sat; double time due when over 12 hours worked per day	CA687Z1 10/1/2013	\$53.89	\$77.19	\$100.49	X X H X X H H D Y
Apprentice Rates:					
1st year		\$32.92	\$45.74	\$58.55	
3rd 6 months		\$35.26	\$49.25	\$63.23	
4th 6 months		\$37.58	\$52.73	\$67.87	
5th 6 months		\$39.92	\$56.23	\$72.55	
6th 6 months		\$42.24	\$59.72	\$77.19	
7th 6 months		\$44.57	\$63.22	\$81.85	
8th 6 months		\$46.91	\$66.72	\$86.53	
Piledriver	CA687Z1P 10/1/2013	\$53.89	\$77.19	\$100.49	X X H X X H H D Y
Four 10s allowed Monday-Saturday; double time due when over 12 hours worked per day					
Apprentice Rates:					
1st 6 months		\$32.92	\$45.74	\$58.55	
2nd 6 months		\$37.58	\$52.73	\$67.87	
3rd 6 months		\$42.24	\$59.72	\$77.19	
4th 6 months		\$46.91	\$66.72	\$86.53	
Cement Mason					
Cement Mason	br1cm 9/3/2013	\$49.30	\$70.06	\$90.81	X X H H H H H D N
Apprentice Rates:					
1st 6 months		\$28.71	\$38.90	\$49.09	
2nd 6 months		\$30.74	\$41.93	\$53.12	
3rd 6 months		\$34.79	\$47.99	\$61.19	
4th 6 months		\$38.85	\$54.05	\$69.23	
5th 6 months		\$40.88	\$57.07	\$73.25	
6th 6 months		\$44.93	\$63.11	\$81.30	
Cement Mason	CE514 11/10/2011	\$46.30	\$64.89	\$83.48	H H D H H H H D N
Apprentice Rates:					
1st 6 months		\$26.77	\$36.07	\$45.36	
2nd 6 months		\$28.68	\$38.91	\$49.13	
3rd 6 months		\$32.50	\$44.59	\$56.66	
4th 6 months		\$36.32	\$50.26	\$64.19	
5th 6 months		\$38.24	\$53.11	\$67.98	
6th 6 months		\$42.06	\$58.79	\$75.51	

Official Request #: 502

Requestor: Wayne State University

Project Description: Linsell Building - Roof Replacement

Project Number: 017-188580

County: Wayne

Official Rate Schedule

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Official 2014 Prevailing Wage Rates for State Funded Projects

Issue Date: 4/2/2014

Contract must be awarded by: 7/1/2014

Page 4 of 29

Classification Name Description	Last Updated	Straight Time and a Hourly Half	Double Time	Overtime Provision
=====				
Drywall				
Drywall Taper	PT-22-D	\$43.16	\$56.14	\$69.11 H H D H D D D Y
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 calendar day and all hours Sunday.	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
	6/26/2013			
Apprentice Rates:				
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/Technician				
	EC-58-SC	\$36.12	\$48.25	\$60.37 H H H H H H D Y
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
Period 5		\$28.84	\$37.33	\$45.81
Period 6		\$30.06	\$39.16	\$48.25

Official Request #: 502

Requestor: Wayne State University

Project Description: Linsell Building - Roof Replacement

Project Number: 017-188580

County: Wayne

Official Rate Schedule

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Official 2014 Prevailing Wage Rates for State Funded Projects

Issue Date: 4/2/2014

Contract must be awarded by: 7/1/2014

Page 5 of 29

Classification		Last Updated	Straight Time and a Half	Double Time	Overtime Provision
Name	Description				
=====					
Elevator Constructor					
Elevator Constructor	EL 36		\$56.46	\$94.99	D D D D D D D Y
Elevator Constructor		8/7/2007			
Apprentice Rates:					
1st Year Apprentice			\$37.74	\$58.93	
2nd Year Apprentice			\$41.90	\$66.94	
3rd Year Apprentice			\$43.98	\$70.95	
4th Year Apprentice			\$48.14	\$78.96	
Glazier					
Glazier	GL-357		\$46.21	\$64.51	\$82.80 H H H H H H D Y
If a four 10 hour day workweek is scheduled, four 10s must be consecutive, M-F.		7/3/2012			
Apprentice Rates:					
1st 6 months			\$31.63	\$42.64	\$53.64
2nd 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			\$40.38	\$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 N
		3/5/2007			
Heat and Frost Insulator and Asbestos Worker					
Heat and Frost Insulators and Asbestos Workers	AS25		\$60.25	\$76.00	\$91.74 H H H H H H D Y
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.		1/29/2014			
Apprentice Rates:					
1st Year			\$46.08	\$54.74	\$63.40
2nd Year			\$49.23	\$59.46	\$69.70
3rd Year			\$50.80	\$61.82	\$72.84
4th Year			\$53.95	\$66.54	\$79.14

Official Request #: 502

Requestor: Wayne State University

Project Description: Linsell Building - Roof Replacement

Project Number: 017-188580

County: Wayne

Official Rate Schedule

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Page 5 of 29

Official 2014 Prevailing Wage Rates for State Funded Projects

Issue Date: 4/2/2014

Contract must be awarded by: 7/1/2014

Page 6 of 29

Classification Name Description	Last Updated	Straight Time and Hourly	a Half	Double Time	Overtime Provision
=====					
Ironworker					
Fence, Sound Barrier & Guardrail erection/installation and Exterior Signage work Four ten hour work days may be worked during Monday- Saturday.	IR-25-F1 4/2/2013	\$33.15	\$45.15	\$57.15	X X H X X X H D Y
Apprentice Rates:					
60% Level		\$22.75	\$29.95	\$37.15	
65% Level		\$24.05	\$31.85	\$39.65	
70% Level		\$25.36	\$33.76	\$42.16	
75% Level		\$26.65	\$35.65	\$44.65	
80% Level		\$27.95	\$37.55	\$47.15	
85% Level		\$29.25	\$39.45	\$49.65	
Siding, Glazing, Curtain Wall 4 tens may be worked Monday thru Thursday @ straight time.	IR-25-GZ2 4/11/2013	\$44.11	\$55.52	\$66.93	X X H H H H D D Y
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	IR-25-PE-Z1 6/3/2013	\$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		\$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 6/25/2013	\$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	
Level 6		\$47.38	\$70.64	\$93.89	

Official Request #: 502

Requestor: Wayne State University

Project Description: Linsell Building - Roof Replacement

Project Number: 017-188580

County: Wayne

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Page 6 of 29

Official 2014 Prevailing Wage Rates for State Funded Projects

Issue Date: 4/2/2014

Contract must be awarded by: 7/1/2014

Page 7 of 29

Classification		Last Updated	Straight Time and a Half	Double Time	Overtime Provision
Name	Description		Hourly		
=====					
Rigging Work	IR-25-RIG	6/25/2013	\$60.28	\$90.26	\$120.24 H H H H H D N
Apprentice Rates:					
	Level 1 & 2		\$34.93	\$52.39	\$69.86
	Level 3		\$37.80	\$56.71	\$75.60
	Level 4		\$40.66	\$60.99	\$81.32
	Level 5		\$43.53	\$65.29	\$87.06
	Level 6		\$46.41	\$69.62	\$92.82
Decking	IR-25-SD	6/25/2013	\$52.24	\$78.08	\$103.92 X X H H H D D Y
4 tens may be worked Monday thru Thursday @ straight time. If bad weather, Friday may be a make up day. If holiday celebrated on a Monday, 4 10s may be worked Tuesday thru Friday. Work in excess of 12 hours per day must be paid @ double time.					
Structural, ornamental, conveyor, welder and pre-cast	IR-25-STR	6/25/2013	\$60.41	\$90.34	\$120.26 H H H H H D D Y
4 tens may be worked Monday thru Thursday @ straight time. If bad weather, Friday may be a make up day. If holiday celebrated on a Monday, 4 10s may be worked Tuesday thru Friday. Work in excess of 12 hours per day must be paid @ double time.					
Apprentice Rates:					
	Levels 1 & 2		\$35.06	\$52.64	\$69.98
	Level 3		\$37.89	\$56.52	\$75.14
	Level 4		\$40.71	\$60.74	\$80.78
	Level 5		\$43.54	\$65.37	\$86.94
	Level 6		\$46.37	\$69.24	\$92.10
	Level 7		\$49.19	\$73.47	\$97.74
	Level 8		\$52.02	\$77.71	\$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 #: 502

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Official 2014 Prevailing Wage Rates for State Funded Projects

Issue Date: 4/2/2014

Contract must be awarded by: 7/1/2014

Page 8 of 29

<u>Classification</u>			Last	Straight Time and a		Double	Overtime	
Name	Description		Updated	Hourly	Half	Time	Provision	
=====								
Laborer								
Construction Laborer, Demolition Laborer, Mason		L33401-A-CC		\$43.54	\$61.94	\$80.33	H H H H H H D Y	
Tender,Carpenter Tender, Drywall Handler, Concrete			7/15/2013					
Laborer, Cement Finisher Tender, Concrete Chute, and								
Concrete Bucket Handler								

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	L33401-B-SB			\$43.80	\$62.33	\$80.85	H H H H H H D Y
Gasoline Tool Operator, Concrete Vibrator Operator,		7/16/2013					
Acetylene Torch & Air Hammer Operator; Scaffold Builder,							
Caisson Worker							

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-	L33401-D-HH			\$44.04	\$62.69	\$81.33	H H H H H H D Y
Acetylene Gun		7/16/2013					

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 #: 502

Requestor: Wayne State University

Project Description: Linsell Building - Roof Replacement

Project Number: 017-188580

County: Wayne

Official Rate Schedule

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Official 2014 Prevailing Wage Rates for State Funded Projects

Issue Date: 4/2/2014

Contract must be awarded by: 7/1/2014

Page 9 of 29

Classification		Last Updated	Straight Time and a Half	Double Time	Overtime Provision
Name	Description		Hourly	Half	Time
=====					
Expediter Man, Top Man and/or Bottom Man (Blast Furnace Work or Battery Work)	L33401-E-EX	7/16/2013	\$44.79	\$63.81	\$82.83 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.

Cleaner/Sweeper Laborer; Furniture Laborer	L33401-F-CL	7/16/2013	\$38.09	\$53.76	\$69.43 H H H H H D Y
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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.

Lansing Burner, Blaster & Powder Man; Air, Electric or Gasoline Tool Operator (Blast Furnace Work or Battery Work)	L334C	7/16/2013	\$44.29	\$63.06	\$81.83 X X H X H H D Y
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Plasterer Tender, Plastering Machine Operator	LPT-1	10/25/2013	\$43.54	\$61.94	\$80.33 X X H H H H D Y
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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 hours	\$37.60	\$53.03	\$68.45
1,001 - 2,000 hours	\$38.79	\$54.81	\$70.83
2,001 - 3,000 hours	\$39.98	\$56.60	\$73.21
3,001 - 4,000 hours	\$42.35	\$60.15	\$77.95

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Page 10 of 29

Classification		Last Updated	Straight Time and a Hourly	Double Time Half	Overtime Provision										
Name	Description														
=====															
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 required.	LHAZ-Z1-A	11/1/2013	\$43.54	\$61.94	\$80.33	H	H	H	H	H	H	H	D	Y

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

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.	LHAZ-Z1-B	11/4/2013		\$44.54	\$63.44	\$82.33	H H H H H H D Y
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Apprentice Rates:

0-1,000 work hours	\$38.36	\$54.17	\$69.97
1,001-2,000 work hours	\$39.59	\$56.01	\$72.43
2,001-3,000 work hours	\$40.83	\$57.87	\$74.91
3,001-4,000 work hours	\$43.30	\$61.58	\$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.	LAUCT-Z1-1	9/6/2013		\$37.87	\$48.66	\$59.44	X X X X X X D Y
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Apprentice Rates:

0-1,000 work hours	\$33.05	\$41.43	\$49.80
1,001-2,000 work hours	\$34.02	\$42.88	\$51.74
2,001-3,000 work hours	\$34.98	\$44.32	\$53.66
3,001-4,000 work hours	\$36.91	\$47.21	\$57.52

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Page 11 of 29

Classification Name Description	Last Updated	Straight Time and Hourly	a Half	Double Time	Overtime 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 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.).	LAUCT-Z1-3 9/6/2013	\$38.04	\$48.91	\$59.78	X X X X X X D Y
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Apprentice Rates:

0-1,000 work hours	\$33.18	\$41.62	\$50.06
1,001-2,000 work hours	\$34.15	\$43.07	\$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, liner plate man, long haul dinky driver and well point man.	LAUCT-Z1-4 9/6/2013	\$38.22	\$49.18	\$60.14	X X X X X X D Y
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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
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)	LAUCT-Z1-5 9/6/2013	\$38.47	\$49.56	\$60.64	X X X X X X D Y
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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
3,001-4,000 work hours	\$37.48	\$48.07	\$58.66

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Page 12 of 29

Classification Name Description	Last Updated	Straight Time and a Hourly Half	Double Time	Overtime Provision
=====				
Class VI - Dynamite man and powder man.	LAUCT-Z1-6			
	9/6/2013	\$38.80	\$50.05	\$61.30 X X X X X D Y
Apprentice Rates:				
0-1,000 work hours		\$33.75	\$42.47	\$51.20
1,001-2,000 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 - Restoration laborer, seeding, sodding, planting, cutting, mulching and topsoil grading and the restoration of property such as replacing mail boxes, wood chips, planter boxes and flagstones.	LAUCT-Z1-7			
	9/6/2013	\$32.08	\$39.97	\$47.86 X X X X X D Y
Apprentice Rates:				
0-1,000 work hours		\$28.71	\$34.91	\$41.12
1,001-2,000 work hours		\$29.38	\$35.92	\$42.46
2,001-3,000 work hours		\$30.06	\$36.94	\$43.82
3,001-4,000 work hours		\$31.41	\$38.97	\$46.52
Landscape Laborer				
Landscape Specialist includes air, gas, and diesel equipment operator, skidsteer (or equivalent), lawn sprinkler installer on landscaping work where seeding, sodding, planting, cutting, trimming, backfilling, rough grading or maintenance of landscape projects occurs.	LLAN-Z1-A			
	7/5/2013	\$28.18	\$38.91	\$49.64 X X H X X H D Y
Sundays paid at time & one half. Holidays paid at double time.				
Skilled Landscape Laborer: small power tool operator, lawn sprinkler installers' tender, material mover, truck driver when seeding, sodding, planting, cutting, trimming, backfilling, rough grading or maintaining of landscape projects occurs	LLAN-Z1-B			
	7/5/2013	\$23.96	\$32.58	\$41.20 X X H X X H D Y
Sundays paid at time & one half. Holidays paid at double time.				

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Page 13 of 29

Classification			Last Updated	Straight Time and a Hourly Half	Double Time	Overtime Provision
Name	Description					
=====						
Marble Finisher						
Marble Finisher	BR1-MF			\$42.94	\$53.65	\$64.35 H H D H D D D Y
A 4 ten workweek may be worked Monday thru Thursday or Tuesday thru Friday.			9/5/2013			

Apprentice 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

Marble Mason

Marble Mason	BR1-MM			\$49.67	\$63.74	\$77.81 H H D H D D D Y
A 4 ten workweek may be worked Monday thru Thursday or Tuesday thru Friday.			9/5/2013			

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	\$42.21	\$53.72	\$65.22
Level 8	\$43.13	\$55.10	\$67.06

Operating Engineer

Crane with boom & jib or leads 120' or longer	EN-324-A120			\$56.01	\$73.30	\$90.58 X X H H D D D Y
Work in excess of 12 per day shall be paid at double time.			8/2/2013			

Crane with boom & jib or leads 140' or longer	EN-324-A140			\$56.83	\$74.53	\$92.22 X X H H D D D Y
Work in excess of 12 per day shall be paid at double time.			8/2/2013			

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 Y
Work in excess of 12 per day shall be paid at double time.			8/2/2013			

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Page 13 of 29

Official 2014 Prevailing Wage Rates for State Funded Projects

Issue Date: 4/2/2014

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Page 14 of 29

Classification Name Description	Last Updated	Straight Time and Hourly	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 double time.	EN-324-A300 8/2/2013	\$58.63	\$77.23	\$95.82	X X 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 double time.	EN-324-A400 8/2/2013	\$60.13	\$79.48	\$98.82	X X H H D D D D Y
Compressor or welding machine Work in excess of 12 per day shall be paid at double time.	EN-324-CW 8/2/2013	\$45.16	\$57.02	\$68.88	X X H H D D D D Y
Forklift, lull, extend-a-boom forklift Work in excess of 12 per day shall be paid at double time.	EN-324-FL 8/2/2013	\$52.47	\$67.99	\$83.50	X X H H D D D D Y
Fireman or oiler Work in excess of 12 per day shall be paid at double time.	EN-324-FO 8/2/2013	\$44.13	\$55.48	\$66.82	X X H H D D D D Y
Regular crane, job mechanic, concrete pump with boom Work in excess of 12 per day shall be paid at double time.	EN-324-RC 8/2/2013	\$55.15	\$72.01	\$88.86	X X H H D D D D Y
Regular engineer, hydro-excavator, remote controlled concrete breaker Work in excess of 12 per day shall be paid at double time.	EN-324-RE 8/2/2013	\$54.18	\$70.55	\$86.92	X X H H D D D D Y

Apprentice Rates:

0-999 hours	\$43.51	\$54.98	\$66.43
1,000-1,999 hours	\$45.14	\$57.41	\$69.69
2,000-2,999 hours	\$46.79	\$59.89	\$72.99
3,000-3,999 hours	\$48.42	\$62.34	\$76.25
4,000-4,999 hours	\$50.05	\$64.78	\$79.51
5,000-5,999 hours	\$51.70	\$67.26	\$82.81

Operating Engineer - DIVER

Diver/Wet Tender/Tender/Rov Pilot/Rov Tender	GLF D	4/2/2014	\$52.80	\$79.20	\$105.60	H H H H H H H D N
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Operating Engineer - Marine Construction

Diver/Wet Tender, Engineer (hydraulic dredge)	GLF-1	2/12/2014	\$65.00	\$84.85	\$104.70	X X H H H H H D Y
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Holiday pay= \$124.55 per hour, wages & fringes

Official Request #: 502

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Project Description: Linsell Building - Roof Replacement

Project Number: 017-188580

County: Statewide

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Issue Date: 4/2/2014

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Page 15 of 29

Classification Name Description	Last Updated	Straight Time and Hourly	a Half	Double Time	Overtime Provision
=====					
<u>Subdivision of county</u>	all Great Lakes, islands therein, & connecting & tributary waters				
Crane/Backhoe Operator, 70 ton or over Tug Operator, Mechanic/Welder, Assistant Engineer (hydraulic dredge), Leverman (hydraulic dredge), Diver Tender	GLF-2 2/12/2014	\$63.50	\$82.60	\$101.70	X X H H H H H D Y
Holiday pay = \$120.80 per hour, wages & fringes					
<u>Subdivision of county</u>	All Great Lakes, islands therein, & connecting & tributary waters				
Friction, Lattice Boom or Crane License Certification	GLF-2B 2/12/2014	\$64.50	\$84.10	\$103.70	X X H H H H H D Y
Holiday pay = \$123.30					
<u>Subdivision of county</u>	All Great Lakes, islands, therein, & connecting & tributary waters				
Deck Equipment Operator, Machineryman, Maintenance of Crane (over 50 ton capacity) or Backhoe (115,000 lbs or more), Tug/Launch Operator, Loader, Dozer on Barge, Deck Machinery	GLF-3 2/12/2014	\$59.30	\$76.30	\$93.30	X X H H H H H D Y
Holiday pay = \$110.30 per hour, wages & fringes					
<u>Subdivision of county</u>	All Great Lakes, islands therein, & connecting & tributary waters				
Deck Equipment Operator, (Machineryman/Fireman), (4 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 Operator	GLF-4 2/12/2014	\$53.60	\$67.75	\$81.90	X X H H H H H D Y
Holiday pay = \$96.05 per hour, wages & fringes					
<u>Subdivision of county</u>	All Great Lakes, islands therein, & connecting & tributary waters				

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Issue Date: 4/2/2014

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Page 16 of 29

Classification		Last Updated	Straight Time and a Half	Double Time	Overtime Provision
Name	Description				
=====					
Operating Engineer Hazardous Waste Class I					
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-HWCI-Z1A	1/20/2012	\$51.84	\$67.86	\$83.87 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.

Apprentice Rates:

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 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-HWCI-Z1B	1/20/2012	\$50.89	\$66.43	\$81.97 H H H H H H D Y
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Four 10 hour days may be worked Monday-Thursday with Friday as a straight-time make up day.

Apprentice Rates:

1st 6 months	\$40.97	\$51.85	\$62.73
2nd 6 months	\$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

Level D - Coveralls, safety boots, glasses or chemical splash goggles and hard hats.	EN-324-HWCI-Z1D	1/20/2012	\$49.59	\$64.48	\$79.37 H H H H H H D Y
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Four 10 hour days may be worked Monday-Thursday with Friday as a straight-time make up day.

Apprentice Rates:

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

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Issue Date: 4/2/2014

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Page 17 of 29

Classification		Last Updated	Straight Time and a Half	Double Time	Overtime Provision
Name	Description		Hourly	Half	
=====					
Level D When Capping Landfill Coveralls, safety boots, glasses or chemical splash goggles and hard hats.	EN-324-HWCII-Z1DCL	1/20/2012	\$49.34	\$64.11	\$78.87 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.

Apprentice Rates:

1st 6 months	\$39.89	\$50.23	\$60.57
2nd 6 months	\$41.36	\$52.44	\$63.51
3rd 6 months	\$42.83	\$54.64	\$66.45
4th 6 months	\$44.31	\$56.86	\$69.41
5th 6 months	\$45.79	\$59.08	\$72.37
6th 6 months	\$47.27	\$61.30	\$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
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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 D Y
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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 D Y
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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
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Four 10 hour days may be worked Monday-Thursday with Friday as a straight-time make up day.

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Page 18 of 29

Classification	Name	Description	Last Updated	Straight Time and a Half	Double Time	Overtime Provision
=====						
Operating Engineer Hazardous Waste Crane w/ Boom & Jib leads 140' or longer						
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 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-HW140-Z1B		1/20/2012	\$53.54	\$70.41	\$87.27 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-HW140-Z1D		1/20/2012	\$52.24	\$68.46	\$84.67 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. 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 H H H H H H D Y

Operating Engineer Hazardous Waste Crane w/ Boom & Jib leads 220' or longer

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 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 #: 502

Requestor: Wayne State University

Project Description: Linsell Building - Roof Replacement

Project Number: 017-188580

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 18 of 29

Official 2014 Prevailing Wage Rates for State Funded Projects

Issue Date: 4/2/2014

Contract must be awarded by: 7/1/2014

Page 19 of 29

Classification Name Description	Last Updated	Straight Time and Hourly	a Half	Double 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	\$87.87	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-HW220-Z1D 1/20/2012	\$52.54	\$68.91	\$85.27	H H H H H H D Y
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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 H H H H H D Y
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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 Operator and Concrete Pump with boom

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

Official Request #: 502

Requestor: Wayne State University

Project Description: Linsell Building - Roof Replacement

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County: Wayne

Page 19 of 29

Official 2014 Prevailing Wage Rates for State Funded Projects

Issue Date: 4/2/2014

Contract must be awarded by: 7/1/2014

Page 20 of 29

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

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Official 2014 Prevailing Wage Rates for State Funded Projects

Issue Date: 4/2/2014

Contract must be awarded by: 7/1/2014

Page 21 of 29

Classification Name Description	Last Updated	Straight Time and Hourly	a Half	Double Time	Overtime Provision
=====					
Boom & Jib 300' or longer	EN-324-SW300 6/14/2013	\$62.76	\$83.60	\$104.43	H H D H H H D D Y
Crane w/ 300' boom or longer w/ Oiler	EN-324-SW300-O 6/14/2013	\$63.76	\$85.10	\$106.43	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 D H H H D D Y
Crane w/ 400' boom or longer w/ Oiler	EN-324-SW400-O 6/14/2013	\$65.26	\$87.35	\$109.43	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 D H H H D D Y
Apprentice Rates:					
0-999 hours		\$47.09	\$60.51	\$73.94	
1,000-1,999 hours		\$49.01	\$63.40	\$77.78	
2,000-2,999 hours		\$50.93	\$66.28	\$81.62	
3,000-3,999 hours		\$52.85	\$69.16	\$85.46	
4,000-4,999 hours		\$54.76	\$72.02	\$89.28	
5,000 hours		\$56.68	\$74.91	\$93.12	
Crane w/ Oiler	EN-324-SWCO-O 6/17/2013	\$60.45	\$80.13	\$99.81	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 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 D H H H D D Y
Oiler	EN-324-SWO 6/17/2013	\$50.59	\$65.34	\$80.09	H H D H H H D D Y
Tower Crane & Derrick where work is 50' or more above first level	EN-324-SWTD50 6/14/2013	\$60.54	\$80.27	\$99.99	H 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-SWTD50-O 6/14/2013	\$61.54	\$81.77	\$101.99	H H D H H H D D Y

Official Request #: 502

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County: Wayne

Official Rate Schedule

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Page 21 of 29

Official 2014 Prevailing Wage Rates for State Funded Projects

Issue Date: 4/2/2014

Contract must be awarded by: 7/1/2014

Page 22 of 29

Classification Name Description	Last Updated	Straight Time and Hourly	a Half	Double Time	Overtime Provision
=====					
Operating Engineer Underground					
Class I Equipment	EN-324A1-UC1 9/13/2013	\$50.34	\$65.33	\$80.32	H H H H H H D Y
Apprentice Rates:					
0-999 hours		\$40.75	\$51.25	\$61.74	
1,000-1,999 hours		\$42.24	\$53.48	\$64.72	
2,000-2,999 hours		\$43.75	\$55.75	\$67.74	
3,000-3,999 hours		\$45.24	\$57.98	\$70.72	
4,000-4,999 hours		\$46.74	\$60.23	\$73.72	
5,000-5,999 hours		\$48.25	\$62.50	\$76.74	
Class II Equipment	EN-324A1-UC2 9/13/2013	\$45.61	\$58.24	\$70.86	H H H H H H D Y
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 H H H H H D Y
Master Mechanic	EN-324A1-UMM 9/13/2013	\$50.59	\$65.71	\$80.82	H H H H H H D Y
Painter					
Painter (8 hours of repaint work performed on Sunday shall be paid time & one half rate)	PT-22-P 6/18/2012	\$41.32	\$53.78	\$66.23	H H D H D D D D Y
Four 10s allowed Monday-Thursday with Friday makeup day if job down due to weather, holiday or other conditions beyond the control of the employer.					
Apprentice Rates:					
First 6 months		\$28.87	\$35.10	\$41.33	
Second 6 months		\$32.60	\$40.69	\$48.79	
Third 6 months		\$33.85	\$42.57	\$51.29	
Fourth 6 months		\$35.09	\$44.43	\$53.77	
Fifth 6 months		\$36.34	\$46.31	\$56.27	
Final 6 months		\$37.58	\$48.17	\$58.75	
Pipe and Manhole Rehab					
General Laborer for rehab work or normal cleaning and cctv work-top man, scaffold man, CCTV assistant, jetter-vac assistant	TM247 10/15/2012	\$27.20	\$36.70		H H H H H H H N

Official Request #: 502

Requestor: Wayne State University

Project Description: Linsell Building - Roof Replacement

Project Number: 017-188580

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

Official 2014 Prevailing Wage Rates for State Funded Projects

Issue Date: 4/2/2014

Contract must be awarded by: 7/1/2014

Page 23 of 29

Classification Name Description		Last Updated	Straight Time and Hourly	a Half	Double Time	Overtime Provision
Tap cutter/CCTV Tech/Grout Equipment Operator: unit driver and operator of CCTV; grouting equipment and tap cutting equipment	TM247-2	10/15/2012	\$31.70	\$43.45		H H H H H H H N
CCTV Technician/Combo Unit Operator: unit driver and operator of cctv unit or combo unit in connection with normal cleaning and televising work	TM247-3	10/15/2012	\$30.45	\$41.57		H H H H H H H N
Boiler Operator: unit driver and operator of steam/water heater units and all ancillary equipment associated	TM247-4	10/15/2012	\$32.20	\$44.20		H H H H H H H N
Combo Unit driver & Jetter-Vac Operator	TM247-5	10/15/2012	\$32.20	\$44.20		H H H H H H H N
Pipe Bursting & Slip-lining Equipment Operator	TM247-6	10/15/2012	\$33.20	\$45.70		H H H H H H H N
Pipefitter Pipefitter	PF-636	6/26/2013	\$65.63	\$86.83	\$104.03	H H D H D D D D Y
Apprentice Rates:						
1st & 2nd periods			\$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			\$33.93	\$45.78	\$56.28	
8th period			\$34.93	\$47.28	\$58.28	
9th period			\$35.93	\$48.78	\$60.28	
10th period			\$37.36	\$50.92	\$63.14	
Plasterer Plasterer	BR1P	11/1/2012	\$45.04	\$67.56	\$90.08	H H H H H H H D N
Apprentice 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			\$37.28	\$55.92	\$74.56	
5th 6 months			\$39.87	\$59.81	\$79.74	
6th 6 months			\$42.45	\$63.68	\$84.90	

Official Request #: 502

Requestor: Wayne State University

Project Description: Linsell Building - Roof Replacement

Project Number: 017-188580

County: Wayne

Official Rate Schedule

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Page 23 of 29

Official 2014 Prevailing Wage Rates for State Funded Projects

Issue Date: 4/2/2014

Contract must be awarded by: 7/1/2014

Page 24 of 29

Classification Name Description	Last Updated	Straight Time and a Hourly Half	Double Time	Overtime Provision
Plasterer	PL67	9/8/2010	\$44.72 \$60.11	\$75.50 H H H X D D D D N
Apprentice 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
5th 6 months		\$38.56	\$51.16	\$63.76
6th 6 months		\$41.64	\$55.49	\$69.34
Plumber				
Plumber	PL-98	7/18/2013	\$64.45 \$84.87	\$101.29 H H D H D D D D Y
Apprentice Rates:				
Period 1		\$19.93	\$26.43	\$32.93
Period 2		\$23.90	\$31.40	\$38.90
Period 3		\$30.60	\$39.19	\$47.77
Period 4		\$31.23	\$40.13	\$49.03
Period 5		\$32.39	\$41.87	\$51.35
Period 6		\$33.54	\$43.59	\$53.65
Period 7		\$34.69	\$45.32	\$55.95
Period 8		\$35.86	\$47.07	\$58.29
Period 9		\$37.01	\$48.80	\$60.59
Period 10		\$38.16	\$50.53	\$62.89
Roofer				
Commercial Roofer	RO-149-WOM	8/18/2008	\$48.46 \$62.29	\$76.62 H H D H H H D D N
Straight time is not to exceed ten (10) hours per day or forty (40) hours per week.				
Apprentice Rates:				
Apprentice 1		\$32.62	\$39.86	\$48.04
Apprentice 2		\$36.80	\$44.80	\$53.30
Apprentice 3		\$38.22	\$46.93	\$56.14
Apprentice 4		\$39.25	\$48.48	\$58.20
Apprentice 5		\$40.47	\$50.30	\$60.64
Apprentice 6		\$41.87	\$52.40	\$63.44
Sewer Relining				
Class I-Operator of audio visual CCTV system including remote in-ground cutter and other equipment used in conjunction with CCTV system.	SR-I	3/27/2013	\$42.07 \$56.90	\$71.72 H H H H H H H D N

Official Request #: 502

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Project Number: 017-188580

County: Statewide

Official Rate Schedule

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Page 24 of 29

Official 2014 Prevailing Wage Rates for State Funded Projects

Issue Date: 4/2/2014

Contract must be awarded by: 7/1/2014

Page 25 of 29

Classification Name Description	Last Updated	Straight Time and Hourly	a Half	Double Time	Overtime Provision
Class II-Operator of hot water heaters and circulation system; water jetters; and vacuum and mechanical debris removal systems and those assisting.	SR-II 3/27/2013	\$40.54	\$54.60	\$68.66	H H H H H H D N

Sheet Metal Worker

Sheet Metal Worker A 4 10 schedule may be worked, 4 consecutive days Monday thru Friday.	SHM-80 8/1/2013	\$60.77	\$77.68	\$94.59	H H D X H H H D Y
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Apprentice Rates:

1st & 2nd Periods Indentured after 6-1-11	\$38.12	\$45.73	\$53.34
3rd & 4th Periods Indentured after 6-1-11	\$39.82	\$48.28	\$56.74
5th & 6th Periods Indentured after 6-1-11	\$41.50	\$50.80	\$60.10
7th & 8th Periods Indentured after 6-1-11	\$43.19	\$53.34	\$63.48
9th & 10th Periods Indentured before 6-1-11	\$50.86	\$63.38	\$75.90

Siding and decking	SHM-80-SD 1/13/2014	\$42.07	\$54.28	\$66.48	H H H H H H D Y
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Sprinkler Fitter

Sprinkler Fitter 4 ten hour days allowed Monday-Friday Double time pay due after 12 hours worked M-F	SP 704 1/10/2014	\$63.92	\$84.88	\$105.83	H H D H D D D D Y
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Apprentice Rates:

1st Period	\$27.77	\$36.15	\$44.53
2nd Period	\$40.87	\$50.30	\$59.73
3rd Period	\$42.97	\$53.45	\$63.93
4th Period	\$45.06	\$56.59	\$68.11
5th Period	\$47.16	\$59.73	\$72.31
6th Period	\$49.25	\$62.87	\$76.49
7th Period	\$51.35	\$66.02	\$80.69
8th Period	\$53.44	\$69.15	\$84.87
9th Period	\$55.54	\$72.31	\$89.07
10th Period	\$57.63	\$75.44	\$93.25

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Official 2014 Prevailing Wage Rates for State Funded Projects

Issue Date: 4/2/2014

Contract must be awarded by: 7/1/2014

Page 26 of 29

<u>Classification</u>			Last	Straight Time and a		Double	Overtime	
Name	Description		Updated	Hourly	Half	Time	Provision	
=====								
Terrazzo								
Terrazzo Finisher		BR1-TRF		\$43.43	\$54.38	\$65.33	H H D H D D D D Y	
A 4 ten workweek may be worked Monday thru Thursday or Tuesday thru Friday.			9/5/2013					

Apprentice 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

Terrazzo Worker	BR1-TRW			\$49.11	\$62.90	\$76.69	H H D H D D D D Y
A 4 ten workweek may be worked Monday thru Thursday or Tuesday thru Friday.		9/5/2013					

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	\$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 H D H D D D D Y
A 4 ten workweek may be worked Monday thru Thursday or Tuesday thru Friday.		9/5/2013					

Apprentice 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

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Page 26 of 29

Official 2014 Prevailing Wage Rates for State Funded Projects

Issue Date: 4/2/2014

Contract must be awarded by: 7/1/2014

Page 27 of 29

Classification Name Description	Last Updated	Straight Time and Hourly	a Half	Double Time	Overtime Provision
Tile Layer A 4 ten workweek may be worked Monday thru Thursday or Tuesday thru Friday.	BR1-TL 9/5/2013	\$49.06	\$62.83	\$76.59	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	\$42.21	\$53.72	\$65.22
Level 8	\$43.13	\$55.10	\$67.06

Truck Driver

on all trucks of 8 cubic yard capacity or less (except dump trucks of 8 cubic yard capacity or over, tandem axle trucks, transit mix and semis, euclid type equipment, double bottoms and low boys)	TM-RB1 8/8/2013	\$41.92	\$37.85	H H H H H H H H Y
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of all trucks of 8 cubic yard capacity or over	TM-RB1A 8/8/2013	\$41.30	\$38.00	H H H H H H H H Y
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on euclid type equipment	TM-RB1B 8/8/2013	\$41.45	\$38.23	H H H H H H H H Y
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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 X D Y
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Apprentice Rates:

0-1,000 work hours	\$32.94	\$41.26	\$49.58
1,001-2,000 work hours	\$33.90	\$42.70	\$51.50
2,001-3,000 work hours	\$34.85	\$44.13	\$53.40
3,001-4,000 work hours	\$36.76	\$46.99	\$57.22

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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

Official 2014 Prevailing Wage Rates for State Funded Projects

Issue Date: 4/2/2014

Contract must be awarded by: 7/1/2014

Page 28 of 29

Classification	Name	Description	Last Updated	Straight Time and a Half	Double Time	Overtime Provision
=====						
Underground Laborer Open Cut, Class II						
	Mortar and material mixer, concrete form man, signal man, well point man, manhole, headwall and catch basin builder, guard rail builders, headwall, seawall, breakwall, dock builder and fence erector.	LAUC-Z1-2	10/25/2013	\$37.83	\$48.60	\$59.36 X X X X X X D Y
Apprentice Rates:						
	0-1,000 work hours			\$33.02	\$41.38	\$49.74
	1,001-2,000 work hours			\$33.98	\$42.82	\$51.66
	2,001-3,000 work hours			\$34.95	\$44.27	\$53.60
	3,001-4,000 work hours			\$36.87	\$47.15	\$57.44
Underground Laborer Open Cut, Class III						
	Air, gasoline and electric tool operator, vibrator operator, drillers, pump man, tar kettle operator, bracers, rodger, reinforced steel or mesh man (e.g. wire mesh, steel mats, dowel bars, etc.), cement finisher, welder, pipe jacking and boring man, wagon drill and air track operator and concrete saw operator (under 40 h.p.), windlass and tugger man, and directional boring man.	LAUC-Z1-3	9/5/2013	\$37.88	\$48.67	\$59.46 X X X X X X D Y
Apprentice Rates:						
	0-1,000 work hours			\$33.06	\$41.44	\$49.82
	1,001-2,000 work hours			\$34.02	\$42.88	\$51.74
	2,001-3,000 work hours			\$34.99	\$44.33	\$53.68
	3,001-4,000 work hours			\$36.92	\$47.23	\$57.54
Underground Laborer Open Cut, Class IV						
	Trench or excavating grade man.	LAUC-Z1-4	9/5/2013	\$37.96	\$48.79	\$59.62 X X X X X X D Y
Apprentice Rates:						
	0-1,000 work hours			\$33.12	\$41.53	\$49.94
	1,001-2,000 work hours			\$34.09	\$42.99	\$51.88
	2,001-3,000 work hours			\$35.06	\$44.44	\$53.82
	3,001-4,000 work hours			\$36.99	\$47.33	\$57.68
Underground Laborer Open Cut, Class V						
	Pipe Layer	LAUC-Z1-5	9/5/2013	\$38.02	\$48.88	\$59.74 X X X X X X D Y
Apprentice Rates:						
	0-1,000 work hours			\$33.16	\$41.59	\$50.02
	1,001-2,000 work hours			\$34.14	\$43.06	\$51.98
	2,001-3,000 work hours			\$35.11	\$44.51	\$53.92
	3,001-4,000 work hours			\$37.05	\$47.43	\$57.80

Official Request #: 502

Requestor: Wayne State University

Project Description: Linsell Building - Roof Replacement

Project Number: 017-188580

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.

Official 2014 Prevailing Wage Rates for State Funded Projects

Issue Date: 4/2/2014

Contract must be awarded by: 7/1/2014

Page 29 of 29

<u>Classification</u>			Last	Straight Time and a	Double	Overtime	
Name	Description		Updated	Hourly	Half	Time	Provision
=====							
Underground Laborer Open Cut, Class VI							
Grouting man, top man assistant, audio visual television	LAUC-Z1-6			\$35.47	\$45.06	\$54.64	X X X X X X D Y
operations and all other operations in connection with		9/5/2013					
closed circuit television inspection, pipe cleaning and pipe							
relining work and the installation and repair of water							
service pipe and appurtenances.							

Apprentice Rates:

0-1,000 work hours	\$31.25	\$38.73	\$46.20
1,001-2,000 work hours	\$32.10	\$40.00	\$47.90
2,001-3,000 work hours	\$32.94	\$41.26	\$49.58
3,001-4,000 work hours	\$34.63	\$43.79	\$52.96

Underground Laborer Open Cut, Class VII

Restoration laborer, seeding, sodding, planting, cutting,	LAUC-Z1-7			\$32.09	\$39.99	\$47.88	X X X X X X D Y
mulching and topsoil grading and the restoration of		9/5/2013					
property such as replacing mail boxes, wood chips, planter							
boxes, flagstones etc.							

Apprentice Rates:

0-1,000 work hours	\$28.72	\$34.93	\$41.14
1,001-2,000 work hours	\$29.39	\$35.93	\$42.48
2,001-3,000 work hours	\$30.07	\$36.95	\$43.84
3,001-4,000 work hours	\$31.42	\$38.98	\$46.54

Official Request #: 502

Requestor: Wayne State University

Project Description: Linsell Building - Roof Replacement

Project Number: 017-188580

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.

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.
- 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:

- List all contractors, sub-contractors, suppliers... ≥ \$1000.00
 - Contractor'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.
- Make sure workers addresses are listed.
- 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
- 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)

- 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.
- 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.

- 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.
- Required training must be completed (if applicable).
- Warranty of work in accordance with project documents.
- 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

AGREEMENT BETWEEN THE UNIVERSITY AND CONTRACTOR FOR CONSTRUCTION SERVICES (rev 6-2013)

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

Linsell Roof Replacement
5104 Gullen Mall
WSU Project No. 017-188580

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 **Roof Replacement**, located at **5104 Gullen Mall**. 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 fully-executed Agreement, and substantial completion shall be achieved by **August 28, 2014**.

Article 3 - The Contract Sum

- 3.1 The University shall pay the Contractor a **"lump sum/not-to-exceed (pick one)"** amount of \$\$\$\$\$\$ **("Amount in words 00" /100 dollars)** for the performance of all work associated with the Contractor's Base Bid **"and Alternates (List)"**.

- 3.1 The University may at its sole discretion, during the life of the contract, award the following alternates at the Amounts indicated:

Description	Amount
Alternate #1. In lieu of base scope, identified in Drawings, remove all existing aluminum drip flashing at eave edge, around entire perimeter of asphalt shingled roof areas. Provide new pre-finished aluminum drip flashing at eave, around entire perimeter of asphalt shingled roof areas, as detailed in Drawings.	
\$ _____	

- 3.3 In the event additional work becomes necessary, the following unit prices will apply:

1. Roof Sheathing Replacement: Provide unit price for replacing deteriorated wood roof decking, for Work not otherwise indicated on the Drawings or included in the base bid. Unit price shall include removal of wood sheathing found to be deteriorated, and replaced with roof sheathing in accordance with Section 061600 "Sheathing". Unit of Measurement: Square Foot. /s.f.
2. Outrigger Eave Framing Replacement: Provide unit price for replacing deteriorated wood outrigger framing, for Work not otherwise indicated on the Drawings or included in the base bid. Unit price shall include removal of 2x4 wood outriggers found to be deteriorated behind eaves, and replaced with framing in accordance with Section 061053 "Miscellaneous Rough Carpentry". Unit of Measurement: Linear Foot. /l.f.

3. Wood Trim Replacement: Provide unit price for replacing deteriorated exterior wood trim, for Work not otherwise indicated on the Drawings or included in the base bid. Unit price shall include removal of wood trim found to be deteriorated at the cornice line, and replaced with painted wood trim, to match existing, in accordance with Section 064600 "Wood Trim" and Section 099113 "Exterior Painting". Unit of Measurement: Linear Foot. //f.

Work Item**Unit Price**

- 1.
- 2.
- 3.

Article 4 - The Contract Documents

- 4.1 The Contract Documents shall consist of this Agreement, the drawings and specifications as listed in Article 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 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:

Quinn Evans Architects
71 Garfield, Suite 160-B
Detroit, MI 48201
(Architect Phone No / Fax No)

- 6.2 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 or 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

- 8.1 Jurisdiction over all claims, disputes, and other matters in question arising out of or relating to this contract or the breach 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.
- 8.2 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 or 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

- 10.1 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.

- 10.2 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.
- 10.3 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.
- 10.4 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

- 11.1 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.
- 11.3 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.
- 12.2 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

- 13.1 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.

- 13.2 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

- 14.1 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.
- 14.2 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

- 15.1 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

- 16.1 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 **\$250.00, Two Hundred and Fifty Dollars** per day. Therefore, the Contractor shall pay as liquidated damages to the University the sum of **\$250.00, Two Hundred and Fifty 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.

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.

Sample

Article 18 - Drawings and Specifications

18.1 The Technical Specifications and the Project Manual dated **April 30, 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
G-0.0	Cover	April 30, 2014
A-1.0	Roof Plan & Details	April 30, 2014
A-2.0	Roof Details	April 30, 2014

Sample

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 _____
signature

Please print name here

Date signed

Title

Witness

**THE BOARD OF GOVERNORS of
WAYNE STATE UNIVERSITY**

By _____
Richard J. Nork, Vice President for
Finance and Facilities

Date signed

Form Contract Approved by OGC 06/13 – LG
File_reference_here

FORM OF GUARANTEE**PROJECT:** Linsell Roof Replacement**OWNER:** BOARD OF GOVERNORS, WAYNE STATE UNIVERSITY**CONTRACTOR:** _____**DATE:** _____

Know all men by these presents that, in consideration of my (our) having been awarded the Contract or Subcontract for complete furnishing and installation of:

Linsell Roof Replacement (017-188580)**For: Board of Governors, Wayne State University**

In conformity with drawings and specifications prepared by Architect or Engineer, **Quinn Evans Architects**, and known as the buildings indicated above, I (we) do hereby agree that, should I (we) be notified that the said work has proved faulty, etc., that I (we) will return to the buildings within three (3) working days of the receipt of such notice, and will furnish the necessary labor and material to repair such work to 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: _____
General Contractor

by: _____

(THIS FORM TO BE FILED IN DUPLICATE.)

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

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.
- b. 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.
- i. 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.
- j. 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.
- l. 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.
- n. 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.
- c. The Contractor shall not be responsible for wear and tear or damage resulting from partial occupancy.
- d. 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.

3.6.2 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

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.
2. 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
 - a. 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.
 - b. System description and elementary diagrams, connection and interconnection diagrams, and device internal diagrams.
 2. Mechanical
 - a. 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.
3. Elevators
 - a. 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

<u>Type of Insurance</u>	<u>Minimum Requirement</u>	
1.Comprehensive General Liability	Bodily Injury	\$ 500,000 each person \$1,000,000 aggregate
	Property Damage	\$ 500,000 each occurrence \$1,000,000 aggregate <u>or</u> \$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	\$ 500,000 each person \$1,000,000 each accident
	Property Damage	\$ 500,000 each accident <u>or</u> \$2,000,000 combined single limit (CSL)
4.Workers' Compensation (Employer's Liability)	Statutory - Michigan	\$100,000
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

<u>Type of Insurance</u>	<u>Maximum Deductible</u>	
Comprehensive General Liability	\$5,000	
Fire Legal Liability		\$5,000
Comprehensive Automobile Liability	-0-	
Workers' Compensation	-0-	
Property - All Risk	\$ 500	

- 11.1.3 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.
- 15.2.1.2 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.
- 15.2.1.7 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 **April 30, 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	Date of Issue
G-0.0	Cover	April 30, 2014
A-1.0	Roof Plan & Details	April 30, 2014
A-2.0	Roof Details	April 30, 2014

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 Bid.

1. 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 reasonable amounts 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 unless 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 Working Drawings and "As Built", 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: Linsell Roof Replacement

WSU PROJECT NO.: 017-188580

PROJECT MANAGER: Nancy Milstein

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 **Roof replacement on historic building.**

3. The building is located at

Wayne State University
5104 Gullen Mall
Detroit, Michigan 48202

PROJECT MANUAL



Linsell House Roof Replacement

Detroit, Michigan
WSU PN: 017-188580
QEA PN: 31401300

Bid Issue Set
April 28, 2014

Prepared For:
WAYNE STATE UNIVERSITY
Facilities Planning & Management
Design & Construction Services
5454 Cass Avenue
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SECTION 061053 - MISCELLANEOUS ROUGH CARPENTRY

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Wood blocking and nailers.

1.2 ACTION SUBMITTALS

- A. Product Data: For each type of process and factory-fabricated product. Indicate component materials and dimensions and include construction and application details.

1.3 INFORMATIONAL SUBMITTALS

A. Evaluation Reports: For the following, from ICC-ES:

1. Preservative-treated wood.

PART 2 - PRODUCTS

2.1 WOOD PRODUCTS, GENERAL

- A. Lumber: DOC PS 20 and applicable rules of grading agencies indicated. If no grading agency is indicated, provide lumber that complies with the applicable rules of any rules-writing agency certified by the ALSC Board of Review. Provide lumber graded by an agency certified by the ALSC Board of Review to inspect and grade lumber under the rules indicated.

1. Factory mark each piece of lumber with grade stamp of grading agency.
2. For exposed lumber indicated to receive a stained or natural finish, mark grade stamp on end or back of each piece.
3. Provide dressed lumber, S4S, unless otherwise indicated.

- B. Maximum Moisture Content of Lumber: 19 percent unless otherwise indicated.

2.2 WOOD-PRESERVATIVE-TREATED MATERIALS

- A. Preservative Treatment by Pressure Process: AWWPA U1; Use Category UC3b for exterior construction not in contact with the ground.

1. Preservative Chemicals: Acceptable to authorities having jurisdiction and containing no arsenic or chromium.

- B. Kiln-dry lumber after treatment to a maximum moisture content of 19 percent. Do not use material that is warped or does not comply with requirements for untreated material.
- C. Mark lumber with treatment quality mark of an inspection agency approved by the ALSC Board of Review.
- D. Application: Treat all miscellaneous carpentry unless otherwise indicated.

2.3 MISCELLANEOUS LUMBER

- A. General: Provide miscellaneous lumber indicated and lumber for support or attachment of other construction, including the following:
 - 1. Blocking.
 - 2. Nailers.
- B. For items of dimension lumber size, provide Construction or No. 2 grade lumber of any species.
- C. For concealed boards, provide lumber with 19 percent maximum moisture content and any of the following species and grades:
 - 1. Mixed southern pine, No. 2 grade; SPIB.
 - 2. Eastern softwoods, No. 2 Common grade; NELMA.
 - 3. Northern species, No. 2 Common grade; NLGA.
 - 4. Western woods, Construction or No. 2 Common grade; WCLIB or WWPA.

2.4 FASTENERS

- A. General: Provide fasteners of size and type indicated that comply with requirements specified in this article for material and manufacture.
 - 1. Where carpentry is exposed to weather, in ground contact, pressure-preservative treated, or in area of high relative humidity, provide fasteners of Type 304 stainless steel.
- B. Power-Driven Fasteners: NES NER-272.

PART 3 - EXECUTION

3.1 INSTALLATION, GENERAL

- A. Set carpentry to required levels and lines, with members plumb, true to line, cut, and fitted. Fit carpentry to other construction; scribe and cope as needed for accurate fit.
- B. Framing Standard: Comply with AF&PA's WCD 1, "Details for Conventional Wood Frame Construction," unless otherwise indicated.
- C. Do not splice structural members between supports unless otherwise indicated.

- D. Comply with AWPAC M4 for applying field treatment to cut surfaces of preservative-treated lumber.
- E. Securely attach carpentry work to substrate by anchoring and fastening as indicated, complying with the following:
 - 1. NES NER-272 for power-driven fasteners.
 - 2. Table 2304.9.1, "Fastening Schedule," in ICC's International Building Code.

3.2 PROTECTION

- A. Protect wood that has been treated with inorganic boron (SBX) from weather. If, despite protection, inorganic boron-treated wood becomes wet, apply EPA-registered borate treatment. Apply borate solution by spraying to comply with EPA-registered label.

END OF SECTION 061053

SECTION 061600 - SHEATHING

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Roof sheathing.

1.2 ACTION SUBMITTALS

A. Product Data: For each type of process and factory-fabricated product. Indicate component materials and dimensions and include construction and application details.

1. Include data for wood-preservative treatment from chemical treatment manufacturer and certification by treating plant that treated plywood complies with requirements.

1.3 INFORMATIONAL SUBMITTALS

A. Evaluation Reports: For following products, from ICC-ES:

1. Preservative-treated plywood.

PART 2 - PRODUCTS

2.1 WOOD PANEL PRODUCTS

- A. Plywood: Either DOC PS 1 or DOC PS 2 unless otherwise indicated.
- B. Thickness: As needed to comply with requirements specified, but not less than thickness indicated.

2.2 PRESERVATIVE-TREATED PLYWOOD

- A. Preservative Treatment by Pressure Process: AWP A U1; Use Category UC3b for exterior construction.
- B. Mark plywood with appropriate classification marking of an inspection agency acceptable to authorities having jurisdiction.
- C. Application: Treat all plywood unless otherwise indicated.

2.3 ROOF SHEATHING

- A. Plywood Roof Sheathing: Exterior, Structural I sheathing.
 - 1. Span Rating: Not less than 32/16.
 - 2. Nominal Thickness: To match existing roof decking, but not less than 3/4 inch (19mm).

2.4 FASTENERS

- A. General: Provide fasteners of size and type indicated that comply with requirements specified in this article for material and manufacture.
 - 1. For roof sheathing, provide fasteners with hot-dip zinc coating complying with ASTM A 153/A 153M or of Type 304 stainless steel.
- B. Nails, Brads, and Staples: ASTM F 1667.
- C. Power-Driven Fasteners: NES NER-272.

PART 3 - EXECUTION

3.1 INSTALLATION, GENERAL

- A. Do not use materials with defects that impair quality of sheathing or pieces that are too small to use with minimum number of joints or optimum joint arrangement. Arrange joints so that pieces do not span between fewer than three support members.
- B. Cut panels at penetrations, edges, and other obstructions of work; fit tightly against abutting construction unless otherwise indicated.
- C. Securely attach to substrate by fastening as indicated, complying with the following:
 - 1. NES NER-272 for power-driven fasteners.
 - 2. Table 2304.9.1, "Fastening Schedule," in ICC's "International Building Code."
- D. Use common wire nails unless otherwise indicated. Select fasteners of size that will not fully penetrate members where opposite side will be exposed to view or will receive finish materials. Make tight connections. Install fasteners without splitting wood.
- E. Coordinate roof sheathing installation with flashing and joint-sealant installation so these materials are installed in sequence and manner that prevent exterior moisture from passing through completed assembly.
- F. Do not bridge building expansion joints; cut and space edges of panels to match spacing of structural support elements.
- G. Coordinate sheathing installation with installation of materials installed over sheathing so sheathing is not exposed to precipitation or left exposed at end of the workday when rain is forecast.

3.2 WOOD STRUCTURAL PANEL INSTALLATION

- A. General: Comply with applicable recommendations in APA Form No. E30, "Engineered Wood Construction Guide," for types of structural-use panels and applications indicated.
- B. Fastening Methods: Fasten panels as indicated below:
 - 1. Roof Sheathing:
 - a. Nail to wood framing. Apply a continuous bead of glue to framing members at edges of wall sheathing panels.
 - b. Space panels 1/8 inch (3 mm) apart at edges and ends.

END OF SECTION 061600

SECTION 064600 - WOOD TRIM

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Exterior standing and running trim.

1.2 UNIT PRICES

- A. Work of this Section is affected by wood trim removal and replacement unit price.

1.3 ACTION SUBMITTALS

- A. Product Data: For each type of product.

1.4 FIELD CONDITIONS

- A. Weather Limitations for Exterior Work: Proceed with installation of exterior wood trim only when existing and forecasted weather conditions permit work to be performed and at least one coat of specified finish to be applied without exposure to rain, snow, or dampness.

PART 2 - PRODUCTS

2.1 WOOD TRIM, GENERAL

- A. Quality Standard: Unless otherwise indicated, comply with the "Architectural Woodwork Standards" for grades of wood trim indicated for construction, finishes, installation, and other requirements.

2.2 EXTERIOR STANDING AND RUNNING TRIM FOR OPAQUE FINISH

- A. Grade: Custom.
- B. Wood Species: Eastern white pine, sugar pine, or western white pine, Any closed-grain hardwood.

2.3 WOOD MATERIALS

- A. Wood Products: Provide materials that comply with requirements of referenced quality standard for each type of wood trim and quality grade specified unless otherwise indicated.
 - 1. Wood Moisture Content for Exterior Materials: 9 to 15 percent.
- B. Water-Repellent Preservative Treated Materials: Comply with AWWA N1 (dip, spray, flood, or vacuum-pressure treatment) for exterior wood trim indicated to receive water-repellent preservative treatment.
 - 1. Preservative Chemicals: 3-iodo-2-propynyl butyl carbamate (IPBC).
 - 2. Extent of Water-Repellent Preservative Treatment: Treat all exterior wood trim unless otherwise indicated.

2.4 MISCELLANEOUS MATERIALS

- A. Nails for Exterior Use: stainless steel.
- B. Screws for Exterior Use: stainless steel.
- C. Adhesives: Do not use adhesives that contain urea formaldehyde.

2.5 SOFFIT VENTS

- A. Soffit Vent: Manufacturer's standard, rigid round metal, or UV-stabilized plastic soffit vent with integral collar and mesh screen; for use under soffit trim boards.
 - 1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. Speedi-Products.
 - b. VentsUSA.
 - 2. Minimum Net Free Area: 5 sq. in. per ft. (MUST HAVE 570 SQ. IN. MIN. TOTAL AROUND HOUSE PERIMETER).
 - 3. Diameter: 5 inches.

2.6 FABRICATION

- A. Fabricate wood trim to dimensions, profiles, and details indicated, to match existing adjacent trim.
- B. Backout or groove backs of flat trim members and kerf backs of other wide, flat members except for members with ends exposed in finished work.

2.7 PRIMING

- A. Preparations for Finishing: Comply with referenced quality standard for sanding, filling countersunk fasteners, sealing concealed surfaces, and similar preparations for finishing wood trim, as applicable to each unit of work.
 - 1. Backpriming: Apply one coat of sealer or primer, compatible with finish coats, to concealed surfaces of wood trim.

PART 3 - EXECUTION

3.1 PREPARATION

- A. Before installation, condition wood trim to average prevailing humidity conditions in installation areas.

3.2 INSTALLATION

- A. Grade: Install wood trim to comply with same grade as item to be installed.
- B. Install wood trim level, plumb, true, and straight. Shim as required with concealed shims. Install level and plumb to a tolerance of 1/8 inch in 96 inches (3 mm in 2400 mm).
- C. Scribe and cut wood trim to fit adjoining work, refinish cut surfaces, and repair damaged finish at cuts.
- D. Preservative-Treated Wood: Where cut or drilled in field, treat cut ends and drilled holes according to AWPAC M4.
- E. Anchor wood trim to anchors or blocking built in or directly attached to substrates. Secure with countersunk, concealed fasteners and blind nailing. Use fine finishing nails for exposed fastening, countersunk and filled flush with woodwork.
- F. Standing and Running Trim: Install with minimum number of joints possible, using full-length pieces (from maximum length of lumber available) to greatest extent possible. Do not use pieces less than 36 inches (900 mm) long except where shorter single-length pieces are necessary.
 - 1. Install standing and running trim with no more variation from a straight line than 1/8 inch in 96 inches (3 mm in 2400 mm).

END OF SECTION 064600

Wayne State University
Detroit, Michigan

LINSELL HOUSE ROOF REPLACEMENT
WSU PN: 017-188580

SECTION 070150.19 - PREPARATION FOR REROOFING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. Section Includes:

- 1. Full tear-off of roof areas indicated.
 - 2. Removal of base flashings.

- B. Related Requirements:

- 1. Section 011000 "Summary" for use of the premises and phasing requirements.
 - 2. Section 015000 "Temporary Facilities and Controls" for temporary construction and environmental-protection measures for reroofing preparation.

1.3 UNIT PRICES

- A. Work of this Section is affected by roof sheathing removal and replacement unit price.

1.4 DEFINITIONS

- A. Roofing Terminology: Definitions in ASTM D 1079 and glossary of NRCA's "The NRCA Roofing and Waterproofing Manual" apply to work of this Section.
- B. Full Roof Tear-Off: Removal of existing roofing system from deck.

1.5 ACTION SUBMITTALS

- A. Product Data: For each type of product.

1.6 INFORMATIONAL SUBMITTALS

- A. Photographs or Videotape: Show existing conditions of adjoining construction and site improvements, including exterior and interior finish surfaces, that might be misconstrued as having been damaged by reroofing operations. Submit before Work begins.

1.7 QUALITY ASSURANCE

- A. Regulatory Requirements: Comply with governing EPA notification regulations before beginning roofing removal. Comply with hauling and disposal regulations of authorities having jurisdiction.
- B. Reroofing Conference: Conduct conference at Project site.
 - 1. Meet with Owner; Architect; Owner's insurer if applicable; testing and inspecting agency representative; roofing system manufacturer's representative; roofing Installer, including project manager, superintendent, and foreman; and installers whose work interfaces with or affects reroofing, including installers of roof deck, roof accessories, and roof-mounted equipment.
 - 2. Review methods and procedures related to roofing system tear-off and replacement, including, but not limited to, the following:
 - a. Reroofing preparation, including roofing system manufacturer's written instructions.
 - b. Temporary protection requirements for existing roofing system components that are to remain.
 - c. Existing roof drains and roof drainage during each stage of reroofing, and roof-drain plugging and plug removal.
 - d. Construction schedule and availability of materials, Installer's personnel, equipment, and facilities needed to avoid delays.
 - e. Existing roof deck conditions requiring notification of Architect.
 - f. Existing roof deck removal procedures and Owner notifications.
 - g. Condition and acceptance of existing roof deck and base flashing substrate for reuse.
 - h. Structural loading limitations of roof deck during reroofing.
 - i. Base flashings, special roofing details, drainage, penetrations, equipment curbs, and condition of other construction that affect reroofing.
 - j. HVAC shutdown and sealing of air intakes.
 - k. Shutdown of fire-suppression, -protection, and -alarm and -detection systems.
 - l. Governing regulations and requirements for insurance and certificates if applicable.
 - m. Existing conditions that may require notification of Architect before proceeding.

1.8 FIELD CONDITIONS

- A. Existing Roofing System: Asphalt shingle roofing.
- B. Owner will occupy portions of building immediately below reroofing area. Conduct reroofing so Owner's operations are not disrupted. Provide Owner with not less than 72 hours' notice of activities that may affect Owner's operations.
 - 1. Coordinate work activities daily with Owner so Owner can place protective dust and water-leakage covers over sensitive equipment and furnishings, shut down HVAC and fire-alarm or -detection equipment if needed, and evacuate occupants from below work area.

2. Before working over structurally impaired areas of deck, notify Owner to evacuate occupants from below affected area. Verify that occupants below work area have been evacuated before proceeding with work over impaired deck area.
- C. Protect building to be reroofed, adjacent buildings, walkways, site improvements, exterior plantings, and landscaping from damage or soiling from reroofing operations.
- D. Maintain access to existing walkways, corridors, and other adjacent occupied or used facilities.
- E. Conditions existing at time of inspection for bidding are maintained by Owner as far as practical.
 1. Construction Drawings for existing roofing system are provided for Contractor's convenience and information, but are not a warranty of existing conditions. They are intended to supplement rather than serve in lieu of Contractor's own investigations. Contractor is responsible for conclusions derived from existing documents.
- F. Limit construction loads on roof to 35psf for uniformly distributed loads.
- G. Weather Limitations: Proceed with reroofing preparation only when existing and forecasted weather conditions permit Work to proceed without water entering existing roofing system or building.
 1. Remove only as much roofing in one day as can be made watertight in the same day.
- H. Hazardous Materials: It is not expected that hazardous materials, such as asbestos-containing materials, will be encountered in the Work.
 1. If materials suspected of containing hazardous materials are encountered, do not disturb; immediately notify Architect and Owner. Hazardous materials will be removed by Owner under a separate contract.

PART 2 - PRODUCTS

2.1 TEMPORARY PROTECTION MATERIALS

- A. Expanded Polystyrene (EPS) Insulation: ASTM C 578.
- B. Plywood: DOC PS1, Grade CD Exposure 1.
- C. OSB: DOC PS2, Exposure 1.

2.2 INFILL AND REPLACEMENT MATERIALS

- A. Wood blocking, curbs, and nailers are specified in Section 061053 Miscellaneous Rough Carpentry."
- B. Plywood roof sheathing is specified in Section 061600 "Sheathing."

2.3 AUXILIARY REROOFING MATERIALS

- A. General: Use auxiliary reroofing preparation materials recommended by roofing system manufacturer for intended use and compatible with components of new roofing system.

PART 3 - EXECUTION

3.1 PREPARATION

- A. Shut off rooftop utilities and service piping before beginning the Work.
- B. Test existing roof drains to verify that they are not blocked or restricted. Immediately notify Architect of any blockages or restrictions.
- C. Protect existing roofing system that is not to be reroofed.
 - 1. Loosely lay 1-inch- (25-mm-) minimum thick, expanded polystyrene (EPS) insulation over existing roofing in areas indicated. Loosely lay 15/32-inch (12-mm) plywood or OSB panels over EPS. Extend EPS past edges of plywood or OSB panels a minimum of 1 inch (25 mm).
 - 2. Limit traffic and material storage to areas of existing roofing that have been protected.
 - 3. Maintain temporary protection and leave in place until replacement roofing has been completed. Remove temporary protection on completion of reroofing.
- D. Coordinate with Owner to shut down air-intake equipment in the vicinity of the Work. Cover air-intake louvers before proceeding with reroofing work that could affect indoor air quality or activate smoke detectors in the ductwork.
- E. During removal operations, have sufficient and suitable materials on-site to facilitate rapid installation of temporary protection in the event of unexpected rain.
- F. Maintain roof drains in functioning condition to ensure roof drainage at end of each workday. Prevent debris from entering or blocking roof drains and conductors. Use roof-drain plugs specifically designed for this purpose. Remove roof-drain plugs at end of each workday, when no work is taking place, or when rain is forecast.
 - 1. If roof drains are temporarily blocked or unserviceable due to roofing system removal or partial installation of new roofing system, provide alternative drainage method to remove water and eliminate ponding. Do not permit water to enter into or under existing roofing system components that are to remain.

3.2 ROOF TEAR-OFF

- A. Full Roof Tear-Off: Where indicated, remove existing roofing and other roofing system components down to the deck.
 - 1. Remove wood blocking and nailers.
 - 2. Remove fasteners from deck.

3.3 DECK PREPARATION

- A. Inspect deck after tear-off of roofing system.
- B. If broken or loose fasteners that secure deck panels to one another or to structure are observed, or if deck appears or feels inadequately attached, immediately notify Architect. Do not proceed with installation until directed by Architect.
- C. If deck surface is unsuitable for receiving new roofing or if structural integrity of deck is suspect, immediately notify Architect. Do not proceed with installation until directed by Architect.
- D. Provide additional deck securement as indicated on Drawings.
- E. Replace roof sheathing as indicated on Drawings.
- F. Replace roof sheathing as directed by Architect. Roof sheathing replacement beyond that indicated on Drawings will be paid for by adjusting the Contract Sum according to unit prices included in the Contract Documents.

3.4 FLASHING REMOVAL

- A. Remove existing copper base flashings and counterflashings. Clean substrates of contaminants, such as asphalt, sealant, sheet materials, dirt, and debris.
- B. Do not damage metal flashings that are to remain. Replace metal flashings damaged during removal with flashings of same metal, weight or thickness, and finish.

3.5 DISPOSAL

- A. Collect demolished materials and place in containers. Promptly dispose of demolished materials. Do not allow demolished materials to accumulate on-site.
 - 1. Storage or sale of demolished items or materials on-site is not permitted.
- B. Transport and legally dispose of demolished materials off Owner's property.

END OF SECTION 070150.19

SECTION 073113 - ASPHALT SHINGLES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. Section Includes:

- 1. Asphalt shingles.
- 2. Underlayment.
- 3. Ridge Vents.

- B. Related Sections:

- 1. Section 061053 "Miscellaneous Rough Carpentry" for wood blocking and nailers.
- 2. Section 061600 "Sheathing" for roof sheathing.
- 3. Section 064600 "Wood Trim" for soffit vents.
- 4. Section 076200 "Sheet Metal Flashing and Trim" for metal roof penetration flashings, counterflashings, and flashings.

1.3 DEFINITIONS

- A. Roofing Terminology: See ASTM D 1079 and glossary of NRCA's "The NRCA Roofing and Waterproofing Manual" for definitions of terms related to roofing work in this Section.

1.4 ACTION SUBMITTALS

- A. Product Data: For each type of product indicated.
- B. Samples for Initial Selection: For each type of asphalt shingle indicated.
 - 1. Include similar Samples of trim and accessories involving color selection.
- C. Samples for Verification: For the following products, of sizes indicated, to verify color selected:
 - 1. Asphalt Shingle: Full size.

1.5 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For qualified Installer.

- B. Product Test Reports: Based on evaluation of comprehensive tests performed by manufacturer and witnessed by a qualified testing agency, for asphalt shingles.
- C. Research/Evaluation Reports: For each type of asphalt shingle required, from the ICC.
- D. Warranties: Sample of special warranties.

1.6 CLOSEOUT SUBMITTALS

- A. Maintenance Data: For each type of asphalt shingle to include in maintenance manuals.

1.7 MAINTENANCE MATERIAL SUBMITTALS

- A. Furnish extra materials that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.

- 1. Asphalt Shingles: 100 sq. ft (9.3 sq. m) of each type, in unbroken bundles.

1.8 QUALITY ASSURANCE

- A. Installer Qualifications: Manufacturer's authorized representative who is trained and approved for installation of units required for this Project.
- B. Source Limitations: Obtain ridge and hip cap shingles from single source from single manufacturer.
- C. Fire-Resistance Characteristics: Where indicated, provide asphalt shingles and related roofing materials identical to those of assemblies tested for fire resistance per test method below by UL or another testing and inspecting agency acceptable to authorities having jurisdiction. Identify products with appropriate markings of applicable testing agency.
 - 1. Exterior Fire-Test Exposure: Class A; ASTM E 108 or UL 790, for application and roof slopes indicated.
- D. Preinstallation Conference: Conduct conference at Project site.

1.9 DELIVERY, STORAGE, AND HANDLING

- A. Store roofing materials in a dry, well-ventilated, weathertight location according to asphalt shingle manufacturer's written instructions. Store underlayment rolls on end on pallets or other raised surfaces. Do not double stack rolls.
 - 1. Handle, store, and place roofing materials in a manner to avoid significant or permanent damage to roof deck or structural supporting members.
- B. Protect unused underlayment from weather, sunlight, and moisture when left overnight or when roofing work is not in progress.

1.10 PROJECT CONDITIONS

- A. Environmental Limitations: Do not deliver or install asphalt shingles until spaces are enclosed and weather-tight, wet work in spaces is complete and dry, and temporary HVAC system is operating and maintaining ambient temperature and humidity conditions at occupancy levels during the remainder of the construction period.
1. Install self-adhering sheet underlayment within the range of ambient and substrate temperatures recommended by manufacturer.

1.11 WARRANTY

- A. Special Warranty: Standard form in which manufacturer agrees to repair or replace asphalt shingles that fail in materials or workmanship within specified warranty period.
1. Failures include, but are not limited to, the following:
 - a. Manufacturing defects.
 - b. Structural failures including failure of asphalt shingles to self-seal after a reasonable time.
 2. Material Warranty Period: 40 years from date of Substantial Completion, prorated, with first 10 years non-prorated.
 3. Wind-Speed Warranty Period: Asphalt shingles will resist blow-off or damage caused by wind speeds up to 110 mph (175 km/s) for 10 years from date of Substantial Completion.
 4. Algae-Discoloration Warranty Period: Asphalt shingles will not discolor 10 years from date of Substantial Completion.
 5. Workmanship Warranty Period: 2 years from date of Substantial Completion.
- B. Special Project Warranty: Roofing Installer's Warranty, or warranty form at end of this Section, signed by roofing Installer, covering the Work of this Section, in which roofing Installer agrees to repair or replace components of asphalt shingle roofing that fail in materials or workmanship within specified warranty period.

PART 2 - PRODUCTS

2.1 GLASS-FIBER-REINFORCED ASPHALT SHINGLES

- A. Laminated-Strip Asphalt Shingles: ASTM D 3462, laminated, multi-ply overlay construction, glass-fiber reinforced, mineral-granule surfaced, and self-sealing.
1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. Atlas Roofing Corporation.
 - b. CertainTeed Corporation.
 - c. GAF Materials Corporation.

2. Butt Edge: Straight cut.
3. Strip Size: Manufacturer's standard.
4. Algae Resistance: Granules treated to resist algae discoloration.
5. Color and Blends: As selected by Architect from manufacturer's full range.

- B. Hip and Ridge Shingles: Manufacturer's standard units to match asphalt shingles.

2.2 UNDERLAYMENT MATERIALS

- A. Felt: ASTM D 226 Type II, asphalt-saturated organic felts, nonperforated.
- B. Self-Adhering Sheet Underlayment, Granular Surfaced: ASTM D 1970, minimum of 55-mil- (1.4-mm-) thick sheet; glass-fiber-mat-reinforced, SBS-modified asphalt; mineral-granule surfaced; with release paper backing; cold applied.
1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. Carlisle Coatings & Waterproofing, Inc.
 - b. CertainTeed Corporation.
 - c. GAF Materials Corporation.
 - d. Grace, W. R. & Co. Conn.

2.3 RIDGE VENTS

- A. Rigid Ridge Vent: Manufacturer's standard, rigid section high-density polypropylene or other UV-stabilized plastic ridge vent with internal filter; for use under ridge shingles.
1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. Air Vent, Inc.; a Gibraltar Industries company Shingle Vent II.
 - b. CertainTeed Corporation; Ridge Vent.
 - c. GAF Materials Corporation; Cobra Snow Country Advanced.
 - d. Owens Corning; VentSure.
 2. Minimum Net Free Area: 18 sq. in. per ft.
 3. Width: 12 inches.
- B. Square Top Roof Vent: Manufacturer's standard, raised, low-profile prefinished metal or UV-stabilized, high-density polypropylene roof vent, with molded and angled internal screen.
1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. Air Vent, Inc.; a Gibraltar Industries company.
 - b. Duraflo.
 - c. Owens Corning; VentSure.

2. Minimum Net Free Area: 50 sq. in. per ft.
3. Opening Size: 7.5 in. x 7.5 in., min.
4. Color: Gray.

2.4 ACCESSORIES

- A. Asphalt Roofing Cement: ASTM D 4586, Type II, asbestos free.
- B. Roofing Nails: ASTM F 1667; aluminum, stainless-steel, copper, or hot-dip galvanized-steel wire shingle nails, minimum 0.120-inch- (3-mm-) diameter, barbed, or smooth shank, sharp-pointed, with a minimum 3/8-inch- (9.5-mm-) diameter flat head and of sufficient length to penetrate 3/4 inch (19 mm) into solid wood decking or extend at least 1/8 inch (3 mm) through OSB or plywood sheathing.
 1. Where nails are in contact with metal flashing, use nails made from same metal as flashing.
- C. Felt Underlayment Nails: Aluminum, stainless-steel, or hot-dip galvanized-steel wire with low-profile capped heads or disc caps, 1-inch (25-mm) minimum diameter.

2.5 METAL FLASHING AND TRIM

- A. General: Comply with requirements in Section 076200 "Sheet Metal Flashing and Trim."

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of the Work.
 1. Examine roof sheathing to verify that sheathing joints are supported by framing and blocking or metal clips and that installation is within flatness tolerances.
 2. Verify that substrate is sound, dry, smooth, clean, sloped for drainage, and completely anchored; and that provision has been made for flashings and penetrations through asphalt shingles.
- B. Prepare written report, endorsed by Installer, listing conditions detrimental to performance of the Work.
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 UNDERLAYMENT INSTALLATION

- A. General: Comply with underlayment manufacturer's written installation instructions applicable to products and applications indicated unless more stringent requirements apply.

- B. Single-Layer Felt Underlayment: Install on roof deck parallel with and starting at the eaves. Lap sides a minimum of 2 inches (50 mm) over underlying course. Lap ends a minimum of 4 inches (100 mm). Stagger end laps between succeeding courses at least 72 inches (1830 mm). Fasten with underlayment nails.
 - 1. Install felt underlayment on roof deck not covered by self-adhering sheet underlayment. Lap sides of felt over self-adhering sheet underlayment not less than 3 inches (75 mm) in direction to shed water. Lap ends of felt not less than 6 inches (150 mm) over self-adhering sheet underlayment.
 - 2. Install fasteners at no more than 36 inch (900 mm) o.c.
- C. Self-Adhering Sheet Underlayment: Install, wrinkle free, on roof deck. Comply with low-temperature installation restrictions of underlayment manufacturer if applicable. Install at locations indicated on Drawings, lapped in direction to shed water. Lap sides not less than 3-1/2 inches (89 mm). Lap ends not less than 6 inches (150 mm) staggered 24 inches (600 mm) between courses. Roll laps with roller. Cover underlayment within seven days.
 - 1. Eaves: Extend from edges of eaves 30 inches (675 mm) beyond interior face of exterior wall.
 - 2. Valleys: Extend from lowest to highest point 18 inches (450 mm) on each side.
 - 3. Hips: Extend 18 inches (450 mm) on each side.
 - 4. Ridges: Extend 36 inches (914 mm) on each side without obstructing continuous ridge vent slot.
 - 5. Dormers, Chimneys, Skylights, and Other Roof-Penetrating Elements: Extend beyond penetrating element 18 inches (450 mm), and return vertically against penetrating element not less than 4 inches (100 mm).

3.3 METAL FLASHING INSTALLATION

- A. General: Install metal flashings and other sheet metal to comply with requirements in Section 076200 "Sheet Metal Flashing and Trim."

3.4 ASPHALT SHINGLE INSTALLATION

- A. General: Install asphalt shingles according to manufacturer's written instructions, recommendations in ARMA's "Residential Asphalt Roofing Manual," and asphalt shingle recommendations in NRCA's "The NRCA Roofing and Waterproofing Manual."
- B. Install starter strip along lowest roof edge, consisting of an asphalt shingle strip with self-sealing strip face up at roof edge.
 - 1. Extend asphalt shingles 1/2 inch (13 mm) to 3/4 inch (19 mm) over fascia at eaves and rakes.
 - 2. Install starter strip along rake edge.
- C. Install first and remaining courses of asphalt shingles stair-stepping diagonally across roof deck with manufacturer's recommended offset pattern at succeeding courses, maintaining uniform exposure.

- D. Fasten asphalt shingle strips with number of roofing nails recommended in writing by manufacturer, or as required under 2009 Michigan Building Code, whichever is greater. Fasten in locations according to manufacturer's written instructions.
 - 1. Where roof slope is less than 4:12, seal asphalt shingles with asphalt roofing cement spots.
 - 2. When ambient temperature during installation is below 50 deg F (10 deg C), seal asphalt shingles with asphalt roofing cement spots.
- E. Woven Valleys: Extend succeeding asphalt shingle courses from both sides of valley 12 inches (300 mm) beyond center of valley, weaving intersecting shingle-strip courses over each other. Use one-piece shingle strips without joints in valley.
 - 1. Do not nail asphalt shingles within 6 inches (150 mm) of valley center.
- F. Ridge Vents: Install continuous ridge vents over asphalt shingles according to manufacturer's written instructions. Fasten with roofing nails of sufficient length to penetrate sheathing.
- G. Ridge and Hip Cap Shingles: Maintain same exposure of cap shingles as roofing shingle exposure. Lap cap shingles at ridges to shed water away from direction of prevailing winds. Fasten with roofing nails of sufficient length to penetrate sheathing.
 - 1. Fasten ridge cap asphalt shingles to cover ridge vent without obstructing airflow.

3.5 ROOFING INSTALLER'S WARRANTY

- A. WHEREAS **<Insert name>** of **<Insert address>**, herein called the "Roofing Installer," has performed roofing and associated work ("work") on the following project:
 - 1. Owner: **<Insert name of Owner>**.
 - 2. Address: **<Insert address>**.
 - 3. Building Name/Type: **<Insert information>**.
 - 4. Address: **<Insert address>**.
 - 5. Area of Work: **<Insert information>**.
 - 6. Acceptance Date: **<Insert date>**.
 - 7. Warranty Period: **<Insert time>**.
 - 8. Expiration Date: **<Insert date>**.
- B. AND WHEREAS Roofing Installer has contracted (either directly with Owner or indirectly as a subcontractor) to warrant said work against leaks and faulty or defective materials and workmanship for designated Warranty Period,
- C. NOW THEREFORE Roofing Installer hereby warrants, subject to terms and conditions herein set forth, that during Warranty Period he will, at his own cost and expense, make or cause to be made such repairs to or replacements of said work as are necessary to correct faulty and defective work and as are necessary to maintain said work in a watertight condition.
- D. This Warranty is made subject to the following terms and conditions:
 - 1. Specifically excluded from this Warranty are damages to work and other parts of the building, and to building contents, caused by:

- a. Lightning;
 - b. Peak gust wind speed exceeding 110 mph (m/sec);
 - c. Fire;
 - d. Failure of roofing system substrate, including cracking, settlement, excessive deflection, deterioration, and decomposition;
 - e. Faulty construction of parapet walls, copings, chimneys, skylights, vents, equipment supports, and other edge conditions and penetrations of the work;
 - f. Vapor condensation on bottom of roofing; and
 - g. Activity on roofing by others, including construction contractors, maintenance personnel, other persons, and animals, whether authorized or unauthorized by Owner.
2. When work has been damaged by any of foregoing causes, Warranty shall be null and void until such damage has been repaired by Roofing Installer and until cost and expense thereof have been paid by Owner or by another responsible party so designated.
 3. Roofing Installer is responsible for damage to work covered by this Warranty but is not liable for consequential damages to building or building contents resulting from leaks or faults or defects of work.
 4. During Warranty Period, if Owner allows alteration of work by anyone other than Roofing Installer, including cutting, patching, and maintenance in connection with penetrations, attachment of other work, and positioning of anything on roof, this Warranty shall become null and void on date of said alterations, but only to the extent said alterations affect work covered by this Warranty. If Owner engages Roofing Installer to perform said alterations, Warranty shall not become null and void unless Roofing Installer, before starting said work, shall have notified Owner in writing, showing reasonable cause for claim, that said alterations would likely damage or deteriorate work, thereby reasonably justifying a limitation or termination of this Warranty.
 5. During Warranty Period, if original use of roof is changed and it becomes used for, but was not originally specified for, a promenade, work deck, spray-cooled surface, flooded basin, or other use or service more severe than originally specified, this Warranty shall become null and void on date of said change, but only to the extent said change affects work covered by this Warranty.
 6. Owner shall promptly notify Roofing Installer of observed, known, or suspected leaks, defects, or deterioration and shall afford reasonable opportunity for Roofing Installer to inspect work and to examine evidence of such leaks, defects, or deterioration.
 7. This Warranty is recognized to be the only warranty of Roofing Installer on said work and shall not operate to restrict or cut off Owner from other remedies and resources lawfully available to Owner in cases of roofing failure. Specifically, this Warranty shall not operate to relieve Roofing Installer of responsibility for performance of original work according to requirements of the Contract Documents, regardless of whether Contract was a contract directly with Owner or a subcontract with Owner's General Contractor.

E. IN WITNESS THEREOF, this instrument has been duly executed this **<Insert day>** day of **<Insert month>**, **<Insert year>**.

1. Authorized Signature: **<Insert signature>**.
2. Name: **<Insert name>**.
3. Title: **<Insert title>**.

END OF SECTION 073113

SECTION 076200 - SHEET METAL FLASHING AND TRIM

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Formed steep-slope roof sheet metal fabrications.

B. Related Requirements:

1. Section 061053 "Miscellaneous Rough Carpentry" for wood nailers and blocking.
2. Section 073113 "Asphalt Shingles" for materials and installation of sheet metal flashing and trim integral with roofing.

1.2 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct conference at Project site.

1.3 COORDINATION

- A. Coordinate sheet metal flashing and trim layout and seams with sizes and locations of penetrations to be flashed, and joints and seams in adjacent materials.
- B. Coordinate sheet metal flashing and trim installation with adjoining roofing and wall materials, joints, and seams to provide leak-proof, secure, and noncorrosive installation.

1.4 ACTION SUBMITTALS

- A. Product Data: For each type of product.

- B. Shop Drawings: For sheet metal flashing and trim.

1. Include plans, elevations, sections, and attachment details.
2. Distinguish between shop- and field-assembled work.
3. Include identification of finish for each item.
4. Include pattern of seams and details of termination points, expansion joints and expansion-joint covers, direction of expansion, roof-penetration flashing, and connections to adjoining work.

1.5 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For fabricator and installer.

1.6 CLOSEOUT SUBMITTALS

- A. Maintenance data.

1.7 QUALITY ASSURANCE

- A. Fabricator Qualifications: Employs skilled workers who custom fabricate sheet metal flashing and trim similar to that required for this Project and whose products have a record of successful in-service performance.
- B. Installer Qualifications: Engage a firm with demonstrated experience in the installation and field-fabrication of sheet metal flashing and trim of type, material, and complexity similar to that of this Project, whose installations have a record of successful in-service performance.

1.8 WARRANTY

- A. Special Warranty on Finishes: Manufacturer agrees to repair finish or replace sheet metal flashing and trim that shows evidence of deterioration of factory-applied finishes within specified warranty period.
 - 1. Finish Warranty Period: 20 years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

- A. General: Sheet metal flashing and trim assemblies shall withstand wind loads, structural movement, thermally induced movement, and exposure to weather without failure due to defective manufacture, fabrication, installation, or other defects in construction. Completed sheet metal flashing and trim shall not rattle, leak, or loosen, and shall remain watertight.
- B. Sheet Metal Standard for Flashing and Trim: Comply with NRCA's "The NRCA Roofing Manual" and SMACNA's "Architectural Sheet Metal Manual" requirements for dimensions and profiles shown unless more stringent requirements are indicated.
- C. Sheet Metal Standard for Copper: Comply with CDA's "Copper in Architecture Handbook." Conform to dimensions and profiles shown unless more stringent requirements are indicated.
- D. Thermal Movements: Allow for thermal movements from ambient and surface temperature changes.
 - 1. Temperature Change: 120 deg F (67 deg C), ambient; 180 deg F (100 deg C), material surfaces.

2.2 SHEET METALS

- A. General: Protect mechanical and other finishes on exposed surfaces from damage by applying strippable, temporary protective film before shipping.
- B. Copper Sheet: ASTM B 370, cold-rolled copper sheet, H00 or H01 temper.
 - 1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. Hussey Copper Ltd.
 - b. Revere Copper Products, Inc.
 - 2. Nonpatinated Exposed Finish: Mill.
- C. Aluminum Sheet: ASTM B 209 (ASTM B 209M), alloy as standard with manufacturer for finish required, with temper as required to suit forming operations and performance required.
 - 1. Exposed Coil-Coated Finish:
 - a. Two-Coat Fluoropolymer: AAMA 620. Fluoropolymer finish containing not less than 70 percent PVDF resin by weight in color coat. Prepare, pretreat, and apply coating to exposed metal surfaces to comply with coating and resin manufacturers' written instructions.
 - 2. Color: As selected by Architect from manufacturer's full range.

2.3 UNDERLAYMENT MATERIALS

- A. Felt: ASTM D 226/D 226M, Type II (No. 30), asphalt-saturated organic felt; nonperforated.
- B. Self-Adhering Sheet Underlayment, Granular Surfaced: ASTM D 1970, minimum of 55-mil- (1.4-mm-) thick sheet; glass-fiber-mat-reinforced, SBS-modified asphalt; mineral-granule surfaced; with release paper backing; cold applied.
- C. Self-Adhering, High-Temperature Sheet: Minimum 30 mils (0.76 mm) thick, consisting of a slip-resistant polyethylene- or polypropylene-film top surface laminated to a layer of butyl- or SBS-modified asphalt adhesive, with release-paper backing; specifically designed to withstand high metal temperatures beneath metal roofing. Provide primer according to written recommendations of underlayment manufacturer.
 - 1. Products: Subject to compliance with requirements, provide one of the following:
 - a. Carlisle Residential, a division of Carlisle Construction Materials; WIP 300HT.
 - b. Grace Construction Products, a unit of W. R. Grace & Co.-Conn.; Grace Ice and Water Shield HT.
 - c. Henry Company; Blueskin PE200 HT.
 - d. Kirsch Building Products, LLC; Sharkskin Ultra SA.
 - e. Polyguard Products, Inc.; Deck Guard HT.

2. Thermal Stability: ASTM D 1970; stable after testing at 240 deg F (116 deg C) or higher.
3. Low-Temperature Flexibility: ASTM D 1970; passes after testing at minus 20 deg F (29 deg C) or lower.

D. Slip Sheet: Rosin-sized building paper, 3 lb/100 sq. ft. (0.16 kg/sq. m) minimum.

2.4 MISCELLANEOUS MATERIALS

- A. General: Provide materials and types of fasteners, solder, protective coatings, sealants, and other miscellaneous items as required for complete sheet metal flashing and trim installation and as recommended by manufacturer of primary sheet metal or manufactured item unless otherwise indicated.
- B. Fasteners: Wood screws, annular threaded nails, self-tapping screws, self-locking rivets and bolts, and other suitable fasteners designed to withstand design loads and recommended by manufacturer of primary sheet metal or manufactured item.
 1. General: Blind fasteners or self-drilling screws, gasketed, with hex-washer head.
 - a. Exposed Fasteners: Heads matching color of sheet metal using plastic caps or factory-applied coating. Provide metal-backed EPDM or PVC sealing washers under heads of exposed fasteners bearing on weather side of metal.
 - b. Blind Fasteners: High-strength aluminum or stainless-steel rivets suitable for metal being fastened.
 2. Fasteners for Copper Sheet: Copper, hardware bronze or passivated Series 300 stainless steel.
 3. Fasteners for Aluminum Sheet: Aluminum or Series 300 stainless steel.
- C. Solder:
 1. For Copper: ASTM B 32, Grade Sn50, 50 percent tin and 50 percent lead.
- D. Sealant Tape: Pressure-sensitive, 100 percent solids, polyisobutylene compound sealant tape with release-paper backing. Provide permanently elastic, nonsag, nontoxic, nonstaining tape 1/2 inch (13 mm) wide and 1/8 inch (3 mm) thick.
- E. Sealants, General: Comply with requirements of Section 079200 "Joint Sealants."
- F. Butyl Sealant: ASTM C 1311, single-component, solvent-release butyl rubber sealant; polyisobutylene plasticized; heavy bodied for hooked-type expansion joints with limited movement.
- G. Bituminous Coating: Cold-applied asphalt emulsion according to ASTM D 1187.
- H. Asphalt Roofing Cement: ASTM D 4586, asbestos free, of consistency required for application.

2.5 FABRICATION, GENERAL

- A. General: Custom fabricate sheet metal flashing and trim to comply with details shown and recommendations in cited sheet metal standard that apply to design, dimensions, geometry, metal thickness, and other characteristics of item required. Fabricate sheet metal flashing and trim in shop to greatest extent possible.
 - 1. Obtain field measurements for accurate fit before shop fabrication.
 - 2. Form sheet metal flashing and trim to fit substrates without excessive oil canning, buckling, and tool marks; true to line, levels, and slopes; and with exposed edges folded back to form hems.
 - 3. Conceal fasteners and expansion provisions where possible. Do not use exposed fasteners on faces exposed to view.
- B. Sealant Joints: Where movable, nonexpansion-type joints are required, form metal to provide for proper installation of elastomeric sealant according to cited sheet metal standard.
- C. Fabricate cleats and attachment devices from same material as accessory being anchored or from compatible, noncorrosive metal.
- D. Fabricate cleats and attachment devices of sizes as recommended by cited sheet metal standard for application, but not less than thickness of metal being secured.
- E. Seams: Fabricate nonmoving seams with flat-lock seams. Tin edges to be seamed, form seams, and solder.

2.6 STEEP-SLOPE ROOF SHEET METAL FABRICATIONS

- A. Apron, Step, Cricket, and Backer Flashing: Fabricate from the following materials:
 - 1. Copper: 16 oz./sq. ft. (0.55 mm thick).
- B. Drip Edges: Fabricate from the following materials:
 - 1. Copper: 16 oz./sq. ft. (0.55 mm thick).
 - 2. Aluminum-Zinc Alloy-Coated Steel: 0.022 inch (0.56 mm) thick.
- C. Base Flashing: Shop fabricate interior and exterior corners. Fabricate from the following materials:
 - 1. Copper: 16 oz./sq. ft. (0.55 mm thick).
- D. Counterflashing: Fabricate from the following materials:
 - 1. Copper: 16 oz./sq. ft. (0.55 mm thick).
- E. Roof-Penetration Flashing: Fabricate from the following materials:
 - 1. Aluminum-Zinc Alloy-Coated Steel: 0.022 inch (0.56 mm) thick.

PART 3 - EXECUTION

3.1 UNDERLAYMENT INSTALLATION

- A. Felt Underlayment: Install felt underlayment, wrinkle
- B. Self-Adhering Sheet Underlayment: free, using adhesive to minimize use of mechanical fasteners under sheet metal flashing and trim. Apply in shingle fashion to shed water, with lapped joints of not less than 2 inches (50 mm). Install self-adhering sheet underlayment, wrinkle free. Prime substrate if recommended by underlayment manufacturer. Comply with temperature restrictions of underlayment manufacturer for installation; use primer for installing underlayment at low temperatures. Apply in shingle fashion to shed water, with end laps of not less than 6 inches (150 mm) staggered 24 inches (600 mm) between courses. Overlap side edges not less than 3-1/2 inches (90 mm). Roll laps and edges with roller. Cover underlayment within 14 days.

3.2 INSTALLATION, GENERAL

- A. General: Anchor sheet metal flashing and trim and other components of the Work securely in place, with provisions for thermal and structural movement. Use fasteners, solder, protective coatings, separators, sealants, and other miscellaneous items as required to complete sheet metal flashing and trim system.
 - 1. Install sheet metal flashing and trim true to line, levels, and slopes. Provide uniform, neat seams with minimum exposure of solder, welds, and sealant.
 - 2. Install sheet metal flashing and trim to fit substrates and to result in watertight performance. Verify shapes and dimensions of surfaces to be covered before fabricating sheet metal.
 - 3. Space cleats not more than 12 inches (300 mm) apart. Attach each cleat with at least two fasteners. Bend tabs over fasteners.
 - 4. Install exposed sheet metal flashing and trim with limited oil canning, and free of buckling and tool marks.
 - 5. Torch cutting of sheet metal flashing and trim is not permitted.
- B. Metal Protection: Where dissimilar metals contact each other, or where metal contacts pressure-treated wood or other corrosive substrates, protect against galvanic action or corrosion by painting contact surfaces with bituminous coating or by other permanent separation as recommended by sheet metal manufacturer or cited sheet metal standard.
 - 1. Underlayment: Where installing sheet metal flashing and trim directly on cementitious or wood substrates, install underlayment and cover with slip sheet.
- C. Expansion Provisions: Provide for thermal expansion of exposed flashing and trim. Space movement joints at maximum of 10 feet (3 m) with no joints within 24 inches (600 mm) of corner or intersection.
 - 1. Form expansion joints of intermeshing hooked flanges, not less than 1 inch (25 mm) deep, filled with sealant concealed within joints.

- D. Fasteners: Use fastener sizes that penetrate wood blocking or sheathing not less than 1-1/4 inches (32 mm) for nails and not less than 3/4 inch (19 mm) for wood screws.
- E. Conceal fasteners and expansion provisions where possible in exposed work and locate to minimize possibility of leakage. Cover and seal fasteners and anchors as required for a tight installation.
- F. Seal joints as required for watertight construction. Prepare joints and apply sealants to comply with requirements in Section 079200 "Joint Sealants."
- G. Soldered Joints: Clean surfaces to be soldered, removing oils and foreign matter. Pre-tin edges of sheets with solder to width of 1-1/2 inches (38 mm); however, reduce pre-tinning where pre-tinned surface would show in completed Work.
 - 1. Do not solder aluminum sheet.
 - 2. Do not use torches for soldering.
 - 3. Heat surfaces to receive solder, and flow solder into joint. Fill joint completely. Completely remove flux and spatter from exposed surfaces.
 - 4. Copper Soldering: Tin edges of uncoated sheets, using solder for copper.

3.3 ROOF FLASHING INSTALLATION

- A. General: Install sheet metal flashing and trim to comply with performance requirements, sheet metal manufacturer's written installation instructions, and cited sheet metal standard. Provide concealed fasteners where possible, and set units true to line, levels, and slopes. Install work with laps, joints, and seams that are permanently watertight and weather resistant.
- B. Pipe or Post Counterflashing: Install counterflashing umbrella with close-fitting collar with top edge flared for elastomeric sealant, extending minimum of 4 inches (100 mm) over base flashing. Install stainless-steel draw band and tighten.
- C. Counterflashing: Coordinate installation of counterflashing with installation of base flashing. Insert counterflashing in reglets or receivers and fit tightly to base flashing. Lap counterflashing joints minimum of 4 inches (100 mm).
- D. Roof-Penetration Flashing: Coordinate installation of roof-penetration flashing with installation of roofing and other items penetrating roof. Seal with elastomeric sealant and clamp flashing to pipes that penetrate roof.

3.4 CLEANING AND PROTECTION

- A. Clean exposed metal surfaces of substances that interfere with uniform oxidation and weathering.
- B. Clean and neutralize flux materials. Clean off excess solder.
- C. Clean off excess sealants.

- D. Remove temporary protective coverings and strippable films as sheet metal flashing and trim are installed unless otherwise indicated in manufacturer's written installation instructions.

END OF SECTION 076200

SECTION 077100 - ROOF SPECIALTIES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. Section Includes:

- 1. Roof-edge drainage systems.

- B. Related Requirements:

- 1. Section 061053 "Miscellaneous Rough Carpentry" for wood nailers, curbs, and blocking.
 - 2. Section 076200 "Sheet Metal Flashing and Trim" for custom- and site-fabricated sheet metal flashing and trim.
 - 3. Section 079200 "Joint Sealants" for field-applied sealants between roof specialties and adjacent materials.

- C. Preinstallation Conference: Conduct conference at Project site.

- 1. Meet with Owner, Architect, Owner's insurer if applicable, roofing-system testing and inspecting agency representative, roofing Installer, roofing-system manufacturer's representative, Installer, structural-support Installer, and installers whose work interfaces with or affects roof specialties, including installers of roofing materials and accessories.
 - 2. Examine substrate conditions for compliance with requirements, including flatness and attachment to structural members.
 - 3. Review special roof details, roof drainage, and condition of other construction that will affect roof specialties.

1.3 ACTION SUBMITTALS

- A. Product Data: For each type of product.

- 1. Include construction details, material descriptions, dimensions of individual components and profiles, and finishes.

- B. Shop Drawings: For roof specialties.

- 1. Include plans, elevations, expansion-joint locations, keyed details, and attachments to other work.
 - 2. Include details for expansion and contraction; locations of expansion joints, including direction of expansion and contraction.

3. Indicate profile and pattern of seams and layout of fasteners, cleats, clips, and other attachments.
 4. Detail termination points and assemblies, including fixed points.
 5. Include details of special conditions.
 - C. Samples for Initial Selection: For each type of roof specialty indicated with factory-applied color finishes.
 - D. Samples for Verification:
 1. Include Samples of each type of roof specialty to verify finish and color selection, in manufacturer's standard sizes.
- 1.4 INFORMATIONAL SUBMITTALS
- A. Qualification Data: For manufacturer.
 - B. Sample Warranty: For manufacturer's special warranty.
- 1.5 CLOSEOUT SUBMITTALS
- A. Maintenance Data: For roofing specialties to include in maintenance manuals.
- 1.6 DELIVERY, STORAGE, AND HANDLING
- A. Do not store roof specialties in contact with other materials that might cause staining, denting, or other surface damage. Store roof specialties away from uncured concrete and masonry.
 - B. Protect strippable protective covering on roof specialties from exposure to sunlight and high humidity, except to extent necessary for the period of roof-specialty installation.
- 1.7 FIELD CONDITIONS
- A. Field Measurements: Verify profiles and tolerances of roof-specialty substrates by field measurements before fabrication, and indicate measurements on Shop Drawings.
 - B. Coordination: Coordinate roof specialties with flashing, trim, and construction of parapets, roof deck, roof and wall panels, and other adjoining work to provide a leakproof, secure, and noncorrosive installation.
- 1.8 WARRANTY
- A. Special Warranty on Painted Finishes: Manufacturer agrees to repair finish or replace roof specialties that show evidence of deterioration of factory-applied finishes within specified warranty period.
 1. Fluoropolymer Finish: Deterioration includes, but is not limited to, the following:

- a. Color fading more than 5 Hunter units when tested according to ASTM D 2244.
 - b. Chalking in excess of a No. 8 rating when tested according to ASTM D 4214.
 - c. Cracking, checking, peeling, or failure of paint to adhere to bare metal.
2. Finish Warranty Period: 20 years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

- A. General Performance: Roof specialties shall withstand exposure to weather and resist thermally induced movement without failure, rattling, leaking, or fastener disengagement due to defective manufacture, fabrication, installation, or other defects in construction.
- B. Thermal Movements: Allow for thermal movements from ambient and surface temperature changes to prevent buckling, opening of joints, hole elongation, overstressing of components, failure of joint sealants, failure of connections, and other detrimental effects. Provide clips that resist rotation and avoid shear stress as a result of thermal movements. Base calculations on surface temperatures of materials due to both solar heat gain and nighttime-sky heat loss.
 1. Temperature Change (Range): 120 deg F (67 deg C), ambient; 180 deg F (100 deg C), material surfaces.

2.2 ROOF-EDGE DRAINAGE SYSTEMS

- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 1. ATAS International, Inc.
 2. Berger Building Products, Inc.
 3. Castle Metal Products.
 4. Cheney Flashing Company.
 5. Metal-Fab Manufacturing, LLC
- B. Gutters: Manufactured in uniform section lengths not exceeding 12 feet (3.6 m), with matching corner units, ends, outlet tubes, and other accessories. Elevate back edge at least 1 inch (25 mm) above front edge. Furnish flat-stock gutter straps, gutter brackets, expansion joints, and expansion-joint covers fabricated from same metal as gutters.
 1. Aluminum Sheet: 0.032 inch (0.81 mm) thick.
 2. Gutter Profile: Style K according to SMACNA's "Architectural Sheet Metal Manual."
 3. Corners: Factory mitered.
 4. Gutter Supports: Spikes and ferrules with finish matching the gutters.
- C. Downspouts: Corrugated rectangular complete with machine-crimped elbows, manufactured from the following exposed metal. Furnish with metal hangers, from same material as downspouts, and anchors.
 1. Formed Aluminum: 0.032 inch (0.81 mm) thick.

- D. Aluminum Finish: Two-coat fluoropolymer.
 - 1. Color: As selected by Architect from manufacturer's full range.

2.3 MATERIALS

- A. Aluminum Sheet: ASTM B 209 (ASTM B 209M), alloy as standard with manufacturer for finish required, with temper to suit forming operations and performance required.

2.4 MISCELLANEOUS MATERIALS

- A. Fasteners: Manufacturer's recommended fasteners, suitable for application and designed to meet performance requirements. Furnish the following unless otherwise indicated:
 - 1. Exposed Penetrating Fasteners: Gasketed screws with hex washer heads matching color of sheet metal.
 - 2. Fasteners for Aluminum: Aluminum or Series 300 stainless steel.
- B. Sealants, General: Comply with requirements of Section 079200 "Joint Sealants."
- C. Butyl Sealant: ASTM C 1311, single-component, solvent-release butyl rubber sealant; polyisobutylene plasticized; heavy bodied for hooked-type joints with limited movement.
- D. Bituminous Coating: Cold-applied asphalt emulsion complying with ASTM D 1187/D 1187M.
- E. Asphalt Roofing Cement: ASTM D 4586, asbestos free, of consistency required for application.
- F. Concrete Splash Blocks.

2.5 FINISHES

- A. Comply with NAAMM's "Metal Finishes Manual for Architectural and Metal Products" for recommendations for applying and designating finishes.
- B. Protect mechanical and painted finishes on exposed surfaces from damage by applying a strippable, temporary protective covering before shipping.
- C. Appearance of Finished Work: Noticeable variations in same piece are unacceptable. Variations in appearance of adjoining components are acceptable if they are within the range of approved Samples and are assembled or installed to minimize contrast.
- D. Coil-Coated Aluminum Sheet Finishes:
 - 1. High-Performance Organic Finish: Prepare, pretreat, and apply coating to exposed metal surfaces to comply with coating and resin manufacturers' written instructions.
 - a. Two-Coat Fluoropolymer: AAMA 2605. Fluoropolymer finish containing not less than 70 percent PVDF resin by weight in color coat. Prepare, pretreat, and apply

coating to exposed metal surfaces to comply with coating and resin manufacturers' written instructions.

- b. Concealed Surface Finish: Apply pretreatment and manufacturer's standard acrylic or polyester backer finish consisting of prime coat and wash coat with a minimum total dry film thickness of 0.5 mil (0.013 mm).

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates, areas, and conditions, with Installer present, to verify actual locations, dimensions, and other conditions affecting performance of the Work.
- B. Examine walls, roof edges, and parapets for suitable conditions for roof specialties.
- C. Verify that substrate is sound, dry, smooth, clean, sloped for drainage where applicable, and securely anchored.
- D. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION, GENERAL

- A. General: Install roof specialties according to manufacturer's written instructions. Anchor roof specialties securely in place, with provisions for thermal and structural movement. Use fasteners, solder, protective coatings, separators, underlayments, sealants, and other miscellaneous items as required to complete roof-specialty systems.
 - 1. Install roof specialties level, plumb, true to line and elevation; with limited oil-canning and without warping, jogs in alignment, buckling, or tool marks.
 - 2. Provide uniform, neat seams with minimum exposure of solder and sealant.
 - 3. Install roof specialties to fit substrates and to result in weathertight performance. Verify shapes and dimensions of surfaces to be covered before manufacture.
 - 4. Torch cutting of roof specialties is not permitted.
 - 5. Do not use graphite pencils to mark metal surfaces.
- B. Metal Protection: Protect metals against galvanic action by separating dissimilar metals from contact with each other or with corrosive substrates by painting contact surfaces with bituminous coating or by other permanent separation as recommended by manufacturer.
- C. Expansion Provisions: Allow for thermal expansion of exposed roof specialties.
- D. Fastener Sizes: Use fasteners of sizes that penetrate wood blocking or sheathing not less than 1-1/4 inches (32 mm) for nails and not less than 3/4 inch (19 mm) for wood screws.
- E. Seal concealed joints with butyl sealant as required by roofing-specialty manufacturer.
- F. Seal joints as required for weathertight construction. Place sealant to be completely concealed in joint. Do not install sealants at temperatures below 40 deg F (4 deg C).

3.3 ROOF-EDGE DRAINAGE-SYSTEM INSTALLATION

- A. General: Install components to produce a complete roof-edge drainage system according to manufacturer's written instructions. Coordinate installation of roof perimeter flashing with installation of roof-edge drainage system.
- B. Gutters: Join and seal gutter lengths. Allow for thermal expansion. Attach gutters to firmly anchored gutter supports spaced not more than 24 inches (610 mm) apart. Attach ends with rivets and seal with sealant to make watertight. Slope to downspouts.
- C. Downspouts: Join sections with manufacturer's standard telescoping joints. Provide hangers with fasteners designed to hold downspouts securely to walls and 1 inch (25 mm) away from walls; locate fasteners at top and bottom and at approximately 60 inches (1500 mm) o.c.
 - 1. Provide elbows at base of downspouts at grade to direct water away from building.

3.4 CLEANING AND PROTECTION

- A. Clean exposed metal surfaces of substances that interfere with uniform oxidation and weathering.
- B. Remove temporary protective coverings and strippable films as roof specialties are installed. On completion of installation, clean finished surfaces, including removing unused fasteners, metal filings, pop rivet stems, and pieces of flashing. Maintain roof specialties in a clean condition during construction.
- C. Replace roof specialties that have been damaged or that cannot be successfully repaired by finish touchup or similar minor repair procedures.

END OF SECTION 077100

SECTION 079200 - JOINT SEALANTS

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Urethane joint sealants.

1.2 ACTION SUBMITTALS

- A. Product Data: For each joint-sealant product indicated.

1.3 INFORMATIONAL SUBMITTALS

- A. Product test reports.
- B. Warranties.

1.4 QUALITY ASSURANCE

- A. Testing Agency Qualifications: Qualified according to ASTM C 1021 to conduct the testing indicated.
- B. Preinstallation Conference: Conduct conference at Project site.

1.5 WARRANTY

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

PART 2 - PRODUCTS

2.1 MATERIALS, GENERAL

- A. Liquid-Applied Joint Sealants: Comply with ASTM C 920 and other requirements indicated for each liquid-applied joint sealant specified, including those referencing ASTM C 920 classifications for type, grade, class, and uses related to exposure and joint substrates.
 - 1. Suitability for Immersion in Liquids. Where 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. Liquid used for testing sealants is deionized water, unless otherwise indicated.
- B. Stain-Test-Response Characteristics: Where 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.

2.2 URETHANE JOINT SEALANTS

- A. Urethane Joint Sealant: ASTM C 920.
 - 1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. BASF Building Systems (Sonneborn Products).
 - b. Pecora Corporation.
 - c. Tremco Incorporated.
 - 2. Type: Single component (S).
 - 3. Grade: nonsag (NS).
 - 4. Class: 100/50.
 - 5. Uses Related to Exposure: Nontraffic (NT).

2.3 JOINT SEALANT BACKING

- A. Cylindrical Sealant Backings: ASTM C 1330, Type C (closed-cell material with a surface skin), and of size and density to control sealant depth and otherwise contribute to producing optimum sealant performance.
- B. Bond-Breaker Tape: Polyethylene tape or other plastic tape recommended by sealant manufacturer.

2.4 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.
- C. Masking Tape: Nonstaining, nonabsorbent material compatible with joint sealants and surfaces adjacent to joints.

PART 3 - EXECUTION

3.1 PREPARATION

- A. Surface Cleaning of Joints: Clean out joints immediately before installing joint sealants to comply with joint-sealant manufacturer's written instructions.
 - 1. Remove laitance and form-release agents from concrete.
 - 2. Clean nonporous joint substrate surfaces with chemical cleaners or other means that do not stain, harm substrates, or leave residues capable of interfering with adhesion of joint sealants.
- B. Joint Priming: Prime joint substrates where recommended by joint-sealant manufacturer or as indicated by preconstruction joint-sealant-substrate tests or prior experience. Apply primer to comply with joint-sealant manufacturer's written instructions. Confine primers to areas of joint-sealant bond; do not allow spillage or migration onto adjoining surfaces.
- C. Masking Tape: Use masking tape where required to prevent contact of sealant or primer with adjoining surfaces that otherwise would be permanently stained or damaged by such contact or by cleaning methods required to remove sealant smears. Remove tape immediately after tooling without disturbing joint seal.

3.2 INSTALLATION

- A. Sealant Installation Standard: Comply with recommendations in ASTM C 1193 for use of joint sealants as applicable to materials, applications, and conditions indicated.
- B. Install sealant backings of kind indicated to support sealants during application and at position required to produce cross-sectional shapes and depths of installed sealants relative to joint widths that allow optimum sealant movement capability.
 - 1. Do not leave gaps between ends of sealant backings.
 - 2. Do not stretch, twist, puncture, or tear sealant backings.
 - 3. Remove absorbent sealant backings that have become wet before sealant application and replace them with dry materials.
- C. Install bond-breaker tape behind sealants where sealant backings are not used between sealants and backs of joints.
- D. 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.
- E. Tooling of Nonsag Sealants: Immediately after sealant application and before skinning or curing begins, tool sealants according to requirements specified in subparagraphs below to form smooth, uniform beads of configuration indicated; to eliminate air pockets; and to ensure contact and adhesion of sealant with sides of joint.
1. Remove excess sealant from surfaces adjacent to joints.
 2. Use tooling agents that are approved in writing by sealant manufacturer and that do not discolor sealants or adjacent surfaces.
 3. Provide concave joint profile per Figure 8A in ASTM C 1193, unless otherwise indicated.
- F. 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.

3.3 JOINT-SEALANT SCHEDULE

- A. Joint-Sealant Application: Exterior joints in vertical surfaces and horizontal nontraffic surfaces.
1. Joint Locations:
 - a. Joints between different materials listed above.
 - b. Other joints as indicated.
 2. Joint Sealant: Urethane.
 3. Joint-Sealant Color: As selected by Architect from manufacturer's full range of colors.

END OF SECTION 079200

SECTION 099113 - EXTERIOR PAINTING

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes surface preparation and the application of paint systems on the following exterior substrates:
 - 1. Wood.
 - 2. Plastic Trim.
 - 3. Copper Trim.

1.2 DEFINITIONS

- A. Gloss Level 1: Not more than 5 units at 60 degrees and 10 units at 85 degrees, according to ASTM D 523.
- B. Gloss Level 3: 10 to 25 units at 60 degrees and 10 to 35 units at 85 degrees, according to ASTM D 523.
- C. Gloss Level 4: 20 to 35 units at 60 degrees and not less than 35 units at 85 degrees, according to ASTM D 523.
- D. Gloss Level 5: 35 to 70 units at 60 degrees, according to ASTM D 523.
- E. Gloss Level 6: 70 to 85 units at 60 degrees, according to ASTM D 523.
- F. Gloss Level 7: More than 85 units at 60 degrees, according to ASTM D 523.

1.3 ACTION SUBMITTALS

- A. Product Data: For each type of product. Include preparation requirements and application instructions.
- B. Samples: For each type of paint system and each color and gloss of topcoat.
- C. Product List: For each product indicated. Include printout of current "MPI Approved Products List" for each product category specified, with the proposed product highlighted.

1.4 QUALITY ASSURANCE

- A. Mockups: Apply mockups of each paint system indicated and each color and finish selected to verify preliminary selections made under Sample submittals and to demonstrate aesthetic effects and set quality standards for materials and execution.

1. Architect will select one surface to represent surfaces and conditions for application of each paint system specified in Part 3.
 - a. Vertical and Horizontal Surfaces: Provide samples of at least 100 sq. ft. (9 sq. m).
 - b. Other Items: Architect will designate items or areas required.
2. Final approval of color selections will be based on mockups.
 - a. If preliminary color selections are not approved, apply additional mockups of additional colors selected by Architect at no added cost to Owner.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Products: Subject to compliance with requirements, provide one of the products listed in other Part 2 articles for the paint category indicated.

2.2 PAINT, GENERAL

- A. MPI Standards: Provide products that comply with MPI standards indicated and that are listed in its "MPI Approved Products List."
- B. Material Compatibility:
 1. Provide materials for use within each paint system that are compatible with one another and substrates indicated, under conditions of service and application as demonstrated by manufacturer, based on testing and field experience.
 2. For each coat in a paint system, provide products recommended in writing by manufacturers of topcoat for use in paint system and on substrate indicated.
- C. VOC Content: Provide materials that comply with VOC limits of authorities having jurisdiction.
- D. Colors: Color and sheen to match existing adjacent paint color.

2.3 PRIMERS/SEALERS

- A. Primer, Bonding, Water Based: MPI #17.
 1. Benjamin Moore; Fresh Start – High Hiding All Purpose Primer.
 2. Benjamin Moore; Fresh Start – Multi-Purpose Latex Primer.
 3. PPG Architectural Finishes; Devoe Paint – Kilstain WB Interior/Exterior Latex Primer.
 4. PPG Architectural Finishes; Glidden Professional – Gripper Interior/Exterior Primer Sealer.
 5. Sherwin-Williams; Multi-Purpose – Multi-Purpose Latex Primer/Sealer.

2.4 METAL PRIMERS

- A. Primer, Quick Dry, for Aluminum or Copper: MPI #95.
 - 1. Rodda Paint; Professional Maintenance – Barrier III HS
 - 2. Rust-Oleum; Zinsser – Cover Stain High Hide Alkyd Base Int/Ext

2.5 WOOD PRIMERS

- A. Primer, Latex for Exterior Wood: MPI #6.
 - 1. Benjamin Moore; Fresh Start – High Hiding All-Purpose Primer.
 - 2. Benjamin Moore; Fresh Start – Multi-Purpose Latex Primer.
 - 3. PPG Architectural Finishes; Devoe Paint – Exterior Wood Primer.
 - 4. PPG Architectural Finishes; Glidden Professional – Hydrosealer Primer/Sealer.
 - 5. Sherwin-Williams; Exterior Latex Wood Primer.

2.6 WATER-BASED PAINTS

- A. Latex, Exterior Low Sheen (Gloss Level 3/4): MPI #15.
 - 1. Benjamin Moore; Aura – Waterborne Exterior Low-Lustre Finish.
 - 2. Benjamin Moore; Regal Select – High-Build Exterior Low-Lustre Finish.
 - 3. Benjamin Moore; Ultra Spec – Exterior Satin Finish.
 - 4. PPG Architectural Finishes; Devoe Paint – Wonder Shield Exterior Satin.
 - 5. PPG Architectural Finishes; Glidden Professional – Ultra-Hide 150 Exterior Satin Paint.
 - 6. Sherwin-Williams; A-100 – Exterior Latex Satin.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates and conditions, with Applicator present, for compliance with requirements for maximum moisture content and other conditions affecting performance of the Work.
- B. Maximum Moisture Content of Substrates: When measured with an electronic moisture meter as follows:
 - 1. Wood: 15 percent.
- C. Verify suitability of substrates, including surface conditions and compatibility with existing finishes and primers.
- D. Proceed with coating application only after unsatisfactory conditions have been corrected.
 - 1. Application of coating indicates acceptance of surfaces and conditions.

3.2 PREPARATION

- A. Comply with manufacturer's written instructions and recommendations in "MPI Manual" applicable to substrates and paint systems indicated.
- B. Clean substrates of substances that could impair bond of paints, including dust, dirt, oil, grease, and incompatible paints and encapsulants.
 - 1. Remove incompatible primers and re-prime substrate with compatible primers or apply tie coat as required to produce paint systems indicated.

3.3 APPLICATION

- A. Apply paints according to manufacturer's written instructions and recommendations in "MPI Manual."
- B. Apply paints to produce surface films without cloudiness, spotting, holidays, laps, brush marks, roller tracking, runs, sags, ropiness, or other surface imperfections. Cut in sharp lines and color breaks.

3.4 CLEANING AND PROTECTION

- A. Protect work of other trades against damage from paint application. Correct damage to work of other trades by cleaning, repairing, replacing, and refinishing, as approved by Architect, and leave in an undamaged condition.
- B. At completion of construction activities of other trades, touch up and restore damaged or defaced painted surfaces.

3.5 EXTERIOR PAINTING SCHEDULE

- A. Wood Substrates: Including wood trim and architectural woodwork.
 - 1. Latex System:
 - a. Prime Coat: Primer, latex for exterior wood, MPI #6.
 - b. Intermediate Coat: Latex, exterior, matching topcoat.
 - c. Topcoat: Latex, exterior, low sheen (Gloss Level 3-4), MPI #15.
- B. Plastic Trim Fabrication Substrates:
 - 1. Latex System:
 - a. Prime Coat: Primer, bonding, water based, MPI #17.
 - b. Intermediate Coat: Latex, exterior, matching topcoat.
 - c. Topcoat: Latex, exterior, low sheen (Gloss Level 3-4), MPI #15.
- C. Copper Trim Fabrication Substrates:

1. Latex System over Q.D. Metal Primer:
 - a. Prime Coat: Primer, solvent based, alkyd, or modified-alkyd Q.D., MPI #95.
 - b. Intermediate Coat: Latex, exterior, matching topcoat.
 - c. Topcoat: Latex, exterior, low sheen (Gloss Level 3-4), MPI #15.

END OF SECTION 099113