# **PROJECT MANUAL**

# **Exterior Restoration, Phase 2**

# Gabreil Daveis Tavern

401 Fourth Avenue Glendora, NJ 08029

## **Owner's Representative:**

Joan Eller-Hinski, Grants Coordinator Gloucester Township P.O. Box 8 Blackwood, NJ 08012 (856) 228-4000x307 ph (856) 374-3526 fax

## Architect:

Margaret Westfield, R.A. Westfield Architects & Preservation Consultants 425 White Horse Pike Haddon Heights, NJ 08035-1706 (856) 547-0465

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# Part 1

Project Overview

# **Project Overview**

# I. PROJECT INTRODUCTION

The Gabreil Daveis Tavern is located at 401 Fourth Avenue in Glendora, Gloucester Township, New Jersey. The historic Gabreil Daveis Tavern is significant as the home and commercial undertaking of one of Gloucester Township's earliest settling families. Gabreil Daveis built the two-and one-half story brick and stone structure in 1756 on the southern end of a 178-acre plot of land overlooking the North branch of the Big Timber Creek. This tract of land was one of the last in the area to be developed prior to the Revolutionary War. Built with the intent purpose of being used as a "Public house of Entertainment," the tavern house is a fine example of vernacular Georgian architecture and served an important social and political function in the early history of Gloucester Township as a center of communications for nearby residents. Phase 1 work, including the replacement of the main roof and the relocation of a bat colony, was completed in 2013. The building serves as a house museum and for special events.

The Township now plans to address the aging wood shingle roofing on the porch, pent, and well roofs that are nearing the end of their functional lives. As the building is listed on the State and National Registers of Historic Places, all work will be reviewed by the New Jersey Historic Preservation Office for compliance with the Secretary of the Interior's Standards for Rehabilitation.

## **II. SCOPE OF WORK**

The project scope of work consists of the following elements, as shown on the drawings and described in the specifications:

- 1. General conditions, including supervision costs;
- 2. Permits and approvals not provided by the owner;
- **3.** Temporary facilities and controls, including construction trailer, dumpster, toilets, fencing, etc.;
- 4. Selective demolition;
- 5. Replace the pent, porch, and well roofs in-kind, with the exception of a combed ridge in lieu of the lapped ridge on the well roof, including replacing individual strips of deteriorated lath as required, if any.

- 6. Repair, prepare and repaint the exterior woodwork components of the pent roof, rear porch (all previously painted woodwork), cornice and soffit below the pent, and well structure (all previously painted woodwork);
- 7. Deduct-Alternate #1: Substitute red cedar instead of the specified material (white cedar).
- 8. Add-Alternate #1: Paint all of the previously painted woodwork not covered by the base bid, with the exception of the windows and the main cornices and the main raking cornices/ bargeboards (that were painted in Phase 1). Include painting the bulkhead.
- **9.** Add-Alternate #2: Paint the exterior side of the windows, including frames, sash, trim, shutters (where existing), and shutter hardware.

Note: the roof on the side bathroom addition, as well as the repainting of its woodwork, is not included. (This addition is scheduled to be removed next year.) Deduct- and Add-Alternates have been included on the bid form to ensure that the Township will be able to execute a contract for the maximum amount of work that the budget will permit.

# Part 2

**Bidding Requirements** 

# **Conditions of the Project**

# A. Definitions

- 1. Documents consist of this Project Manual (Project Overview, Bidding Requirements, Contract Forms, Conditions of the Contract, and Technical Specifications), and any owner-issued documents.
- The Owner is the Township of Gloucester. The Owner's representative is Joan Eller-Hinski, Grants Coordinator, The Township of Gloucester, 1261 Chews Landing Road, P.O. Box 8, Blackwood, NJ 08012 phone: (856) 228-4000x307. All questions are to be directed to the Architect.
- **3.** The Architect is Westfield Architects & Preservation Consultants, 425 White Horse Pike, Haddon Heights, NJ 08035; phone: (856) 547-0465. Project Contact: Margaret Westfield.

# **B.** Bidding

- 1. The Base Bid is the sum stated in the Bid for which the Bidder offers to perform the work described in the Bidding Documents to which work may be added or deleted for sums stated in Alternate Bids.
- 2. Alternate Bid (or Alternate) is an amount stated in the Bid to be added or deducted from the Base Bid amount for a corresponding change in the work as described in the Bidding Documents.

# C. Instructions to Bidders

- 1. Bidders must be licensed or registered Contractors in the State of New Jersey, as required. The certificate of registration must be submitted with the bid.
- 2. By submitting a Bid, the Bidder represents that:
  - **a.** The Bidder has read and understands the Bid Documents and the Bid is made accordingly.
  - **b.** The Bidder has visited the site; become familiar with conditions and has correlated the Bidder's observations with the requirements of the proposed work.
  - **c.** The Bid is based upon materials, equipments and systems required by the Bid Documents.
  - **d.** The Bidder will complete the project within the timeframe specified.
- **3.** Bids will be Lump Sum, submitted on the enclosed Bid Form. All bids must be enclosed in a sealed envelope, labeled with the following: the name and address of the bidder, and the name of the nature of the proposal.

- All bids must be accompanied by: Bid Document Submission Checklist Bid Bond Consent of Surety Noncollusion Affidavit Corporate Disclosure Statement Certificate of Registration with the State List of Subcontractors Form Bidder's Qualifications Statement
- 5. All bidders are strongly encouraged to attend a pre-bid meeting at the site at 11:00 am on Tuesday, 20 October 2015.
- 6. Bids will be received at the Township of Gloucester until 11:00 am on Wednesday, 4 November 2015, at which time the bids will be opened. Bidders may be present at the opening.
- 7. The Owner reserves the right to accept any Bid, to reject any and all Bids, to negotiate Contract Terms with the various Bidders, and to waive any formalities in bidding.
- 8. No proposal may be withdrawn for a period of sixty (60) days subsequent to the date of opening of the Proposals without written consent of the Owner.

# **D.** Documents

- 1. Bidders shall use complete sets of Bid Documents in preparing bids; neither Owner nor Architect assumes responsibility for errors or misinterpretations resulting from the use of incomplete sets of Bid Documents.
- 2. Bid Documents are available to download from the municipal website, or via email as a pdf. from the architect. The fee for printed bid documents is \$50.00 per set. (These fees cover reproduction and handling costs.) We encourage bidders to print out their own hard copy of the document if desired.
- 3. Bidders are required to visit the site before preparing their Bids, compare the Contract Documents with existing conditions, and report any conflicts. Bidders should call Joan Eller-Hinski, Owner's Representative, at (856) 228-4000x307 to obtain directions and arrange access to the site.
- 4. If during the bidding period the bidder finds discrepancies, ambiguities, omissions, or is in doubt as to the meaning or intent of Documents, notify the Owner seven (7) calendar days prior to the Bid Due Date. All such necessary clarifications, information, interpretations or amendments shall be answered in the form of written addenda to Drawings and Specifications, issued simultaneously to all holders of complete sets of Documents. The Addendum will become a part of the Construction Contract. Architect and Owner representatives shall not be responsible for oral instructions or interpretations during bidding period.

# E. Insurance

- 1. The Contractor shall maintain Contractor's Liability Insurance throughout the life of this Contract, written in a comprehensive form, satisfactory to the Owner. Contractor is responsible for protecting the property during construction.
- 2. Property Insurance for Work-in-place will be carried by the Owner as a rider on the existing property insurance policy.

# F. Bonding

- 1. Bids must be accompanied by a Certified Check, Bid Bond, or Cashier's Check drawn to the order of the Owner for ten percent (10%) of the amount of the total amount bid, provided said security need not be more than \$20,000.00. All bid guarantees shall be accompanied by an executed consent from an approved surety company, licensed to conduct business in the State of New Jersey, agreeing to furnish the required Performance Bond upon the award of contract.
- **2.** The successful bidder will be required to provide a Performance Bond in the amount of 100% of the contract price.

# G. Construction Permit

- 1. Contractor is responsible for obtaining all permits required during construction. Construction Documents must be kept by the Contractor at the site during construction. Since the building is owned by the Township, the permit fees will be waived.
- 2. A separate set of documents should be kept to record any field changes or revisions during construction. This set shall be given to the Owner upon completion of all work, as the required "as built" documentation.

# H. Forms

- 1. Contract will be written and provided by the Township and will incorporate the *Standard Form of Agreement Between Owners and Contractors, Stipulated Sum*, AIA Document A101, dated 1997, the twelfth edition, or an approved similar form.
- 2. Contractor shall submit bid on the Bid Form in Part 2.
- 3. Contractor shall submit all forms per the Bid Document Submission Checklist.

# I. Payment

1. Prior to commencing work, selected contractor shall submit a Schedule of Values on AIA Document G702 *Application and Certification for Payment Continuation Sheet*. After review and acceptance by the Architect, these values shall become the basis for payment, on percentage completed as the project moves forward. 2. Applications for payment shall be submitted on AIA Document G702 forms on a monthly basis. Retainage of 2% shall be held until project is deemed by the Architect to be 100% complete.

# **BID DOCUMENT SUBMISSION CHECKLIST**

Failure to submit the following documents may be a cause for the proposal to be rejected. (N.J.S.A. 40A:11-23.1b.)

By initialing below, bidder acknowledges inclusion of the following required documents in his/her bid package submission:

Bid Document Submission Checklist	
Bid Bond	
Bid Form	
Consent of Surety	
NonCollusion Affidavit	
Corporate Disclosure Statement	
Certificate of Registration with State	
List of Subcontractors Form	
Bidder's Qualification Statement	

The undersigned hereby acknowledges and has submitted the above listed requirements. SIGNATURE :

Name of Bidder:\_\_\_\_\_ Signature: \_\_\_\_\_

## **BID FORM**

From:	(Name of General Contractor)	
To:	Township of Gloucester 1261 Chews Landing Road Blackwood, NJ 08012	
Project:	Exterior Restoration, Phase 2 Gabreil Daveis Tavern	
Date:		

The undersigned Bidder acknowledges by his signature that he has visited and examined the site of the proposed construction and has received and examined the Project Manual titled "Exterior Restoration, Phase 2 of the Gabreil Daveis Tavern" dated August 2015, and has included its provisions in his Bid. The Bidder acknowledges that he has received the following Addenda by indicating the dates thereof:

Addendum No.	1	Date
	2	
	3	

In submitting this Bid, the Bidder agrees:

**a.** To hold his Bid for 60 days from the date shown above.

**b.** To enter into and execute a Contract, if awarded, on the basis of this Bid.

c. To accomplish Work in accordance with the Bid Documents within the specified time frame.

**BASE BID:** The Bidder agrees to construct the Work related to the Exterior Restoration, Phase 2 at the Gabreil Daveis Tavern as specified in the Bid Documents of this project for the lump sum of (show amount in both words and figures):

	Dollars
	\$
	vide the Work related to Deduct-Alternate #1 in the Bid ead of white cedar as specified) for the lump sum of (show
ADD	Dollars
	+ \$
	ork related to Add-Alternate #1 in the Bid Documents of this work not included in the Base Bid except for the windows and (show amount in both words and figures):
ADD	Dollars
	+ \$
	ork related to Add-Alternate #2 in the Bid Documents of this cluding ssh, frames, trim, shutters, and shutter hardware) for
ADD	Dollars

+ \$

**Bid Form** 

Start-up Date:	Completion Date:	
Name of Firm:		
Signed by:	Title:	
Bidder's address:		
Bidder's telephone number:		
Signature	Date	

NOTE: Attach any notes, exceptions or clarifications to the Bid to this Form, along with all required paperwork per the Project Manual.

# NON-COLLUSION AFFIDAVIT Exterior Restoration, Phase 2 at Gabreil Daveis Tavern

State of New Jersey		
County of		
SS:		
I,	of the	in the County of worn according to law on my oath depose and say
and the State of that:	, of full age, being duly s	worn according to law on my oath depose and say
has not, directly or indirectly, entered into any a free, competitive bidding in connection with th affidavit are true and accurate, and made with fi statements contained in said Proposal and in th I further warrant that no person or sel such contract upon an agreement or understand employees or bona fide established commercial	aamed project, and I executed the st agreement, participated in any colle a above named project; and all stat full knowledge that the Owner and/ his affidavit in awarding the contract lling agency has been employed or ding for a commission, percentage, l or selling agencies maintained by	aid Proposal with full authority so to do; said bidder usion, or otherwise taken any action to restraint of ements contained in said Proposal and in this or the State of New Jersey relies upon the truth of the et for the said project. retained to solicit or secure
(Name of Contractor)		
Signature	Date	
Type or print name of affiant.		
Subscribed and sworn to before me, this day of		
Notary (Affix Seal and Stamp)		

THIS FORM MUST BE COMPLETED AND SUBMITTED WITH YOUR PROPOSAL.

#### CORPORATE DISCLOSURE STATEMENT

The Township of Gloucester has chosen to voluntarily comply with Chapter 33 of the Public Laws of 1977 (N.J.S.A. 52:25-24.2), which provides in pertinent part that no partnership or corporation shall be awarded any State, County, Municipal or School District Contract for the performance of any work or the furnishing of any materials or supplies unless prior to the receipt of the bid or accompanying the bid of said partnership or corporation, there is submitted a statement containing the following information:

1. If the bidder is a partnership, then the statement shall set forth the names and addresses of all partners who own a 10% or greater interest in the partnership.

2. If the bidder is a corporation, then the statement shall set forth the names and addresses of all stockholders in the corporation who own 10% or more of its stock of any class.

**3.** If a corporation owns all or part of any stock of the corporation or partnership submitting the bid, then the statement shall include a list of the stockholders who own 10% or more of the stock of any class of **that** corporation.

#### **BIDDER MUST COMPLETE ONE OF THE FOLLOWING STATEMENTS:**

I. Stockholders or Partners owning 10% or more of the company submitting:

NAME	Al	LDDRESS
Signature	Date	
Signature	Date	
II. No Stockholder or Partner	owns 10% or more of the company submitt	ting bid:
Signature	Date	
III. Bid is being submitted by	an individual who operates as a sole proprie	etorship:
Signature	Date	
THIS FORM MUST BE CO	OMPLETED AND SUBMITTED WITH Y	YOUR PROPOSAL.

# List of Subcontractors

General Contractor:		
By signing below, the bidder her trades on the Roof Restoration, I	eby acknowledges that the following subcontra Phase 2 project:	ctors will be utilized for the following
Name:		
Address:		
Name:		
Address:		
Role in Project:		
Name:		
1010 III 1 10jeet		
Name:		
Address:		
Role in Project:		
Name:		
Name of Bidder:	Signature:	
(Attach additional sheets if requi	ired.)	

#### BIDDER'S QUESTIONNAIRE Exterior Restoration, Phase 2 Gabreil Daveis Tavern

This form must be completed and submitted with the Contractor's Bid. Attachments to this sheet are acceptable (please properly label).

1.	Name and Address of Firm:
2.	Under what other name(s) has your business operated?
3.	Business form (corporation, partnership, etc.)
	Date of formation:
	Principal location:
	Names and Titles of officers of corporation, or partners and the number of years with the business:

- 4. Has your firm or any predecessor firm defaulted on a contract or had work terminated for non-performance within the last five (5) years? If so, on a separate sheet describe the project, owner, date and circumstances/reasons.
- 5. Has your firm or any predecessor firm been denied a consent of surety, a bid bond, or a performance bond within the last twelve (12) months? If so, on a separate sheet describe the circumstances/reasons.
- 6. GENERAL CONTRACTOR:

Provide evidence of successful experience on at least two (2) projects involving separate historic buildings or sites and of similar activities and scope of work as the subject project, including the installation of wood shingle roofs completed in compliance with the Secretary of the Interior's <u>Standards for the Treatment of Historic Properties</u> (revised 1995) within the past five (5) years preceding the date of the execution of the Bidder's Questionnaire. At least one of the projects must have been reviewed by a State Historic Preservation Office, or New Jersey Historic Trust, or the historic review body of a county or local municipal authority. The cost of the work for each project must be at least \$30,000.

Project #1
Project Name:
Location:
Construction Cost:
Completion Date:
Approximate Construction Date of the Historic Building or Site:
Project Superintendent/Manager:
Scope of Work and Nature of Project:
Owner:
Owner's Contact Person:
Phone:
Fax:
Architect:
Architect's Contact Person:
Phone:
Fax:
Historical Review Agency:

Project #2
Project Name:
Location:
Construction Cost:
Completion Date:
Approximate Construction Date of the Historic Building or Site:
Project Superintendent/Manager:
Scope of Work and Nature of Project:
Owner:
Owner's Contact Person:
Phone:
Fax:
Architect:
Architect's Contact Person:
Phone:
Fax:
Historical Review Agency:

#### 7. PROPOSED PROJECT SUPERINTENDENT/MANAGER:

Provide evidence of successful experience on at least two (2) projects involving separate historic buildings or sites and of similar activities and scope of work as the subject project completed in compliance with the Secretary of the Interior's <u>Standards for the Treatment of Historic Properties</u> (revised 1995) within the past five (5) years preceding the date of the execution of this Bidder's Questionnaire. At least one of the projects must have been reviewed by a State Historic Preservation Office, or New Jersey Historic Trust, or the historic review body of a county or municipal authority. The cost of the work for each project must be at least \$60,000.

Name and Address of Project Superintendent/Manager:

Project #1
Project Name:
Location:
Construction Cost:
Completion Date:
Approximate Construction Date of the Historic Building or Site:
Scope of Work and Nature of Project:
Owner:
Owner's Contact Person:
Phone: Fax:
Architect:
Architect's Contact Person:
Phone:Fax:
Historical Review Agency:

Project Name:			
Location:			
Owner:	Phone:		
Architect:	tect:Phone:		
Contract Amount:			
Scheduled Completion Date:			
Architect's Contact Person:			
Phone:			
Project Name:			
	Phone:		
	Phone:		
Project Name:			
	Phone:		
Architect:	Phone:		
Contract Amount:			
Scheduled Completion Date:			
Architect's Contact Person:			
Phone:			
Project Name:			
	Phono:		
	Phone: Phone:		
	F11011e		

# Project #2

	Project Name:			
	Location: Construction Cost: Completion Date: Approximate Construction Date of the Historic Building or Site:			
	Scope of Work and Nature of Project:			
	Owner:			
	Owner's Contact Person:			
	Phone:	Fax:		
	Architect:			
	Architect's Contact Person:			
	Phone:	Fax:		
	Historical Review Agency:			
8.	Provide a list of the names, titles, and years of experience of all principal members of the prospective bidder's staff who will be available and assigned to this particular project.			
9.	GENERAL CONTRACTOR: PROVIDE THE FOLLOWING INFORMATION ON ALL CURRENT PROJECTS IN PROGRESS: (If necessary, include additional sheets.)			
	Project Name:			
	Location:			
	Owner:	Phone:		
	Architect:	Phone:		
	Contract Amount:			
	Scheduled Completion Date:			
	Architect's Contact Person:			
	Phone:			

Scheduled Completion Date:
Architect's Contact Person:
Phone:

# CERTIFICATION

I (We) the undersigned certify the truth and correctness of all statements and answers contained herein:

DATE:						
	NAME OF POTENTIAL BIDDER:					
ADDRESS	ADDRESS OF BIDDER:					
TELEPHONE AND FAX:						
BY (sign name, no stamps):						
(Print/type name and title):						
WITNESSED: (If a Corporation, by the secretary of the corporation)						
BY (sign name, no stamps):						
(Print/type r	name and title):					
Subscribed	and sworn to befo	ore me				
this	day of	, 20	Notary Public of the State of			
			My commission expires			

(Seal)

# Part 3

**Contract Forms** 

#### WAIVER OF LIENS

Owner:	Township of Gloucester
	Joan Eller-Hinski
	P.O. Box8
	1261 Chews Landing Road
	Blackwood, NJ 08012

Contractor:\_\_\_\_\_

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

Whereas, the Township of Gloucester, hereinafter called "Owner" and

\_\_\_\_\_\_, hereinafter called "Contractor," have entered into a Contract dated \_\_\_\_\_\_, providing that the Contractor shall furnish the materials and perform the labor and services necessary or contemplated for erection, construction, alteration or repair of a structure or improvement consisting of:

#### Gabreil Daveis Tavern

upon the lots of ground owned by the Owner known as the following:

#### 401 Fourth Avenue Glendora, NJ 08029

1. Now, therefore, the Contractor covenants and agrees, intending to be legally bound hereunder, that neither the undersigned Contractor nor any sub-contractor nor any other person furnishing labor, materials or services under or in connection with said Contract shall file a claim, commonly called a "Mechanics Lien," for labor, materials or services furnished to said structure, or any part thereof, or for anything done under or in connection with said Contract. Violation of this waiver shall constitute a breach of this Contract and the Contractor agrees to indemnify and hold Owner harmless against all costs of discharging any such "Mechanics Lien", including attorney fees and costs of suit.

2. The Contractor hereby certifies that payment in the amount of \$\_\_\_\_\_ has been received as consideration for giving this waiver.

(Seal)

By:

Title: .

In witness whereof, said Contractor has subscribed and sworn to these statements before me on this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_.

#### NOTICE

### **REQUIRED AFFIRMATIVE ACTION EVIDENCE FOR CONSTRUCTION CONTRACTS**

All successful construction contractors must submit the following form of evidence:

° Complete form AA201

Affirmative Action evidence must be submitted no later than 3 days after signing of the contract.

# Part 4

**Conditions of the Contract** 

### TOWNSHIP OF GLOUCESTER

### COUNTY OF CAMDEN, NEW JERSEY

## NOTICE TO BIDDERS

**PUBLIC NOTICE** is hereby given that sealed proposals for the purchase of

Lower Roof Restoration and Exterior wood trim painting at Gabreil Daveis Tavern

will be received no later than 11:00 A.M. on Wednesday, November 4, 2015 at the Municipal Building, 1261 Chews Landing Road, Laurel Springs, N.J. 08012. A pre-bid meeting will be held at the site on Tuesday, October 20, 2015 at 11:00 A.M.

Bids must be on the bid form prepared by Westfield Architects & Preservation Consultants, in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes bearing the name and address of the bidder on the outside and also bearing on the outside reference to **Exterior Restoration, Phase 2 at Gabriel Daveis Tavern**. Said bids shall be addressed to Rosemary DiJosie, Clerk, Township of Gloucester, P.O. Box 8, Blackwood, New Jersey 08012.

**PROPOSAL FORMS**, instructions to bidders, specifications and other bidding documents may be examined or obtained at <u>glotwp@glotwp.com</u>

THE TOWNSHIP COUNCIL RESERVES THE RIGHT TO REJECT ANY OR ALL PROPOSALS IN WHOLE OR IN PART AND TO WAIVE SUCH INFORMATION AS MAY BE PERMITTED BY LAW. BIDDERS ARE REQUIRED TO COMPLY WITH THE REQUIREMENTS OF <u>N.J.S.A.</u> 10:5-31 <u>et seq</u>. and <u>N.J.A.C</u>. 17:27

IF AWARDED A CONTRACT, YOUR COMPANY/FIRM WILL BE REQUIRED TO COMPLY WITH THE REQUIREMENTS OF <u>N.J.S.A.</u> 10:5-31 <u>et seq</u>. and <u>N.J.A.C</u>. 17:27

# Part 5

**Technical Specifications** 

# **GENERAL REQUIREMENTS**

1

### SECTION 01010 - Summary Of Work

#### 1. General

- **1.1** DESCRIPTION
  - A. Contractor will complete the specified Exterior Restoration, Phase 2 of the Gabriel Daveis Tavern located at 401 Fourth Avenue, Glendora, Gloucester Township, NJ 08029. The Owner's representative is Joan Eller-Hinski, phone (856) 288-4000 x307, who is coordinating access to the site. The projects architects are Westfield Architects & Preservation Consultants, 425 White Horse Pike, Haddon Heights, NJ 08035-1706. Contact Margaret Westfield R.A. with any technical questions at (856) 547-0465.
  - **B.** The building would be classified as Assembly Use Group A- 3 (IBC NJ Edition 2009). It has an assumed Construction Type of 5B.
  - **C.** The building appears to meet the conditions stated in UCC Rehabilitation Subcode Section 6.33 and may be subject to interpretation by local construction officials due to its classification as a Historic Building.
  - **D.** Major systems involved are Architectural. These specifications, drawings, notes, and Owner-issued bidding documents compose the Contract Documents which delineate work required for this phase of restoration. The work of all trades under contract is to comply with all applicable state, county, and local codes. The Contractor is responsible for coordination of the work of various trades included in the full scope of work.
  - E. The Gabreil Daveis Tavern was originally built in 1756. The significance of the structure has been acknowledged by the National Park Service through its listing on the National Register of Historic Places. All work shall be undertaken in accordance with the Secretary of the Interior's *Standards for the Treatment of Historic Properties* (Revised 1995).
  - F. Funding for this project is being provided by the Camden County Open Space Preservation Trust Fund.
  - G. The goal of this project is to restore the three roofs and repaint the related woodwork.
- 2. Products Not Applicable To This Section
- 3. Execution Not Applicable To This Section

## SECTION 01015 - Project Requirements

- 1. General
  - 1.1 DESCRIPTION
    - **A.** Contractor will verify all field conditions and be familiar with all facets of the proposed work prior to submitting a bid to the Owners.

- **B.** All existing historic fabric is to remain or be replaced in kind. Existing architectural elements, where original, are to be used as guides.
- **C.** Building access is to be coordinated with the Owner's Representative. Contractor will be responsible for securing the building during construction. Any acts of damage, theft, or similar incidents will be the responsibility of the Contractor. Contractor agrees to indemnify and hold harmless Owner from any and all expense, claim, damages, losses, including attorney's fee, resulting from any accidents or injuries to any person who is an agent, workman and/or employee of the Contractor or any subcontractor, or who is at the premises at the request or invitation of the Contractor or subcontractor.
- **D.** Contractor is to provide for all necessary temporary facilities and utilities on site as deemed necessary to complete the project.
- **E.** Contractor shall photographically document all unforeseen conditions that are not visible from the ground.
- **F.** Contractor is responsible for obtaining or paying for all licenses, permits, and/or regulatory fees. However, Gloucester Township will waive the local permit fees.
- **G.** Prior to the start of any work, the successful Contractor will verify all dimensions and conditions, and report any unforeseen conditions or discrepancies to the Architect.
- H. Architect is not responsible for work that the Architect does not review and/or work not completed in accordance with Architect's plans and/or instructions. No deviation from Construction documents is permitted without written approval from the Architect. Field Changes and Addenda must be in writing and must be approved by Architect and Owner prior to undertaking related work.
- I. The approved foreman shall be on site every day that construction activity is underway. The foreman is responsible for coordinating all trades, sequencing all work, and overseeing his own crew and the sub-contractors to ensure that work is being performed in strict accordance with the drawings and specifications and that quality workmanship is maintained.
- J. If existing field conditions do not permit the installation of the work in accordance with the details shown, notify the Architect immediately and provide a sketch of the condition. Contractor shall not resolve problem conditions without prior approval of Architect except in case of an emergency.
- **K.** In any case of conflict between notes, details, and specifications, the most stringent requirements govern.
- **L.** Contractor shall protect pedestrians, motorists, and any other persons or property by restricting access throughout the project to any areas where persons or property may be injured by construction work.
- **M.** Proper temporary bracing of all construction work in progress is the Contractor's responsibility. The Contractor shall maintain on site the proper materials for quickly reinforcing the existing structure should the need arise.
- **N.** Open flames, heat guns, and all other hot work operations are prohibited unless prior written approval for their use has been obtained from the Architect. Smoking is prohibited within and adjacent to the building as well as anywhere on the property. All soldering of roof metal work must be done on the ground. Contractor(s) must post a fire watch and have appropriate fire extinguishers on hand for all hot work operations.

- **O.** Parking is available on site.
- **P.** Contractor may use the restroom facility in the building, but then must take responsibility for keeping the building clean throughout the construction period.
- **Q.** Contractor may use the electricity at the building.

#### 2. Products

- 2.1 MATERIALS
  - A. All existing historic fabric is to remain or be replaced "in kind" to match existing in composition, size, species, grade, finish, and installation methodology (except where noted). Existing architectural elements are to be used as guides.

#### 3. Execution

- **3.1** Contractor shall verify all field conditions and dimensions and be familiar with all facets of the proposed work prior to starting work on related items. Verify and/or establish all existing conditions and dimensions at the site before ordering any material and commencing any work. Prior to start of any work, the successful contractor will verify all dimensions and conditions, and report any unforeseen conditions or discrepancies to the Architect.
- **3.2** Contractor is to provide for all necessary temporary facilities and utilities on site as deemed necessary to complete the project. Placement of contractor-related facilities, if any, such as dumpsters, a project trailer, port-a-john, etc. must be coordinated with the Owner and approved in advance by the Architect.
- **3.3** Any acts of damage, theft or other similar incidents will be the responsibility of the Contractor. Contractor agrees to indemnify and hold harmless Owner from any and all expense, claim, damages, losses, including attorney's fee, resulting from any accidents or injuries to any person who is an agent, workman and/or employee of the Contractor or any subcontractor, or who is at the premises at the request or invitation of the Contractor or subcontractor.

#### **SECTION 01030 – Alternates**

#### 1. General

- **1.1** DESCRIPTION
  - **A.** List price for substitution of each alternate. Include cost of modifications to other work to accommodate alternate.
    - 1. Deduct-Alternate #1: The Bidder shall provide all work to replace the roofs of the rear porch, the well cover structure, and the pent roof using red cedar instead of white cedar shingles.
    - 2. Add-Alternate #1: The Bidder shall include all work to prepare and repaint all exterior woodwork not included in the Base Bid with the exception of the main roof's cornice and bargeboards that were already painted in 2013, and the windows.
    - 3. Add-Alternate #2: The Bidder shall include all work to prepare and paint the exterior sides of the windows, including frames, sash, trim, shutters (where existing), and shutter hardware.

- 2. Products Not Applicable To This Section
- 3. Execution Not Applicable to This Section

#### **SECTION 01045 - Cutting and Patching**

- 1. General
  - 1.1 DESCRIPTION
    - **A.** "Cutting and patching" includes cutting into existing construction to provide for the installation or performance of other work and subsequent fitting and patching required to restore surfaces to their original condition.
    - **B.** The goal is to save as much historic fabric as possible. Repair rather than replace whenever possible.
    - **C.** See also individual sections of specifications for specific instructions regarding cutting and patching requirements and limitations as applicable to those products. Comply with project requirements for:
      - 1. Visual requirements, including special detailing.
      - 2. Inspection, preparation, and performance.
      - 3. Cleaning.

#### 2. Products

- 2.1 MATERIALS
  - **A.** Match existing materials for cutting and patching work with new materials conforming to project requirements.
  - **B.** Use materials for cutting and patching that are identical to existing materials. If identical materials are not available, or cannot be used, use materials that match existing adjacent surfaces to the fullest extent possible with regard to visual effect and that will result in equal-or-better performance characteristics. All alternate materials must be submitted to the Architect for approval prior to installation.

#### 3. Execution

#### 3.1 STRUCTURAL WORK

- **A.** Do not cut-and-patch structural work in a manner resulting in a reduction of load-carrying capacity or load/deflection ratio.
- **B.** To prevent failure, provide temporary support of work to be cut.

#### 3.2 VISUAL/QUALITY LIMITATIONS

- **A.** Do not cut-and-patch work exposed to view (exterior and interior) in a manner resulting in noticeable reduction of aesthetic and functional qualities, as judged by Architect.
- **B.** Before cutting, examine surfaces to be cut and patched and conditions under which the work is to be performed. If unsafe or otherwise unsatisfactory conditions are encountered, take corrective action before proceeding with the work.

- **C.** Protect other work during cutting and patching to prevent damage. Provide protection from adverse weather conditions for that part of the project that may be exposed during cutting and patching operations.
- **D.** Where cutting is required, use hand or small power tools designed for sawing or grinding, not hammering and chopping. Cut through concrete and masonry using a cutting machine such as a carborundum saw or core drill. Cut holes and slots neatly to size required with minimum disturbance of adjacent work. To avoid marring existing finished surfaces, cut and drill from the exposed or finished side into concealed surfaces. Temporarily cover openings when not in use.
- **E.** Patch with seams which are durable and as invisible as possible. Restore exposed finishes of patched areas and where necessary extend finish restoration into retained adjoining work in a manner which will eliminate evidence of patching and refinishing.

#### 3.3 INSTALLATION

- **A.** Inspect conditions prior to work to identify scope and type of work required. Notify Owner of work requiring interruption to building services or Owner's operations. Conform to project requirements listed above.
- **B.** Perform work with workmen skilled in the trades involved. Prepare sample area of each type of work involved for approval.
- C. Clean work area and areas affected by cutting and patching operations.

#### SECTION 01100 - Procedures, Controls, and Payments

#### 1. General

#### **1.1** DESCRIPTION

- A. Provide coordination of work.
  - 1. Supervisory personnel.
  - 2. Preconstruction conference, if determined necessary.
  - 3. Monthly meetings.
  - 4. Other meetings.
- **B.** Submit monthly and special reports.
- C. Submit progress schedule, bar-chart type, updated monthly.
- D. Prepare submittal schedule; coordinate with progress schedule.
- E. Submit schedule of values.
- F. Submit schedule of required tests (payment and responsibility).
- **G.** Perform surveys:
  - 1. Laying out the work and verifying locations during construction.
  - 2. Final site survey.
- **H.** Submit record construction documents; to be maintained and annotated by Contractor as work progresses.

- I. Submit payment request procedures.
- J. Submit beginning, progress, and completion photographs.
- **K.** Perform quality control during installation.
- L. Perform cutting and patching.
- M. Clean and protect the work.
- 2. Products Not Applicable To This Section
- 3. Execution Not Applicable To This Section

#### SECTION 01300 - Submittals, Products, and Substitutions

- 1. General
  - 1.1 DESCRIPTION
    - A. Project Schedule: Within 15 days of the date established for "commencement of the work," submit a comprehensive progress schedule indicating a time bar or specific completion date for each significant category of work to be performed. Arrange schedule to indicate required sequencing and to show time allowances for submittals, inspections, and similar time margins.
    - **B.** Project Meetings: Attend progress and coordination meetings attended by representatives of each entity engaged for performance of work. It is the Contractor's responsibility to coordinate with his subcontractors to attend meetings as necessary. The Architect will distribute copies of minutes to those attending and others affected.
    - C. Payment Requests: Submit a request each calendar month. Use AIA Form G702, fully completed and executed. The Contractor shall submit with each executed AIA Form G702, a triplicate set of progress photos, including negatives. As the project is partially funded by grant sources, payment will be made within 45 days of Architect's Certification. As the Owner is a tax-exempt organization, there should not be any tax on any materials or labor.
    - **D.** Shop Drawings, Product Data, Samples:
      - 1. Samples of materials which will be required to be provided to Architect and Owner include:
        - a. White cedar shingles (if Deduct-Alternate #1 is NOT accepted)
        - b. Red cedar shingles (if Deduct-Alternate #1 is accepted).
        - c. Flashing.
        - d. Paint color.
        - e. A list of manufacturer's product data to be supplied in advance (with printed data, maintenance manuals, warranty information, and related documents.)
      - 2. Comply with project format for submittals, all to be directed to the Architect.
        - a. Do not delay construction. Order samples with sufficient time for review and approval. Allow sufficient lead time for material order after approval of sample and before the material is required for construction.
        - b. Shop drawings, reviewed and annotated by the Contractor 4 blackline prints.
        - c. Product data 4 copies.

- d. Samples -one that matches, plus extra samples as required to indicate range of color, finish, and texture to be expected.
- e. Mock-ups as required in the individual sections.
- f. Inspection and test reports 4 copies.
- g. Warranties 4 copies.
- h. Survey data 4 copies.
- i. Closeout submittals -4 copies.
- j. Project photographs 3 sets of 4x6 color prints with the Contractor's Application for Payment each month and at beginning and end of construction (one for the Architect, one for the Camden County Open Space Preservation Trust Fund, and one for the Owner). Include digital images on disk or photographic negatives in the Owner's set. (Each and every Application for Payment will not be processed without photographic documentation of work for which payment is requested.)
- 3. Provide types of submittals listed in individual sections and number of copies required.
- 4. Provide required resubmittals.
- 5. Samples and shop drawings shall be prepared specifically for this project. Shop drawings shall include dimensions and details, including adjacent construction.
- 6. Provide warranties as specified; warranties shall not limit length of time for remedy of damages Owner may have by legal statute. Warranties shall be signed by Manufacturer and Contractor.
- 7. Provide products selected or approved equal. Products submitted for substitution shall be submitted with acceptable documentation, and include costs of substitution including related work.
- 8. Substitutions shall be submitted prior to award of contract, unless otherwise acceptable. The cost of professional services to review substitutions requested by the Contractor after the award of contract shall be the responsibility of the Contractor.
- 9. Punch list Contractor will be responsible for inspecting his work and completing all anticipated punchlist work in house so that all work is substantially complete when the Contractor calls for the Architect to prepare the project's Punchlist. Owner will pay for one site visit for Architect to develop Punchlist and one site visit to verify successful completion of the Punchlist work. If additional site visits by the Architect are required due to the Contractor's inability to successfully complete all punchlist work before the Architect's return visit, the cost thereof will be the contractor's responsibility, and if not paid, will be deducted from the contractor's retainage on the final Application for Payment.
- 2. Products Not Applicable To This Section
- 3. Execution Not Applicable To This Section

# SECTION 01500 - Temporary Facilities

- 1. General
  - 1.1 DESCRIPTION
    - A. Provide temporary services and utilities:
      - 1. Water (potable and non-potable).

- 2. Power.
- 3. Telephone.
- **B.** Provide construction facilities:
  - 1. Construction equipment.
  - 2. Enclosure (if desired).
- **C.** Provide security and protection requirements:
  - 1. Fire extinguishers.
  - 2. Site enclosure fence, barricades, warning signs, and lights (as necessary).
  - 3. Building enclosure and lock-up.
  - 4. Environmental protection.
- **D.** Provide personnel support facilities:
  - 1. Drinking water.
  - 2. Project identification sign.
  - 3. Cleaning and trash removal.
- 2. Products Not Applicable To This Section
- 3. Execution Not Applicable To This Section

#### SECTION 01700 - Project Closeout

#### 1. General

#### 1.1 PREREQUISITES TO SUBSTANTIAL COMPLETION

- A. Punch list.
- **B.** Submittal documentation.
- C. Warranties.
- **D.** Certifications.
- E. Architect's Certificate of Substantial Completion.
- **1.2** PREREQUISITES TO FINAL ACCEPTANCE
  - A. Final payment request with supporting documentation.
  - **B.** Completed punch list.
  - C. Provide record document submittals.

#### **1.3** CLOSEOUT PROCEDURES

- A. Final cleaning and touch-up.
- **B.** Removal of temporary facilities.
- C. Turnover to Owner's personnel.

- 2. Products Not Applicable To This Section
- 3. Execution Not Applicable To This Section

# END OF DIVISION 1 -GENERAL REQUIREMENTS

Specifications Gabreil Daveis Tavern Exterior Restoration, Phase 2

# **SITE WORK**

# SECTION 02070 - Selective Demolition

# 1. General

- **1.1** DESCRIPTION
  - A. Perform selective demolition as required including, but not limited to, the following:
    - 1. Remove existing cedar shingle roof from pent roof, rear porch roof, and well roof. Retain all TCS flashing (if any) for evaluation and potential reuse.
    - 2. Remove aluminum flashing on rear porch roof.
    - 3. Demolish components designated to be removed.
    - 4. Protect all portions of building adjacent to or affected by selective demolition.
    - 5. Remove and legally dispose of demolished materials off-site.
  - **B.** Unless otherwise noted, the term "remove" shall mean disconnect or disassemble **only**. Nothing shall be hauled away from the site until approved by the Owner.
  - **C.** Removed materials not desired by Owner shall become the property of the Contractor, and shall be promptly hauled away from the site and are to be disposed of legally.
  - **D.** Materials herein indicated or shown on the drawings to be re-used after removal shall be carefully disassembled, labeled, and stored by the Contractor, and shall be examined and approved for re-use by the Owner after disassembly.
  - **E.** It shall be the Contractor's responsibility to provide adequate shoring during all phases of the disassembly. It shall also be the Contractor's responsibility to protect adjacent structures, machinery, equipment, personnel, vehicles, and the public.

# 1.2 SUBMITTALS

- A. Submit for approval selective demolition schedule.
- **B.** Submit schedule indicating proposed methods and sequence of operations for selective demolition work to Architect and Engineer for review prior to commencement of work.
- **C.** Certification: Within 3 days of disposal, submit certification, evidence, or receipts clearly establishing that materials were properly and legally conveyed to, and deposited at, a legal disposal site.

# **1.3** QUALITY ASSURANCE

A. Comply with governing codes and regulations. Use experienced workmen..

# 1.4 PROJECT CONDITIONS

- A. Areas of work will not be occupied by Owner's personnel during work.
- **B.** The building will not be open to the public during the construction period.

- 2. Products Not Applicable To This Section.
- 3. Execution
  - 3.1 DEMOLITION
    - **A.** Perform selective demolition work in a systematic manner. Use such methods as required to complete work indicated in these specifications in accordance with progress schedule and governing regulations.
    - **B.** Perform all removals and cutting carefully to avoid damage to adjacent elements scheduled to remain. Removal of existing roofing shall be undertaken using hand tools only.
    - **C.** Provide exterior and interior shoring, bracing, and support to prevent movement, settlement, or collapse of sections of the structure indicated to remain.
    - **D.** Take all precautions and use all applicable protective devices or materials that are required to assure that specified portions of the structure to remain are not loaded beyond safe limits and are not broken or otherwise damaged.
    - **E.** If safety of structure appears to be endangered at any time, cease operations immediately and notify Architect.
    - **F.** Use all measures required to protect the structure and its materials, finishes, fixtures, and assemblies from damage resulting from the work of this section. Provide all temporary protection and facilities required to ensure that no removed material damages surfaces not indicated to be removed.
    - **G.** Provide temporary protection to shield elements exposed to the weather as a result of the selective demolition.
    - **H.** Do not damage building elements and improvements indicated to remain. Items of salvage value (if any) and stated, in writing, not to be desired by the Owner may be removed from the site with the permission of the Owner. Nothing may be removed from the site without the permission of the Owner. Storage or sale of items at the project site is prohibited.
    - I. Do not close or obstruct streets, walks, drives, parking areas, or other occupied or used spaces or facilities without the written permission of the Owner and the authorities having jurisdiction. Do not interrupt utilities serving occupied or used facilities without the written permission of the Owner and authorities having jurisdiction. If necessary, provide temporary utilities.
    - J. Cease operations if public safety or remaining structures are endangered. Perform temporary corrective measures until operations can be continued properly.
    - **K.** Carefully identify, disassemble, and demolish those features designated demolish or designated remove.
    - L. Perform disassembly, demolitions, and removals of all types in a controlled manner without damage to the historic structure or features, damage to the materials or construction to remain, injury or alteration to disassembled material or component, and leaving surfaces ready to receive new or assembled work.

#### 3.2 SCHEDULE

- **A.** Items to be removed:
  - 1. Items to be left in place or stored and reinstalled: TCS Flashing.

2. Items to be removed from site by Contractor: wood shingles of pent, porch, and well roofs (only).

#### 3.3 CLEAN-UP

- A. Comply with Article 3.15 of General Conditions in Part 4.
- B. Remove all materials designated and approved to be discarded at the end of each shift.
- C. Remove and dispose of temporary protective materials when complete.
- D. Dispose of all materials off site in compliance with government regulations.

#### SECTION 02080 - Paints And Coatings Removal

#### 1. General

NOTE: Exterior paint on wood or metal surfaces should be removed to sound substrate only. Complete paint removal from wood or metal is **not** permitted or required unless the paint is alligatored or deteriorated down to bare wood or metal. In areas where these conditions exist (alligatoring, exposed wood or metal, and/or deteriorated paint on masonry), the contractor shall completely remove paints and coating as specified below. See Specification Section 09900 for paint removal only to a sound substrate.

#### **1.1** DESCRIPTION

- **A.** Work included: Remove paint, sealants and coatings of all types from exterior wood and metal, and stone substrates (including interior door and window surfaces), without physical or chemical damage to the substrates, including:
  - 1. Pre-testing of soil adjacent to building for lead levels.
  - 2. Protection of adjoining surfaces.
  - 3. Chemical removal.
  - 4. Scraping and wipe down.
  - 5. Neutralizing of chemical removers.
  - 6. Rinsing.
  - 7. Complete containment and collection of chips, rinse water, runoff, residue, dusts and abrasives.
  - 8. Clean-up and disposal (Note: any disposal fees are the Contractor's responsibility.)
  - 9. Post-paint removal testing of soil for lead levels.

#### **1.2** SUBMITTALS

- **A.** Chemical paint removal systems product data: 7 days after award of contract, submit Manufacturer's:
  - 1. Specifications and product data.
  - 2. Application instructions.
  - 3. Storage instructions.
- **B.** Mock-ups: At least five (5) days before the start of paint removal or within 21 days after award of contract (whichever comes first), submit paint removal mock-up on all paint/ substrate combinations.

- **C.** Procedure: At least ten (10) days before the start of paint removal or within 21 days after award of contract (whichever comes first), submit:
  - 1. Procedure complying with the requirements of governmental agencies having jurisdiction over the removal and disposal of lead based paint.
  - 2. Submit a notarized statement, signed by a responsible officer of the firm performing the work, attesting to the fact that the procedure complies with applicable government requirement.
  - 3. Submit pre-paint removal soil analysis results for lead levels taken by an certified independent environmental consultant. Soil samples may not be taken by the Contractor, and the Owner shall be notified and be present when the samples are being taken, and labeled duplicate samples shall be provided to Owner.
  - 4. Certification: Within three (3) days of disposal, submit certification, evidence, or receipts clearly establishing that materials were properly and legally conveyed to, and deposited at, a legal disposal site.
  - 5. Submit post-paint removal soil analysis results for lead levels taken by an certified independent environmental consultant. Soil samples may not be taken by the Contractor, and the Owner shall be notified and be present when the samples are being taken.

#### **1.3** QUALITY ASSURANCE

- **A.** Lead Based Paint (if any): Comply with applicable health, safety, and environmental requirements of the government agencies having jurisdiction, as well as industry standards, that govern lead-based paint abatement work or hauling and disposal of hazardous waste materials, including, but not limited to, the following:
  - 1. OSHA, including but not limited to:
    - a. 29 CFR 1926.20: General safety and health provisions.
    - b. 29 CFR 1926.28: Personal protective equipment.
    - c. 29 CFR 1926.55: Gases, vapors, fumes, dusts, and mists.
    - d. 29 CFR 1926.57: Ventilation.
    - e. 29 CFR 1926.62: Lead Construction Standard.
  - 2. DOT: U.S. Department of Transportation, including but not limited to:
    - a. 49 CFR 171 and 172: Hazardous Substances.
  - 3. EPA, including but not limited to:
    - a. 40 CFR 745 (Proposed) Lead Based Paint Activities: Training, Certification, and Work Practice Requirements.
  - 4. HUD: Department of Housing and Urban Development:
    - a. 24 CFR 35, 905: Lead Based Paint Hazard Elimination; Interim Rule 941, 965 and 968.
- **B.** Take all necessary actions and precautions to assure the safety of the public and workers, adjacent buildings and property, on and off site, and the environment.
- **C.** Provide manufacturer's representative to observe each mock-up application and to make written recommendations on existing conditions, chemical paint removal.
- **D.** Paint chips, rinse water, and residue must be contained and collected. Do not permit this material to become airborne, to enter the soil, or to contaminate other surfaces.

- 1.4 The following paint removal methods are prohibited: open flame or heat, water-abrasive or air-abrasive removal, pressure water blasting (with or without abrasives) or power sanding or mechanical impingement. Water pressure is not to exceed 600 p.s.i. at the nozzle.
- **1.5** Chemical paint removal is limited to areas where there is no sound paint substrate and all paint must be removed down to the bare wood, metal, or masonry.
- **1.6** Contractor shall be responsible for compliant removal of any lead contamination that occurs as a result of painting operation as defined by an increase in lead level in post-paint soil samples in comparison with pre-paint soil samples.
- **1.7** If contractor fails to provide independent pre-paint soil testing, any and all lead contamination of post-paint soil shall be the contractor's responsibility.

# 2. PRODUCTS

#### 2.1 CHEMICAL PAINT REMOVAL

A. Chemical Paint Removal System:

One possible source is "Peel Away 7" non-alkaline, non-methylene chloride, proprietary organic solvent mixture, paste paint stripper with a fibrous laminated cloth applied as a backing/seal to the paste, available from Dumond Chemicals, Inc., 1501 Broadway, New York, NY 10036, tel: (212) 869-6350, or approved equal.

- **B.** Or other non-methylene chloride chemical paint remover, demonstrated harmless to the substrate, and demonstrated equally effective in removing the existing coating as approved by the Architect.
- C. Denatured alcohol or mineral spirits for final clean down.

#### **2.2** TOOLS

**A.** Tools compatible with the chemical remover and the various substrates include: stiff non-metallic bristle brushes/medium natural bristle brushes and metallic and non-metallic scrapers of various sizes, a garden hose with spray nozzle.

# 2.3 MILDEWCIDE

A. Bleach or other approved substance.

# 2.4 OTHER MATERIALS

**A.** Gloves, protective and clean-up gear, sheeting and masking tape sufficient for proper protection, application, and containment and collection of residue and waste.

# 3. EXECUTION

#### 3.1 SURFACE CONDITIONS

**A.** With careful study of the contract documents and the building, examine all paint to be removed, identify coatings removal methods required, and with the Architect, confirm the limits of paint removal.

# 3.2 ENVIRONMENTAL CONDITIONS

- **A.** Do not apply chemical paint remover if air temperature falls below 40 degrees F at night or during application, or when weather conditions create drifting of spray or debris.
- **B.** Do not allow paint chips to touch the ground or leave the work area. Contractor is responsible for laying tarps and providing all protective and collection measures.

#### **3.3** PROTECTIVE MEASURES

- A. Install protective measures prior to paint removal.
- **B.** Install and secure temporary waterproof protection to prevent damage at wall openings, windows, door and architectural features, masonry, and interior finishes and furnishings. Contractor is responsible for laying tarps and providing all protective and collection measures.
- C. Do not nail temporary protective coverings to the structure.
- **D.** Install measures to contain, collect and dispose of all waste materials, residue, or liquids generated from this Work.
- **E.** Provide protective measures so no paint chips reach the ground surface. Contractor is responsible for laying tarps and providing all protective and collection measures.

#### 3.4 ACCEPTANCE CRITERIA

- A. No loose or flaking paint is to remain on the substrate.
- B. Remaining paint should be evenly distributed, and tightly adhered to the substrate.
- **C.** Transitions between painted areas and areas where paint layers have been removed are to be hand-sanded smooth, so that the transition is not visible to the naked eye. If architect's fingernail catches on transitions, paint preparation will be deemed inadequate.
- D. Substrate is to be undamaged or unstained by removal, and fully neutralized.
- **E.** No paint chips or paint removal residue shall be on the ground or adjacent surfaces. Contractor is responsible for laying tarps and providing all protective and collection measures.

#### 3.5 CHEMICAL PAINT REMOVAL

- **A.** Apply chemical paint remover by trowel, brush, or roller, to the thickness recommended by the manufacturer.
- **B.** Apply the laminated cloth backing, lapping edges to form a seal. Secure backing cloth with tape.
- C. Let stand until paint has softened (2-96 hours).
- D. Remove backing and residue in accordance with the manufacturer's instructions.
- **E.** Wood: carefully scrape surface and recesses to remove softened paint and residue. Select and use scraping tools with care, keep scrapers sharp and clean, do not alter wood surface profile, and wipe down with cloth or sponge soaked with denatured alcohol or mineral spirits.
- **F.** Repeat entire chemical remover sequence again.
- G. Chemical paint removal must be followed by a neutralizing process.

#### 3.6 CONTAINMENT AND COLLECTION

A. Construct and maintain a system to contain and collect all residue and runoff for disposal; do not permit runoff or residue to contact masonry foundations, surrounding soil, or surrounding hard surfaces. Contractor is responsible for laying tarps and providing all protective and collection measures.

#### 3.7 CLEAN-UP

- A. Comply with Article 3.15 of General Conditions in Part 4.
- B. Remove all waste materials and liquids at the end of each shift.
- **C.** Dispose of all materials off site in compliance with governmental requirements. If necessary, assist the Owner in obtaining an EPA number. Contractor will be responsible for all costs associated with disposal, including fees to obtain an EPA number if applicable.
- **D.** Leave substrate free of contaminants or residues incompatible with the paint systems and ready to receive coatings.
- **E.** Remove any soil containinated by painting work, in accordance with all applicable regulations. Provide new topsoil to replace contaminated soil.

#### **END OF DIVISION 2-SITE WORK**

Specifications Gabreil Daveis Tavern Exterior Restoration, Phase 2

# 6

# WOOD

# **SECTION 06350 - Wood Restoration**

#### 1. General

- 1.1 DESCRIPTION
  - A. Work included: Epoxy repair and restoration of existing wood, including:
    - 1. Hole in cornice of pent roof.
    - 2. Reset dowels and pegs.
    - 3. Miscellaneous woodwork repairs in preparation for painting.

#### 1.2 SUBMITTALS

- A. Product data: 14 days after award of the Contract, submit:
  - 1. Manufacturer's specifications and product data for epoxy repair system.
  - 2. Manufacturer's application instructions for epoxy repair system.

# **1.3** QUALITY ASSURANCE

- A. Safety: Take all necessary actions and precautions to assure safety of:
  - 1. The public and workers
  - 2. Adjacent materials and surfaces
  - 3. The environment, especially with respect to solvents and epoxies.
- **B.** Comply with governing codes and regulations. Provide products of acceptable manufacturers that have been in satisfactory use in similar service for three years. Use experienced installers. Deliver, handle, and store materials in accordance with manufacturer's instructions.

#### 2. Products

#### 2.1 EPOXY REPAIR SYSTEM

- A. Epoxy repair system:
  - 1. Consolidating low viscosity epoxy resins and hardeners
  - 2. Patching epoxy resins, hardeners and filler
  - 3. Additives and catalysts
  - 4. Provide from a single manufacturer/supplier as follows:
    - a. Liquidwood and WoodEpox from Abatron, Inc., 33 Center Drive, Gilberts, IL 60136, tel: (800) 445-1754.
    - b. West System, from Gougeon Brothers, Inc., P.O. Box X908, Bay City, MI 48707, tel: (517) 684-7286.

- c. Beta System, from Dell Corporation, P.O. Box 1462, Rockville, MD 20850, tel: (301) 279-2612.
- d. or an approved equal.
- B. Provide compatible solvents, tools, gloves, goggles, and safety equipment as necessary.
- **C.** Provide wood for dutchmen in accordance with:
  - 1. Section 06200: Finish Carpentry for:
    - a. Finish carpentry restoration
  - 2. Section 08210: Wood Doors and Windows Restoration for:
    - a. Wood Doors and Windows Restoration

#### 3. Execution

#### 3.1 ENVIRONMENTAL CONDITIONS

- **A.** Perform wood epoxy restoration only when ambient weather conditions are within the recommended limits of the epoxy manufacturer for:
  - 1. Temperature
  - 2. Relative humidity
  - 3. Moisture content of wood

#### 3.2 EPOXY REPAIRS

- A. Manufacturers' Instructions:
  - 1. Follow manufacturers' instructions and safety recommendations exactly.
  - 2. Plan for epoxies in mass placements that may result in high heat release.
  - 3. Plan and execute epoxy placement to avoid dangerous curing temperatures.
- **B.** Preparation of repair areas:
  - 1. Remove all loose wood fiber, rotted wood, paint and paint chips, dirt, grease, mold, fungus, etc., to assure proper adhesion.
  - 2. Prepare wood substrate per manufacturer's instructions.
  - 3. Verify proper wood moisture content:
    - a. If too high, dry the wood.
- **C.** Epoxy consolidation:
  - 1. Epoxy consolidate porous or "punky" deteriorated wood with liquid epoxy.
  - 2. Drill holes and apply consolidant per manufacturer's instructions.
- **D.** Split repair:
  - 1. Apply epoxy adhesive to both faces of split.
  - 2. Join pieces and clamp/restrain in place until cured.
- E. Hole repair:
  - 1. Use putty epoxy in layers. If not structural wood, fill larger holes with wood and finish with putty epoxy.
- F. Cleaning:

- 1. Remove excess epoxy from exposed surfaces.
- 2. Use recommended solvents.
- 3. Do not drip or smear epoxy on exposed surfaces. Protect adjacent surfaces.
- G. Finishing:
  - 1. Sand, carve, and otherwise trim the exposed surface of the fully cured repair to match surface texture and elevation of the adjacent original existing materials.
  - 2. All surfaces not treated with epoxy will be treated with a combined "natural" consolidant composed of equal parts boiled linseed oil, gum turpentine, and spar varnish. Apply two coats, allow twenty four hours before application of primer coat.

#### **END OF DIVISION 6 - WOOD**

Specifications Gabreil Daveis Tavern Exterior Restoration, Phase 2

# **THERMAL & MOISTURE PROTECTION**

# 7

# SECTION 07310 - Shingles

#### 1. General

- **1.1 DESCRIPTION** 
  - A. Provide shingles for roofing.
    - 1. Wood shingles.
      - a. Atlantic White Cedar (Base Bid)
      - b. Western Red Cedar (Deduct-Alternate #1)
- 1.2 SUBMITTALS
  - A. Submit for approval samples, product data, mock-ups, warranty, extra stock.
- 1.3 QUALITY ASSURANCE
  - A. Comply with governing codes and regulations. Provide products of acceptable manufacturers which have been in satisfactory use in similar service for three years. Use experienced installers. Deliver, handle, and store materials in accordance with manufacturer's instructions.
  - **B.** Certification from the Red Cedar Shingle & Handsplit Shake Bureau for materials required for wood shingles.
  - **C.** Installer must be certified by the Red Cedar Shingle & Handsplit Shake Bureau and must provide a 20 year labor and material warranty.

# 2. Products

- 2.1 MATERIALS
  - A. Wood shingles, Atlantic White Cedar Shingles by Dow's of Corinth, ME (207-884-8299) Roof Grade extra clear, or approved equal (Base Bid) or UL Class C: Western red cedar shingles (Deduct-Alternate #1) matching the profile, length, exposure, thickness, and texture of the original; No. 1 Blue Label sawn and kiln-dried, 24" length.
  - **B.** Hot dipped, zinc-coated or aluminum nails, of type and size recommended by Red Cedar Shingle & Handsplit Shake Bureau.
  - C. Penetrating Sealer: Andek Polaseal E.F.M. by Andek Corporation, P.O. Box 392, 850 Glen Avenue, Moorestown, NJ 08057-0392 Phone: (856)786-6900 Fax: (856)786-0580

#### 3. Execution

- 3.1 INSTALLATION
  - **A.** Wood shingle roof shall be installed with a combed ridge with the comb on the wind slope. A shop drawing must be provided by the contractor to the Architect for approval prior to installation.

- **B.** Replace individual pieces of deteriorated shingle lath as necessary for complete installation of roof.
- **C.** Install materials and systems in accordance with manufacturer's instructions and approved submittals. Install materials and systems in proper relation with adjacent construction and with uniform appearance. Coordinate with work of other sections.
- **D.** Apply one heavy coat of Andek Polaseal E.F.M. Penetrating Sealer (or an approved equal clear wood preservative with UV protection and fire retardant) in accordance with manufacturer's instructions to dry, clean surface at a maximum coverage of 150 square feet per gallon.
- E. Restore damaged components. Clean and protect work from damage.

# SECTION 07600 - Flashing and Sheet Metal

#### 1. General

- **1.1 DESCRIPTION** 
  - A. Provide flashing and sheet metal components for building construction.
    - 1. Metal flashing and counter-flashing.

# 1.2 SUBMITTALS

- A. Submit for approval:
  - 1. Samples of sheet metal flashing, trim, and accessory items.
    - a. 8" square samples of specified sheet materials to be exposed as finished surfaces.
    - b. Samples of each type of metal joint required (e.g., locked and soldered; lapped, riveted, and soldered). Samples should be cut in half to verify that they are fully sweated. Samples seams shall be submitted by each roofing mechanic proposed by the contractor for soldering work.
  - 2. Shop Drawings of each item specified showing layout, profiles, method of joining, and anchorage details.
  - 3. Product Data from the manufacturers.

# 1.3 QUALITY ASSURANCE

- **A.** Comply with governing codes and regulations. Provide products of acceptable manufacturers which have been in satisfactory use in similar service for three years.
- **B.** Comply with Architectural Sheet Metal Manual published by Sheet Metal and Air-Conditioning Contractors National Association (SMACNA):
  - 1. Standard Catalog items may be used for flashing, trim, and similar purposes provided such items meet or exceed SMACNA Manual.
- C. Safety: Take all necessary actions and precautions to assure the safety of:
  - 1. The public and workers.
  - 2. Adjacent buildings and property, on site and off site.

- 3. The environment, especially with respect to solvents and soldering.
- **D.** Use experienced installers who have completed sheet metal flashing and trimwork similar in material, design, and extent to that indicated for this project and with a record of successful performance.
- **E.** Coordinate the work of this section with that of adjoining work for proper sequencing of each installation. Ensure best possible weather resistance, durability of work, and protection of materials and finishes.
- F. Deliver, handle, and store materials in accordance with manufacturer's instructions.

#### 2. Products

- 2.1 MATERIALS
  - A. Flashing:
    - 1. Reuse any existing TCSS flashing if still sound.
    - 2. From roofer's yard stock, Terne Coated Stainless Steel (TCSS) or TCSII Type 304 (18% chrome, 8% nickel) dead-soft stainless steel covered on both sides with Terne Alloy (50% zinc, 50% tin): 26 gauge for flashing and counter-flashing, if available.
    - 3. Zinc or lead-coated copper, min. 16 oz.
  - **B.** Accessories:
    - 1. Fasteners for TCSII: Stainless Steel or lead-coated copper.
    - 2. Solder: ASTM Specification B-32, pure tin solder for Terne II and TCSII.
    - 3. Flux: Rosin flux for TCSII.

# 3. Execution

- **3.1** PREPARATION
  - A. Examine the areas and conditions under which work of this section will be performed. Correct conditions detrimental to timely and proper completion of the work. Do not proceed until unsatisfactory conditions are corrected. Surfaces to which sheet metal is to be applied shall be smooth, sound, clean, dry and free from loose materials, sharp projections or defects that might affect the application.
  - **B.** DO NOT commence flashing installation prior to approval of all submittals required by this section.
  - **C.** Install all flashing with steps and required shapes as shown on drawings or to conform to field conditions.

#### 3.2 INSTALLATION

- **A.** Install materials and systems in accordance with manufacturer's instructions and approved submittals. Install materials and systems in proper relation with adjacent construction and with uniform appearance. Coordinate with work of other sections.
- **B.** Sheet Metal:
  - 1. Install sheet metal flashing and trim to withstand wind loads, structural movement, thermally induced movement, and exposure to weather without failing.
  - 2. Forming:

- a. Accurate to necessary dimensions and shapes.
- b. Make breaks/molded surfaces with true, sharp, and straight lines, arrises, and angles.
- c. Plane surfaces shall be free from waves and buckles.
- d. Generally, flashing shall be in lengths not exceeding 8' and free from longitudinal joints.
- e. Cope intersections and solder securely.
- f. Turn exposed edges back 1/2".
- 3. Accurately position and align materials.
- 4. Seams:
  - a. Lock seams: flat and true to line, sweated full of solder.
  - b. Lock seams and lap seams, soldered: at least 1/2" wide.
  - c. Lap seams, not soldered: lap according to pitch, 3" (min).
  - d. Lock and lap seams: in direction of flow.
- 5. Expansion/Contraction joints:
  - a. Make watertight.
  - b. Provide for expansion and contraction.
  - c. Space at 25'-0" maximum, unless otherwise noted.
- 6. Weatherproofing:
  - a. Finish watertight and weathertight.
- 7. Joints not soldered:
  - a. Secure with rivet or sheet metal screws for strength and stiffness.
- 8. Fastening:
  - a. Use clips or cleats. Provide continuous edge cleats where sheet metal extends over edges. Form edge cleats of 26 gauge TCSS at stainless steel flashing locations. Secure to building construction with brass screws spaced not more than 12" on centers. Install cleats in continuous, butted long lengths to allow metalwork to be hooked over lower edge not less than 3/4".
  - b. Do not nail unless authorized by the owner.
  - c. Spacing: 8" maximum.
  - d. Comply with manufacturer's instructions and recommendations and with SMACNA "Architectural Sheet Metal Manual." Allow for expansion. Isolate dissimilar materials.
- 9. Conceal fasteners where possible. Install new work with laps and joints which will be permanently water tight and weatherproof.
- C. Soldering:
  - 1. Solder joints:
    - a. Use solder/flux.
    - b. Thoroughly clean to bright metal with flux.
    - c. Use heavy soldering iron.

- d. Solder slowly with well-heated iron.
- e. Heat seams to completely fill with solder.
- f. Make exposed soldering on finished surfaces neat, full flowing, and smooth.
- g. Seams on slopes greater than 45 degrees should be soldered a second time to ensure that they are fully sweated. To prevent buckling (as necessary), spot puddle the solder and then fill in between the puddles.
- h. Promptly remove all flux residue.
- 2. Perform soldering off the building except for final closure/assembly.
  - a. Post and maintain fire watch during and after soldering on the building.
- **D.** Cleaning Up:
  - 1. Comply with Article 3.15 of General Conditions in Part 4.
  - 2. Clean all exposed sheet metal surfaces as each section of the work is completed. Remove all flux, excess solder, scraps and dirt immediately. Neutralize excess flux with a 5% to 10% solution of washing soda followed by washing with clear water. Avoid staining or discoloring adjacent surface.
  - 3. Restore damaged components and finishes. Clean and protect work from damage.

# SECTION 07900 - Joint Sealants

- 1. General
  - 1.1 DESCRIPTION
    - A. Provide sealants at intersections of building components.
  - 1.2 SUBMITTALS
    - A. Submit for approval:
      - Samples of each type and color of joint sealant required. Install joint sealant samples in 1/2" wide joints formed between two 6" long strips of material matching the appearance of exposed surfaces adjacent to joint sealants.
      - 2. Product data from manufacturers for each joint sealant product required.
        - a. Certification by joint sealant manufacturer that sealants plus the primers and cleaners required for sealant installation comply with local regulations controlling use of volatile organic compounds.
        - b. Certificates from manufacturers of joint sealants attesting that their products comply with specification requirements and are suitable for the use indicated.
        - c. Compatibility and adhesion test reports from elastomeric sealant manufacturer indicating that materials forming joint substrates and joint sealant backings have been tested for compatibility and adhesion with joint sealants. Include sealant manufacturer's interpretation of test results relative to sealant performance.
        - d. Product test reports for each type of joint sealants indicated, evidencing compliance with requirements specified.
      - 3. Preconstruction field test reports indicating which products and joint preparation methods demonstrate acceptable adhesion to joint substrates.

# **1.3** QUALITY ASSURANCE

- A. Comply with governing codes and regulations.
- **B.** Provide products of acceptable manufacturers which have been in satisfactory use in similar service for three years. Obtain joint sealant materials from a single manufacturer for each different product required.
  - 1. Submit to joint sealant manufacturers samples of materials that will contact or affect joint sealants for compatibility and adhesion testing as indicated below:
    - a. Perform tests under normal environmental conditions that will exist during actual installation.
  - 2. Submit not less than 3 pieces of each type of material, including joint substrates, shims, joint sealant backings, secondary seals, and miscellaneous materials.
  - 3. Schedule sufficient time for testing and analysis of results to prevent delay in the progress of work.
  - 4. Investigate materials failing capability or adhesion tests, and obtain joint sealant manufacturer's written recommendations for corrective measures, including use of specially formulated primers.
  - 5. Provide comprehensive test data for each type of joint sealant based on tests conducted by a qualified independent testing laboratory on current product formulations within a 24 month period preceding date of Contractor's submittal of test results to Architect.
    - a. Test elastomeric sealants for compliance with requirements as specified by reference to ASTM C 920. Include test results for hardness, stain resistance, adhesion and cohesion under cyclic movement (per ASTM C 719), low-temperature flexibility, modulus of elasticity at 100% strain, effects of heat aging, and effects of accelerated weathering.
  - 6. Prior to installation of joint sealants, field test their adhesion to joint substrates as follows:
    - a. Locate test joints where indicated or, if not indicated, as directed by Architect.
    - b. Conduct field tests for each type of elastomeric sealant and joint substrate indicated.
    - c. Notify Architect one week in advance of the dates and times when mock-ups will be erected.
    - d. Arrange for tests to take place with joint sealant manufacturers technical representative present.
    - e. Test joint sealants by hand pull method.
      - Install joint sealants in 60" joint lengths using same materials and methods for joint preparation and joint sealant installation required for completed work. Allow sealants to cure fully before testing.
      - 2. Make knife cuts horizontally from one side of the joint to the other followed by two vertical cuts approximately 2" long at side of joint and meeting horizontal cut at top of 2" cuts. Place a mark 1" from top of 2" piece.

- 3. Use fingers to grasp 2" piece of sealant just above 1" mark; pull firmly down at a 90 degree angle or more while holding a ruler along side of sealant. Pull sealant out of joint to the distance recommended by sealant manufacturer for testing adhesive capability, but not less than that equaling specified maximum movement capability in extension; hold this position for 10 seconds.
- f. Report whether or not sealant in joint connected to pulled out portion failed to adhere to joint substrates or tore cohesively. Include data on pull distance used to test each type of product and joint substrate.
- g. Sealants not evidencing adhesive failure from testing, in absence of other indications of noncompliance with requirements will be considered satisfactory. Do not use sealants that fail to adhere to joint substrates during testing.
- C. Use experienced installers. Do not proceed with installation when:
  - 1. Ambient and substrate conditions are outside the limits permitted by joint sealant manufacturer.
  - 2. When joint substrates are wet.
  - 3. Where joint widths are less than allowed by joint sealant manufacturer for application indicated.
  - 4. Until contaminants capable of interfering with their adhesion are removed from joint substrates.
- **D.** Deliver, handle, and store materials in accordance with manufacturer's instructions. Products should be in unopened containers or bundles with labels indicating manufacturer, product name and designation, color, expiration period for use, pot life, curing time, and mixing instructions for multi-component materials.
- **E.** Store and handle materials in compliance with manufacturer's recommendations to prevent their deterioration or damage due to moisture, high or low temperatures, contaminants, or other causes.

#### 2. Products

- 2.1 MATERIALS
  - A. Joints designed for expansion and movement conditions at site:
    - 1. Exterior joints on vertical surfaces: Non-sag polyurethane; Tremco Dymonic or approved equal.
    - 2. Primers, bond breakers, and backer rods compatible with sealant and adjacent surfaces.

# 3. Execution

- 3.1 INSTALLATION
  - **A.** Examine substrate; report unsatisfactory conditions in writing. Beginning work means acceptance of substrates.
  - B. Provide sealants in colors as selected by Architect from manufacturer's standards.
  - **C.** Install materials and systems in accordance with manufacturer's instructions and approved submittals. Install materials and systems in proper relation with adjacent construction and with uniform appearance. Coordinate with work of other sections. Clean

and prime joints, and install bond breakers, backer rods and sealant as recommended by manufacturers.

- **D.** Depth shall equal width up to 1/2" wide; depth shall equal 1/2 width for joints over 1/2" wide, except fill joints completely with fire-retardant products.
- **E.** Cure and protect sealants as directed by manufacturers. Replace or restore damaged sealants. Clean adjacent surfaces to remove spillage.

# END OF DIVISION 7 - THERMAL & MOISTURE PROTECTION

# **FINISHES**

# **SECTION 09900 - Painting**

# 1. General

- 1.1 DESCRIPTION
  - A. Provide painting and surface preparation for all except masonry: exterior surfaces, including electrical conduits and mechanical equipment,
    - 1. Base Bid
      - a. Rear porch posts, beams, soffit, fascia, siding on ends (both interior and exterior surfaces), and any other previously painted surfaces.
      - b. Pent roof's woodwork including cornice, fascia, soffit, bed molding, and end returns.
      - c. Well structure's previously painted woodwork, including, posts, beams, bargeboards, and end siding (both surfaces). Do not paint roof rafters, ridge beam, or cast iron pump.
    - 2. Add-Alternate 1
      - a. All previously painted surfaces, including bulkhead, doors, door trim and frames, but excepting the windows, the base bid work, and the main roof's cornices and bargeboards that were painted in 2013.
    - 3. Add-Alternate 2
      - a. Exterior surfaces of window sash, window trim, frames, shutters, and shutter hardware.
  - **B.** The side bathroom addition is scheduled for demolition (in the future) and does not get painted or receive any other work.

# 1.2 SUBMITTALS

- A. Submit for approval samples, product data, mock-ups, extra stock.
- **B.** Submit a drawdown of each color match to the Architect for approval of the color match and obtain a report to certify the approval of each color match.

# 1.3 QUALITY ASSURANCE

- A. Comply with governing codes and regulations. Provide products of acceptable manufacturers which have been in satisfactory use in similar service for three years. Use experienced installers. Deliver, handle, and store materials in accordance with manufacturer's instructions.
- B. Colors
  - 1. Trim and window sash shall be painted white to match existing.
  - 2. Flashing shall be painted to blend with adjacent surfaces.
    - a. Drip edges to be painted to match trim.

- b. Wall flashing at rear porch to be left unpainted.
- 3. Doors and shutters shall be painted red ochre to match Sherwin-Williams "Rookwood Red" SW2802.
- 4. Hardware and miscellaneous metal shall be painted gloss black.
- 5. Metal pump shall be left as is, without any preparation or painting.
- C. Color Matching
  - All color matching should be done in standard conditions of illumination. Illumination will be average daylight and tungsten light (3000K) for visual evaluation and will be illuminate/observer C<sup>2</sup>, specular component excluded (SCE) for any spectrophotometric measurement. Do not use fluorescent illumination in the color matching process.
- D. Color Measurement and Evaluation
  - 1. Each drawdown submitted to the Architect will be evaluated visually. The standard conditions of illumination will apply average daylight and tungsten light (3000K) for visual evaluation.
- E. Final Acceptance
  - 1. The final acceptance of all samples for color and appearance will be from job applied samples. Provide a brush-out (drawdown) of each color of paint brought to the job. Present the dried brush-out to the Architect for visual comparison.
  - 2. Provide final paint source and color formulation on each color in a letter to the Architect. This information will be used for any maintenance painting in the near future.
  - 3. Provide any unused paint, in original containers, to Owner for future use (touch-ups).

#### 2. Products

2.1 First-line standard products for all systems by Sherwin Williams, Benjamin-Moore, Pratt and Lambert, Finnaren & Haley, Glidden, or approved equal. If using Sherwin-Williams or other brands with a color-prime system, use the color-prime primer indicated for the chosen colors.

# 2.2 EXTERIOR PAINT SYSTEMS:

**A.** Wood for opaque finish: Paintable water repellent preservative; Latex primer; latex enamel, 2 coats.

#### 2.3 ACCESSORIES:

**A.** Chlorothalonil: Mildewcide supplement to be added to exterior paint. Verify compatibility with manufacturer.

# 3. Execution

- 3.1 INSTALLATION
  - A. Inspect surfaces, report unsatisfactory conditions in writing; beginning work means acceptance of substrate.

- **B.** Comply with manufacturer's instructions and recommendations for preparation, priming and coating work. Add mildewcide to exterior paints and apply paintable water repellent preservative to exterior wood. Coordinate with work of other sections.
  - 1. General: Clean surfaces thoroughly to remove dirt, chalk, mildew, organic growth, efflorescence, oil, grease, bird droppings, spider webs, or other surface deposits. Seal knots and sap streaks with a generous coat of Latex Primer/Stain Sealer after removing excess sap by treating with a heat gun and scraping. Remove rust and scale from ferrous material.
  - 2. Previously painted surfaces: To obtain proper adhesion, glossy or protected surfaces, such as porch ceilings, supports, overhangs, and areas not directly exposed to the weather, must be sanded and hosed down with plenty of water. Allow to dry. Scrape off all loose, scaling, or peeling paint and sand edges smooth. Sand all weathered bare wood areas. Old paint showing bad cracking, flaking, peeling, alligatoring, or blistering must be completely removed per Section 02080 above. Treat as an unpainted surface. Blistering and peeling are most often caused by moisture entering in, or trapped within a structure. Correct structural defects and provide venting where required before repainting. To remove dirt and chalk, scrub with detergent and water, thoroughly rinse and allow to dry. After cleaning, if mildew is present, remove by scrubbing with a mixture of one quart hypochlorite bleach in three quarts of water. Rinse thoroughly with clean water and allow to dry. All water applications shall be low pressure, maximum 600 psi at the nozzle.
  - 3. New Wood (if any): All newly installed wood must be primed and edge-primed on all surfaces prior to installation.
- **C.** Match approved mock-ups for color, texture, pattern and coverage. Re-coat or remove and replace work which does not match.
- **D.** Clean up, touch up and protect work.
- E. Professionally clean window panes if Add-Alternate #2 was accepted.

# END OF DIVISION 9 - FINISHES END OF SPECIFICATIONS