Project Manual for:
City of Negaunee
Fire Station Exterior Painting
200 S. Pioneer Avenue, Negaunee, MI

Issued:
June 19, 2018
Client Review

Project Number:
1812

Prepared By:

NORTHERN DESIGN WORKS

420 Rail Street
Negaunee, MI 49866
906-475-6616
WWW.NDW.US

Section 00 01 10
Table of Contents

Division 00 – Procurement and Contracting Requirements

Division 01 – General Requirements

Division 02 – Existing Conditions

Division 03 – Concrete

Not Used

Division 04 – Masonry

Not Used

Division 05 – Metals

Not Used

Division 06 – Wood, Plastics, and Composites

Not Used

Division 07 – Thermal & Moisture Protection

Division 08 – Openings

Not Used

Division 09 – Finishes

Division 10 – Specialties

End of Section

Section 00 11 16
Invitation to Bid

Notice is given hereby that

City of Negaunee

will accept bids from qualified contractors for construction of:

Fire Station Exterior Painting

according to Drawings and Specifications prepared by:

Northern Design Works
420 Rail Street
Negaunee, MI 49866

Including, but not limited to: Preparation and painting of exterior of building.

Sealed bids will be received at the office of City of Negaunee City Clerk, until 1:00 PM local time, July 11, 2018. At that time, bids will be publicly opened. Bids received after the date and time specified may be returned to the bidder, unopened.

Bids will be taken on a lump sum basis as defined on the bid form.

100% surety bonds for performance and payment of labor and materials are required.

Bid documents may be examined at the following locations:

Northern Design Works
420 Rail Street
Negaunee, MI 49866

Negaunee City Hall

Marquette Builders Exchange

Iron Mountain Builders Exchange

Builders Exchange of Wisconsin - Fox Valley

Delta County Builders Exchange

Bid documents are available from the office of the architect, upon payment of $30. Partial sets will not be issued. Electronic versions of the documents are available via e-mail or upon payment of a $20 fee for a CD-ROM copy to cover the cost of handling and delivery.

Contractors are requested to notify the architect of their interest in the project, so they can be placed on the plan holders list.

The owner reserves the right to reject any or all bids and to waive irregularity in the bidding or the bidding process and accept the bid that is most advantageous to the owner.

Dated: June 22, 2018 by: City of Negaunee

End of Section

Section 00 21 00
Instructions to Bidders

PART 1 - General

1.1 Summary

A. Section includes:

1. Bidder representations.
2. Bid submission.
3. Contract time.
4. Bidding documents.
5. Inquiries and addenda.
6. Product substitutions.
7. Site examination.
8. Bidder qualifications.
9. Subcontractors and suppliers.
10. Submission procedure.
11. Permits and Fees.
12. Rejection of bids.
13. Performance assurance.
14. Acceptance of bid.
15. Correction or withdrawal of bids.
16. Form of agreement between owner and contractor.

B. Related documents:

1. Section 00 11 16 – Invitation to Bid.
2. Section 00 41 00 – Bid Form.
3. Section 00 73 00 – Supplementary Conditions.

1.2 Bidder Representations

A. By submitting a Bid, the Bidder represents that:

1. The bidder has examined and understands the bidding documents.
2. The Bid is made in compliance with the bidding documents.
3. The bidder has examined the site in accordance with 'Site Examination' below.
4. The bid is based on the materials, equipment, and systems required by the bidding documents without exception.
5. The Bid is based solely on the information contained in the bidding documents, including addenda, and the bidder has not relied on any verbal statement from the Owner or Architect in the preparation of the Bid.

1.3 Bid Submission

A. Refer to Section 00 11 16 – Invitation to Bid for bid date, time, and location.

B. Bids received after the date and time stated above may be returned to the bidder un-opened.

C. Amendments to submitted bids will be permitted when received in writing prior to bid closing and when endorsed by the same party or parties who signed and sealed the bid.

1.4 Contract Time

A. The Work is to be substantially complete by November 15, 2018. Bidders may suggest revisions to completion time as a voluntary alternate on the bid form with a specific adjustment to their Bid.

1.5 Bidding Documents

A. Refer to Section 00 11 16 – Invitation to Bid for information on document availability.

B. Bidding Documents are made available only for the purpose of obtaining bids on this Project. Their use does not grant a license for other purposes.

C. Bidders shall use complete sets of bidding documents in the preparation of their Bid. Neither the Owner nor the Architect assumes responsibility for errors or misinterpretations resulting from the use of incomplete sets of bidding documents.

1.6 Inquiries and Addenda

A. Direct questions in writing to the office of the Architect.

B. Verbal answers are not binding on any party and bidders shall not rely on them.

C. Submit questions not less than four (4) days before bid date. Replies will be made by Addenda when required.

D. Addenda will be issued at least two (2) days before bid date, unless addenda include a revision in bid date. Addenda will be issued to all plan holders who have notified the Architect of their interest in bidding the project and to all plan rooms known to the Architect to have sets on file.

E. Costs for all addenda shall be included in the Bid.

F. Each bidder shall verify their receipt of all addenda before submitting a Bid and shall note receipt of addenda where indicated on bid form.

1.7 Product Substitutions

A. The materials, products, and equipment described in the bid documents establish a standard or required function, dimension, appearance, and quality to be met by any proposed substitution.

B. Where bidding documents stipulate particular Products and substitutions are allowed, Bidders may submit requests for substitutions in writing no later than seven (7) days prior to bid date. With each substitution request provide enough information for Architect to determine acceptability of proposed products. Requests without sufficient information will be rejected without review.

C. Approved substitutions will be identified by addenda.

D. Claims by the bidder after the bid date for an addition to the Contract Time or Contract Sum because of changes in the Work necessitated by substitutions will not be considered.

1.8 Site Examination

A. All contractors will be responsible for reviewing the existing site conditions prior to bidding. Each bidder shall fully inform himself prior to bidding as to existing conditions and limitations under which the work is to be performed and shall include in his bid a sum to cover the cost of items necessary to perform the work as set forth in the contract documents. No allowance will be made to a bidder because of lack of such examination. The submission of a bid will be considered as conclusive evidence that the bidder has made such examination.

B. The site is open for examination at any time.

1.9 Bidder Qualifications

A. To demonstrate qualifications to perform the Work of this Project, Bidders may be requested to submit written evidence of financial position, previous experience, current commitments, licensure, and current and past legal disputes related to project performance. All such information will be treated as confidential by the Architect and Owner and used for purposes of evaluating contractor qualifications only.

1.10 Subcontractors and Suppliers

A. Bidder shall state proposed sub-contractors where requested on the bid form. Failure to do so may be cause for rejection of a bid.

B. The Owner reserves the right to reject proposed sub-contractors or suppliers for reasonable cause.

C. Refer to AIA document A201-2017, article 5 of General Conditions.

1.11 Submission Procedure

A. Bidders are solely responsible for delivery of Bids in manner and time described.

B. Submit two copies of executed offer on Bid Form provided, signed by an authorized individual, with bid security as noted in Section 00 11 16 – Invitation to Bid, in a sealed envelope. Label the envelope with the bidder's name, project name, and 'sealed bid'.

C. Bids will not be accepted in facsimile, phone, electronically transmitted, or verbal format.

D. A bid summary will be available to bidders after bids are received and reviewed.

1.12 Permits and Fees

A. The Bid shall include all applicable fees and permit costs required by authorities having jurisdiction over the project unless noted otherwise in these specifications.

1.13 Rejection of Bids

A. Bids that do not meet the requirements stated above, are un-signed, or illegible may be rejected by the Owner.

1.14 Performance Assurance

A. The accepted bidder shall provide a performance and payment bond as described in 00 73 00 – Supplementary Conditions. The cost of such bond shall be included in the contract sum.

1.15 Acceptance of Bid

A. The Owner reserves the right to accept or reject any offer, with or without cause and to waive any informalities or irregularities in the bidding process.

B. If the lowest bid exceeds the project budget, the Owner reserves the right to negotiate scope changes, and contract sum adjustments, with the lowest bidder.

C. After acceptance of the bidder by the Owner, the Architect will issue, on behalf of the Owner, a letter of award. The bidder shall then cooperate with the Owner, with technical and practical advice from the Architect, to prepare and execute a contract within the time stated on the bid form.

1.16 Correction or Withdrawal of Bid

A. Bidders may withdraw their bids by written request at any time before bid closing. The written request shall not reveal the amount of the bid.

B. After the bid closing, corrections may be made to bids where the error resulted from mathematical or clerical errors and the correct information is readily apparent from the information on the bid form.

C. Bidders may be allowed to withdraw their bid after bid closing, without penalty, for serious mistakes of fact given that:
   1. The mistake is objectively provable.
   2. The mistake is large enough to present a material detriment to the bidder.

D. Bidders will not be allowed to withdraw their bid after bid closing for mistakes of judgment. Bidders which do not execute a contract in such a situation will forfeit their bid security as damages to the Owner as stated on the bid form.

1.17 Form of agreement between Owner and Contractor

A. The form of agreement shall be AIA document A101 – Standard Form of Agreement between Owner and Contractor where the basis of payment is a Stipulated Sum, 2017 edition.

B. AIA document A201 – General Conditions of the Contract for Construction, 2017 edition, is included by reference herein.
   1. Refer to Section 00 73 00 – Supplementary Conditions for modifications to the General Conditions.

C. Copies of these documents may be obtained from the office of the Architect.

End of Section

Section 00 30 00
Information Available to Bidders

PART 1 - General

1.1 Summary
- A. Document Includes:
  1. Lead containing material testing report.
- B. Related Sections:
  1. Section 00 21 00 – Instructions to Bidders
  2. Section 00 73 00 – Supplementary Conditions

1.2 Lead Containing Material Testing Reports
- A. Copies of lead containing material testing report are included in this section. The reports are prepared by EMSL Analytical and dated August 31, 2006.
- B. This report identifies results of testing for sampled materials, prepared primarily for the use of the Architect.
- C. Samples were taken at these locations:
  1. Sample 1 & 2 – Not applicable
  2. Sample 3 – East roof soffit
  3. Sample 4 – East entrance door
  4. Sample 5 – Basement entrance roof paint

End of Section

(Attached information follows)

EMSL Analytical
2001 East 52nd St., Indianapolis, IN 46205
Phone: (317) 803-2997 Fax: (317) 803-3047 Email: indianapolislab@emsl.com

Attn: **Richard Uren**
Northern Design Works
302 Rock St.
Negaunee, MI 49866
Fax: (906) 475-6954 Phone: (906) 475-6616
Project: **0617- Negauner Fire Station**

Customer ID: NDES22
Customer PO:
Received: 08/30/06 9:40 AM
EMSL Order: 160609991
EMSL Proj:
Report Date: 8/31/2006

Lead in Paint Chips by Flame AAS (SW 846 3050B and 7420*)

Lab ID:	Analyzed	RDL	Lead Concentration	Notes
0003	8/30/2006	0.01	31.00 % wt	
Client Sample 3				Collected: 8/27/2006
0004	8/30/2006	0.02	18.00 % wt	
Client Sample 4				Collected: 8/27/2006
0005	8/30/2006	0.01	0.05 % wt	
Client Sample 5				Collected: 8/27/2006

or other approved signatory

Reporting limit is 0.01 % wt. The QC data associated with these sample results included in this report meet the method quality control requirements, unless specifically indicated otherwise. Unless noted, results in this report are not blank corrected . This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities.

* slight modifications to methods applied Samples received in good condition unless otherwise noted. Quality Control Data associated with this sample set is within acceptable limits, unless otherwise noted

ACCREDITATIONS: AIHA Environmental Lead Laboratory Approval Program #157245

Date Printed: 8/31/2006 8:05:33 AM

Section 00 41 00
Bid Form

PART 1 - General

1.1 Project Information
- A. To: City of Negaunee, hereinafter called 'Owner'.
- B. Project: Fire Station Exterior Painting
- C. Date: July 11, 2018

1.2 Contractor Information
- A. Submitted by:

_____
(Hereinafter called 'Bidder')

_____
(Address)

_____
(Address)

_____
(Phone and Fax numbers)

1.3 Bid
- A. Base Bid

Having examined the Place of The Work and all matters referred to in the Instructions to Bidders and the Contract Documents prepared by Northern Design Works for the above mentioned project, we, the undersigned, hereby offer to enter into a Contract to perform the Work for the Sum of:

_____ (Dollars)

($_____) in lawful money of the United State of America

- B. Contract Time

If this bid is accepted we will achieve Substantial Completion by November 15, 2018.

- C. Bid Acceptance

This offer shall be open to acceptance and irrevocable for thirty (30) days from the Bid Date.

If the Owner accepts the Bid within the time stated above, we will:
1. Execute the Agreement within seven (7) days of receipt of Notice of Award.
2. Furnish the required bonds, as described in Section 00 73 00 – Supplementary Conditions, within seven (7) days of receipt of Notice of Award.
3. Commence work within seven (7) days of Notice to Proceed.

If this bid is accepted within the time stated, and we fail to commence the Work, the security deposit shall be forfeited as damages to the Owner by reason of our failure,

limited in amount to the lesser of the face value of the security deposit or the difference between this bid and the bid upon which a Contract is signed.

In the event our bid is not accepted within the time stated above, the required security deposit will be returned to the undersigned, in accordance with the provisions of the Instructions to Bidders; unless a mutually satisfactory arrangement is made for its retention and validity for an extended period of time.

D. Addenda

The following addenda have been received. The modifications to the Bid Documents have been noted and all costs are included in the Bid Sum.

1. Addenda numbers _____

E. Sub-Contractors

The following work will be performed by Sub-Contractors and coordinated by the Contractor. Failure to list sub-contractors at bid time may be a cause for rejection of the bid. (indicate portion of work and sub-contractor name, attach additional sheet if needed):

_____

_____

_____

_____

_____

_____

F. Voluntary Alternates

The Contract Sum proposed by the undersigned on the Bid Form is for the work as shown on the Drawings, described in the Specifications and otherwise defined in the Contract Documents. However, the undersigned proposes the following Voluntary Alternates for the Owner's consideration. Should the Owner accept any or all of the proposed substitutions, the bidders proposed Contract sum would be reduced by the amount shown (indicate specified product or material, proposed substitute, and reduction in Sum):

_____

_____

_____

_____

_____

G. Bid Form Signatures

_____
(Authorized Signature(s))

_____
(Printed name(s) and title(s))

_____
(Type of organization – Corporation, partnership, etc.)

Affix corporate seal, additional signatures required to give authority to bind corporation, or additional signatures for a joint venture or partnership as appropriate.

End of Section

Section 00 73 00
Supplementary Conditions

PART 1 - General

1.1 Summary

A. This document includes Supplementary Conditions to the General Conditions of the Contract for Construction.

1.2 Related Documents

A. Section 00 21 00 – Instructions to Bidders: Reference to Agreement and General Conditions.

1.3 Supplementary Conditions:

A. These Supplementary Conditions modify the General Conditions of the Contract for Construction, AIA Document A201-2017, and other provisions of the Contract Documents as indicated below. All provisions that are not so modified remain in full force and effect.

B. The terms used in these Supplementary Conditions that are defined in the General Conditions of the Contract for Construction, AIA Document A201-2017, have the meanings assigned to them in the General Conditions.

Article 1.1 Basic Definitions

Add the following:

1.1.9 Miscellaneous Definitions

A. The term ‘product’ includes materials, systems, and equipment.

B. The term "provide" includes furnishing and installing a product, complete in place, tested and approved.

C. The term "building code," and the term "code," refer to regulations of governmental agencies having jurisdiction.

D. The terms "approved," "required," and "as directed" refer to and indicate the work or materials that may be approved, required, or directed by the Architect acting as the agent of the Owner.

E. The term "similar" means in its general sense and not necessarily identical.

F. The terms "shown," "indicated," "detailed," "noted," "scheduled," and terms of similar import, refer to requirements contained in the Contract Documents.

Article 3.10 Contractor’s Construction Schedules

Add the following to 3.10.3:

In planning his construction schedule within the agreed contract time, it shall be assumed that the Contractor has anticipated the amount of adverse weather conditions normal to the site of the Work for the season or seasons of the year involved. The Architect will consider those weather delays attributable to other than normal weather conditions only.

Add the following to 3.10.3:

When the contract time has been extended, as provided under this Paragraph, such extension of time shall not be considered as justifying extra compensation to the Contractor for administrative or similar costs.

Article 3.14 Cutting and Patching

Add the following:

3.14.3 Each Subcontractor shall do all fitting of his own work as required to make its several components fit together or to receive the work of other Contractors. Holes cut in exterior walls or roofs for installation of mechanical or electrical equipment shall be waterproofed by the Contractor responsible for such installation.

Article 7 Changes in the Work

Add the following:

7.1.4 The Agreement identifies the overhead and profit fees applicable to Changes in the Work, whether additions to or deductions from the Work on which the Contract Sum is based and identifies the fees for subcontract work for changes (both additions and deductions) in the Work. The Contractor shall apply fees as noted, to the Subcontractor's gross (net plus fee) costs on additional work.

Article 9 Payments and Completion

Add the following to 9.3.1:

The form of application for payment shall be AIA Documents G702, "Application and Certificate for Payment," supported by continuation sheet or sheets G703 as approved by the Owner.

Add the following:

9.6.8 Retainage: Progress payments shall include that portion of the Contract Sum properly allocable to completed Work and stored materials, less Retainage of ten percent (10%). Retainage will be limited as follows: After fifty percent (50%) of the work has been completed, if the Architect finds that satisfactory progress is being made, the Architect shall recommend that the remaining progress payments be paid in full.

Article 11 Insurance and Bonds

Add the following to 11.1.2:
Insurance coverage shall not be less than the following:

A. Worker's Compensation: Statutory

B. Contractor's Public Liability:
   1. Personal injury: $500,000/$1,000,000
   2. Property damage: $500,000/$1,000,000

C. Contractor's Contingent Liability:
   1. Personal injury: $500,000/$1,000,000
   2. Property damage: $500,000/$1,000,000

D. Automobile Public Liability:
   1. Personal injury: $500,000/$1,000,000
   2. Property damage: $500,000 each occurrence

Substitute the following for 11.4.1:

11.4.1 The Contractors shall furnish a Performance Bond in an amount equal to One Hundred Percent (100%) of the Contract and, also a Labor and Material Payment Bond in the amount of not less than One Hundred Percent (100%) of the Contract Sum or in a penal sum not less than that prescribed by State, Federal, Territorial, or Local Law, as security for payment of persons performing the Labor on the Project under this Contract and furnishing material in connection with this Contract. The Performance and Material Payment Bond may be in one or separate instruments and shall be delivered to the Owner not later than the date of execution of the Contract. Bonds shall be submitted on AIA document A312 or surety's standard form.

End of Section

Section 01 11 00
Summary of the Work

PART 1 - General

1.1 The Work

A. The project includes all material, labor, tools, equipment, field engineering, and transportation necessary to complete all work as identified in the Drawings and further defined in these Specifications. This includes all items not specifically mentioned, but incidental to the work to provide a complete and operational product.

B. The Work includes:

1. Base Bid: Exterior preparation and painting.

C. The Owner may contract for other work concurrent with this contract.

1.2 Owner Occupancy

A. The Owner will occupy the premises during the entire period of construction for the conduct of normal operations.

B. Cooperate with Owner to minimize conflict, and to facilitate Owner's operations.

End of Section

Section 01 20 00
Price and Payment Procedures

PART 1 - General

1.1 Section Includes
- A. Schedule of Values
- B. Applications for Payment
- C. Requests for Information
- D. Contract Modification Procedures
- E. Defect Assessment

1.2 Schedule of Values
- A. Submit printed schedule on AIA form G703 – Continuation Sheet for G702. Contractor's standard form will be considered if similar to above.
- B. Submit two copies of schedule of values to Architect within 15 days after date of Owner-Contractor Agreement.
- C. Format: Identify each line item with title. Include mobilization and bonds and insurance as line items.
- D. Include in each line item allowances specified in this section.
- E. Revise schedule to include approved Change Orders with each Application for Payment.

1.3 Applications for Payment
- A. Submit three copies of each application on AIA form G702 – Application and Certificate for Payment and G703 – Continuation Sheet for G702.
- B. Content and Format: Utilize schedule of values for listing items in application for payment.
- C. Payment Period: Submit at intervals as specified in the Agreement.

1.4 Requests for Information
- A. Requests for Information (RFI) shall be used to:
  1. Request information and/or clarification related to the plans, specifications, or contract requirements.
  2. Request approval for minor deviations from contract requirements that do not involve any time or cost adjustment.
  3. Obtain directions on how to proceed when there are conflicting contract requirements.
- B. RFI shall be submitted by the Contractor to the Architect on the Contractor's standard RFI form. RFI's shall be numbered sequentially and shall include:
  1. RFI number.
  2. Date.
  3. Identification of the construction deficiency or Contract document clarification requested.
  4. Reference to Specification and paragraph numbers, drawing numbers and drawing reference.
  5. Impact this clarification will have on schedule (number of days) and project costs (if any).

C. If a change in the Contract Time and/or Contract Sum are required, a Change Order will be issued by the Architect for signatures of parties as provided for in the Conditions of the Contract.

1.5 Contract Modification Procedures

A. The Architect will advise of minor changes in the Work, not involving adjustment to Contract Sum or Contract Time by issuing supplemental instructions.

B. The Architect may issue a Bulletin, including a detailed description of proposed change. The Contractor shall promptly prepare and submit a fixed price quotation for the proposed change, including any adjustment in the Contract Time. Provide full documentation to support price quotation.

C. Contractor may propose changes by submitting a request for change to the Architect, describing proposed change and its full effect on the Work. Include a statement describing reason for the change, and effect on Contract Sum and Contract Time with full documentation.

D. Stipulated Sum Change Order: Based on a Bulletin and the Contractor's price quotation, or Contractor's request for change.
   1. Change Orders will be prepared on the Architect's standard form.
   2. Architect will issue Change Orders for signatures of parties as provided for in the Conditions of the Contract.

E. Construction Change Directive: Architect may issue directive, on AIA form G713 – Construction Change Directive, signed by Owner, instructing Contractor to proceed with change in the Work. The change will subsequently be included in a Change Order. The document will describe changes in the Work, and designate a method for determining any change in Contract Sum or Contract Time. Promptly execute change.

F. Correlation of Contractor Submittals:
   1. Promptly revise Schedule of Values and Application for Payment forms to record each authorized Change Order as separate line item and adjust Contract Sum.
   2. Promptly revise project schedules to reflect change in Contract Time and resubmit.
   3. Promptly enter change in project record documents.

1.6 Defect Assessment

A. Replace the Work, or portion of the Work, not conforming to specified requirements.

B. If, in the opinion of the Architect, it is not practical to remove and replace the non-conforming work, the Architect will direct appropriate remedy or adjust payment.

C. At the Owner's discretion, defective work may remain and an appropriate adjustment be made in payment.

D. Authority of Architect to assess defects and identify payment adjustments is final.

E. Non-Payment for Rejected Products: Payment will not be made for rejected products for any of the following:
   1. Products wasted or disposed of in a manner that is not acceptable.
   2. Products determined as un-acceptable before or after placement.
   3. Products placed beyond lines and levels of required Work.
   4. Products remaining on hand after completion of Work.
   5. Loading, hauling, and disposing of rejected products.

PART 2 - Products – Not Used

PART 3 - Execution – Not Used

End of Section

Section 01 33 00
Submittal Procedures

PART 1 - General

1.1 Summary

A. Section includes samples, test reports, certificates, shop drawings and manufacturers' literature and data.

B. Submit for approval, all of the items specifically mentioned under the separate sections of the specification, with information sufficient to evidence full compliance with contract requirements. Materials, fabricated articles and the like to be installed in permanent work shall equal those of approved submittals. After an item has been approved, no change in brand or make will be permitted unless:

1. Satisfactory written evidence is presented to, and approved by the Architect, that manufacturer cannot make scheduled delivery of approved item or;
2. Item delivered has been rejected and substitution of a suitable item is an urgent necessity or;
3. Other conditions become apparent which indicates approval of such substitute item to be in best interest of the Owner.

C. The Architect may request submittals in addition to those specified when deemed necessary to adequately describe the work covered in the respective sections.

D. Each submittal is to be complete and in sufficient detail to allow ready determination of compliance with contract requirements.

E. Forward submittals in sufficient time to permit proper consideration and approval action. Time submission to assure adequate lead time for procurement of contract required items. Delays attributable to untimely and rejected submittals will not serve as a basis for extending contract time for completion.

1.2 Submittals

A. Provide transmittal form with each submittal including:

1. Contractor name
2. Date of submittal
3. Project title
4. Section number of the specification section by which submittal is required.
5. Description of submittal
6. Submittal number
7. When submittal is a re-submission, add alphabetic suffix on submittal number. For example, submittal 1 would become 1A to indicate re-submission.

B. Provide submittals other than physical samples in electronic format submitted via e-mail to the Architect. Electronic submittals should include transmittal form as part of the submittal. Electronic files must be of sufficient quality that all information is legible. Electronic format shall be in PDF, unless otherwise specified or coordinated with the Architect.

C. When submittals cannot be submitted in electronic format provide four copies.

D. Samples should be submitted in the quantity specified in each specification requesting the samples.

E. Submit two copies of Operations and Maintenance Data at completion of work for review and approval.

1.3 Quality Assurance

A. The contractor shall review all submittals before submission for compliance with the contract documents.

B. Submittals which have not been reviewed and certified as compliant with the project requirements by the Contractor will be rejected.

1.4 Scheduling

A. Schedule and submit concurrently submittals covering component items forming a system or items that are interrelated. Include certifications to be submitted with the pertinent drawings at the same time.

B. Coordinate scheduling, sequencing, preparing and processing of submittals with performance of work so that work will not be delayed by submittal processing. Allow for potential re-submittal.

C. Allow 10 business days for review of submittals in the construction schedule.

PART 2 - Products - Not Used

PART 3 - Execution - Not Used

End of Section

Section 01 50 00
Temporary Facilities and Controls

PART 1 - General

1.1 Section Includes
- A. Temporary Utilities
  1. Temporary electricity.
  2. Temporary water service.
  3. Temporary sanitary facilities.
- B. Construction Facilities
  1. Fire Extinguishers.
  2. Vehicular access and parking.
  3. Progress cleaning and waste removal.
  4. Project identification.
  5. Traffic regulation.
- C. Temporary Controls
  1. Barriers.
  2. Dust control.
  3. Pollution control.
  4. Smoking.
  5. Removal of temporary utilities, facilities, and controls.

1.2 Temporary Electricity
- A. Owner will pay cost of energy used. Exercise measures to conserve energy. Utilize Owner's existing power service.
- B. Provide flexible power cords as required for portable tools and equipment.
- C. Permanent convenience receptacles may be used during construction.

1.3 Temporary Water Service
- A. Owner will pay for cost of temporary water. Exercise measures to conserve water. Utilize Owner's existing water system, extend and supplement with temporary devices as needed to maintain specified conditions for construction operations.

1.4 Temporary Sanitary Facilities
- A. Provide and maintain required facilities in a sanitary condition. Use of existing facilities is not permitted. Provide facilities at time of project mobilization.

1.5 Fire Extinguishers
- A. Provide at least one 4A:10B-C rated portable fire extinguisher at each floor which is under construction.
- B. Locate fire extinguishers at stairs if applicable.
- C. Provide an additional fire extinguisher at each area where flammable or combustible liquids are stored, used, and dispensed.
- D. Provide fire extinguishers at each temporary office or storage shed on site.

1.6 Vehicular Access and Parking
- A. Provide unimpeded access for emergency vehicles.
- B. Provide and maintain access to fire hydrants free of obstructions.

1.7 Progress Cleaning and Waste Removal

A. Maintain areas free of waste materials, debris, and rubbish. Maintain site in clean and orderly condition.
B. Remove debris and rubbish from pipe chases, plenums, attics, crawl spaces, and other enclosed or remote spaces prior to enclosing spaces.
C. Broom and vacuum clean interior areas prior to start of surface finishing, and continue cleaning to eliminate dust.
D. Collect and remove waste materials, debris, and rubbish from site weekly and dispose of off-site.

1.8 Project Identification
A. No signs are permitted without Owner permission, except those required by law.

1.9 Traffic Regulation
A. Signs, Signals, and Devices
1. Post and wall mounted traffic control and information signs: As approved by authority having jurisdiction.
2. Traffic cones and drums, flares, and lights: As approved by authority having jurisdiction.
B. Flag Persons
1. Provide trained persons to regulate traffic when construction operations or traffic encroach on public traffic lanes.
2. Provide equipment required by authority having jurisdiction to flag persons.
C. Lights
1. Use lights during hours of low visibility to delineate traffic lanes and guide traffic.
D. Removal
1. Remove traffic regulation devices when no longer required.
2. Repair any damage caused by installation.

1.10 Barriers
A. Provide barriers to prevent un-authorized entry to construction areas and to protect existing facilities and adjacent properties from damage from construction operations.
B. Protect non-owned vehicles, stored materials, site, and structures from damage.

1.11 Dust Control
A. Execute Work by methods to minimize raising dust from construction operations.
B. Provide positive means to prevent dispersion of air-borne dust.

1.12 Pollution Control
A. Provide methods, means, and facilities to prevent contamination of soil, water, and atmosphere from discharge of noxious, toxic substances, and pollutants produced by construction operations.
B. Comply with pollution and environmental control requirements of authorities having jurisdiction.

1.13 Smoking
A. Smoking is not permitted in this facility.

1.14 Removal of Temporary Utilities, Facilities, and Controls
A. Remove temporary utilities, equipment, facilities, and materials prior to final inspection.
B. Clean and repair damage caused by temporary installations or use of temporary work.

PART 2 - Products – Not Used

PART 3 - Execution – Not Used

End of Section

Section 02 83 19
Lead Based Paint Remediation

PART 1 - General

1.1 Summary

A. This Section specifies requirements for working with lead-containing materials (LCM), during any of the following operations:

1. Incidental Removal or Disturbance of Lead-Based Paint (LBP): This includes activities such as sanding and scraping for paint preparation activities.
2. Abatement of Lead-Based Paint (LBP): Complete removal of LBP from substrate.

B. Related Sections:

1. Section 00 30 00 – Information Available to Bidders: Results of testing of existing paint materials.
2. Section 09 90 00 – Painting: Requirements for preparing surfaces for repainting.

1.2 Definitions

A. The term “Lead-Based Paint” (LBP) is identified as paint or other surface coating such as varnish, sealer or stain containing lead in any detectable amount.

B. The term “Abatement” means that LBP is completely removed from the substrate.

C. The term "Incidental Removal or Disturbance of Lead-Based Paint" indicates one or more of the following operations:

1. Scraping, hand sanding, or otherwise removing loose LBP from existing surfaces scheduled to remain in place, when this work is for purposes other than Abatement and will not result in complete removal of all LBP.

D. The term “Demolition of LCM” refers to cutting, drilling, abrading, demolishing, or otherwise disturbing building elements coated with LBP or containing lead for purposes other than Abatement.

E. The term “Lead-Containing Materials” (LCM) is identified as construction debris coated with lead-based paint or other materials containing lead, such as x-ray shielding.

F. The term "Critical Barrier" indicates the perimeter of the enclosure within which lead disruption/removal work takes place. Critical Barriers may include existing floor, wall, and ceiling structures, as well as constructed partitions, closures and seals.

G. The term "Project Site" indicates the limits of the Project Site as indicated on drawings or by provisions of this specification.

H. The term "Work Area" indicates the area within the Critical Barrier.

I. The term “Action Level” means exposure to an airborne concentration of lead of 30 micrograms per cubic meter of air calculated as an 8-hour time-weighted average (TWA).

J. The term “Exposure Assessment” means a determination of employee exposures for a given task measured by air monitoring. The Assessment must meet the criteria for objective data as outlined in the MIOSHA/OSHA Lead in Construction Standard (MIOSHA Part 603, R325.51992 and 29 CFR 1926.62).

K. The term “OSHA PEL” stands for the Permissible Exposure Limit established by the Occupational Safety and Health Administration for lead exposure. The OSHA PEL

refers to an airborne concentration of lead of 50 micrograms per cubic meter of air calculated as an 8-hour time-weighted average (TWA).

L. The abbreviation "TCLP" stands for Toxicity Characteristic Leaching Procedure and refers to one of the tests to determine if waste is to be disposed as a Hazardous Waste or non-hazardous solid waste.

M. The term "Hazardous Waste" refers to a listed waste or any solid or liquid waste with one or more of the following characteristics: toxic, corrosive, flammable, explosive, combustible, oxidizer, pyrophoric, unstable (reactive) or water - reactive. This definition includes lead paint that has been removed from the substrate and has failed the TCLP for any reason.

N. The term "Non-Hazardous Waste" refers to any solid or liquid waste not exhibiting characteristics of Hazardous Waste. This definition includes LBP not removed from substrate and not failing TCLP for other characteristics. It also includes lead paint chips that do not fail the TCLP for any reason.

1.3 Submittals

A. Exposure Assessment Documentation: Submit information used to document previous employee exposure assessment, if available. If not available, conduct an initial exposure assessment at the start of the project.

B. Written Compliance Plan: Submit a Written Compliance Plan incorporating all requirements in the MIOSHA Lead in Construction Standard. Also indicate type of containment and method of liquid waste capture to be established if water is utilized for removal.

C. Health and Safety Requirements: Submit the following information for each employee that will conduct lead disturbance on the job site:

1. Respiratory Protection Program.
2. Proof of current fit test for respirator that will be worn on Project Site.
3. Proof of medical surveillance for respirator usage and lead work.
4. Proof of lead awareness training in accordance with section 1.4. QUALITY ASSURANCE.
5. Proof of certified lead abatement worker or supervisor accreditation when required.
6. A copy of the Contractor's License to Conduct Lead Abatement Activities from the State of Michigan, when required.

D. Prepare a written schedule for each operation expected to disturb/remove LCM, indicating the following:

1. Type of work to be performed, such as cutting, demolition, paint removal, or other action.
2. Location of work to be performed.
3. Proposed starting date and time.
4. Proposed working hours.
5. Proposed duration.

1.4 Quality Assurance

A. Personnel involved in the disturbance of LCM shall be trained in accordance with the requirements of the MIOSHA Lead in Construction Standard, including:

1. The content of the MIOSHA Lead in Construction Standard and its appendices;
2. The specific nature of the operations which could result in exposure to lead above the action level;

3. The purpose, proper selection, fitting, use, and limitations of respirators;
4. The purpose and a description of the medical surveillance program, and the medical removal protection program including information concerning the adverse health effects associated with excessive exposure to lead (with particular attention to the adverse reproductive effects on both males and females and hazards to the fetus and additional precautions for employees who are pregnant);
5. The engineering controls and work practices associated with the employee's job assignment including training of employees to follow relevant good work practices;
6. The contents of any compliance plan in effect;
7. Instructions to employees that chelating agents should not routinely be used to remove lead from their bodies and should not be used at all except under the direction of a licensed physician; and
8. The employee's right of access to records under 29 CFR 1910.20.

PART 2 - Products

2.1 Materials

A. Contractor shall furnish, provide and utilize all tools and equipment necessary to perform the work.

PART 3 - Execution

3.1 Health and Safety Requirements

A. General: Determine employee exposure to lead in air as required in MIOSHA Lead in Construction Standard.

B. Exposure Assessment: If Contractor has made a previous Exposure Assessment that is representative of the task to be performed on-site, the Contractor may rely on this data and determine the need for personal protective equipment and work practice controls based upon this data.

C. Job requirements: When the Contractor does not have an Exposure Assessment or the Assessment is determined to be insufficient, the Contractor must conduct personal air monitoring in accordance with the MIOSHA Lead in Construction Standard and follow the requirements below which are outlined by job task until monitoring determines otherwise:

1. Manual demolition, scraping, sanding, heat gun application, power tool cleaning with HEPA dust collection system:
    a. Use of 1/2 mask respirator with HEPA filters.
    b. PPE.
    c. Medical surveillance.
    d. Use of changing room.
    e. Use of handwashing facilities.
    f. Provision of lead awareness training.
2. Power tool cleaning without HEPA collection, cleaning up with dry expendable abrasives, removing or relocating enclosure:
    a. Loose fitting PAPR with HEPA or supplied air respirator.
    b. PPE.
    c. Medical surveillance.
    d. Use of changing room.

e. Use of handwashing facilities.
f. Provision of lead awareness training.

3. Lead Abatement:
   a. Work must be completed by personnel trained in accordance with the MIOSHA Lead in Construction Standard.

3.2 Preparation

A. General: Prepare Work Areas in a manner that will protect Owner's personnel and property, and the visiting public, from contact with LCM. Prior to beginning work, confirm starting date and time with Owner. Do not begin work that will disturb LCM without Owner's approval.

B. Preparing Building Exteriors: Ensure adequate measures are in place to limit airborne lead content below the Action Level of 30 ug/m3 (micrograms per cubic meter) adjacent to the Work Area.

1. Erect barricades and install warning tape or signs as necessary to prevent inadvertent exposure of passersby to LCM in all forms, including, but not necessarily limited to dust, particles, and fumes.
2. Completely cover grounds and vegetation with minimum 8-mil thick polyethylene sheets with joints between sheets lapped and taped; with one edge taped to adjacent building surfaces below area of work; and with free ends secured in position with stakes, tie-down lines or weights. Cover sufficient ground area to capture wind-blown chips, dust and particles.

C. Preparing Building Interiors: Ensure adequate measures are in place to protect building occupants from exposure to airborne lead dust, particles, fumes or other LCM exceeding the Action Level of 30 ug/m3 (micrograms per cubic meter) lead content in air. Adequate measures shall include, but are not necessarily limited to, construction of Critical Barriers and/or establishment of negative pressure within Work Area.

1. Seal off openings and penetrations into the Work Area. Provide temporary dust barriers consisting of at least polyethylene plastic sheet on wood studs. Lap and tape joints of plastic sheeting to prevent dust, particles, fumes, and other forms of lead debris from leaving the enclosed area.
2. Discontinue building ventilation within the Work Area and seal off ventilation supply and return or exhaust diffusers, grilles or openings.
3. Post warning signs at all entrances to the Work Area that states the following, as required in MIOSHA Lead in Construction Standard:
   WARNING
   LEAD WORK AREA
   POISON
   NO SMOKING OR EATING

3.3 Work Practices

A. General: Perform removal of LCM (includes demolition and abatement activities) in compliance with the following requirements:

1. Restrict access to Work Area to essential personnel.
2. Use moist-removal methods and/or HEPA vacuuming where applicable. Do not over-saturate the Work Area.
3. Any debris generated must be cleaned up immediately before it can be tracked into other areas.

4. Remove contaminated clothing and personal protective equipment before leaving the Work Area, or Work Area enclosure, as applicable.
5. If Action Level is exceeded outside Work Area, discontinue work and modify Critical Barrier, or perform other modifications of methods or materials as required to reduce the lead contamination below the Action Level.
6. Prohibit eating, drinking, and smoking in the Work Area.

B. Incidental Removal and Abatement of LBP: Remove paint from building surfaces by hand scraping and sanding; or through the use of fluid-applied chemical strippers designed to dry into a solid polymeric sheet and peel off with paint encapsulated. Hand-scraping and sanding must be used in conjunction with moist-removal methods using misted water. Leave moist paint dust and chips in place to air dry before collection.
1. Wet methods (including power-washing) that use amounts of water that can drip, spill, or leak onto the ground, or onto or into other adjacent surfaces are prohibited.
2. Dry removal methods (including sand blasting, power sanding, and other methods relying on high velocity mechanical abrasion) that create airborne fine particulate waste materials are prohibited.

3.4 Disposal

A. Lead Paint Chips and Liquids Containing Lead Waste: Coordinate TCLP testing, collection, and removal of the above types of lead waste from the Project. Only these types of lead waste need to be collected for TCLP testing and special disposal. Debris from demolition of building structures and equipment covered with lead based paint does not need to be TCLP tested. This type of waste can be disposed of as normal construction demolition debris or recycled. Where testing of waste indicates waste is Non-Hazardous, refer to paragraph C of this section entitled "Disposal of Non-Hazardous LCM from Demolition/Renovation Activities". If waste is classified as Hazardous or needs to be TCLP tested, comply with the following requirements:

B. All waste shall be kept drummed, secured, labeled and stored in a designated secured storage space on site until test results categorize all waste to be hazardous or non-hazardous. Do not stage containers on lawns, dirt piles, or gravel drives areas with mud.

C. Ensure that soil, ground water, and drains or sewers within the storage area are protected from possible contamination. Keep containers secure and tightly closed at all times, except when adding waste.

D. Keep abatement waste segregated from other waste and from other Projects. Do not co-mingle waste. DO NOT MIX LIQUID AND SOLID WASTE.

E. Place appropriate labels on all containers. Provide all information required on the label; mark labels using indelible ink.

F. Mark the side of each drum with the name and phone number of Owner's Representative knowledgeable about the type of waste contained.

G. All waste, after being evaluated in accordance with the Toxicity Characteristic Leaching Procedure (TCLP) test, shall be disposed of in accordance with all applicable Local, Federal, State and/or County Regulations.
1. The Contractor shall warrant and represent that all entities and/or individuals involved in the work shall possess all federal, state or local permits or licenses required for removal, packaging, transportation and disposal of hazardous waste.

2. All hazardous waste materials removed hereunder must be lawfully treated and disposed by the Contractor at an Environmental Protection Agency (EPA) permitted Treatment, Storage and Disposal Facility (TSD).
3. All wastes, drums, and other items removed hereunder must be lawfully treated and disposed of by Contractor within sixty (60) days after removal from the site. The Contractor shall provide completed shipping documents for all hazardous waste removed, as well as all Certificates of Disposal, which specify where each component of all wastes removed are ultimately treated or disposed. Such Certificates shall include references to the Manifest Form for the shipment as well as address and EPA identification numbers for the generator facility.
4. The Contractor shall provide completed shipping documents, hereinafter referred to as "Bills of Lading", for all non-hazardous. A Bill of Lading must accompany each waste shipment and must include information regarding the quantity and type of waste being removed, the destination and disposal firm accepting the waste, the waste transporter name, and the date of removal.

H. Disposal of Non-Hazardous LCM from Demolition/Renovation Activities: Collect Non-hazardous LCM waste in a covered dumpster and dispose of the waste at a landfill. If previously containerized lead paint chips pass the TCLP, they can be disposed of as normal construction debris after all hazardous waste labels have been removed from then container.

3.5 Clean Up

A. Upon completion of LCM or LBP removal and disposal operations, clean all surfaces within the Work Area before it can be tracked into other areas, including, but not necessarily limited to the following:
1. Siding.
2. Steel support structures.
3. Floors and ground.
4. Walls.
5. Window sills.
6. Trim.
7. Ledges and projections.

B. For projects within building interior spaces, use a HEPA filtered vacuum for removal/elimination of dust, particulates, and debris.
1. Brushing, sweeping, and other dry methods that generate airborne dust are prohibited.

C. Remove and dispose of wash water and HEPA filters as Hazardous Waste.

D. Remove and dispose of all solid waste used for protection and clean-up as Non-Hazardous Waste.

E. Field Testing: Upon completion of removal, disposal, and clean-up operations, the Owner may visually inspect and/or test the Project Site for evidence of remaining lead contamination. Return to Project Site and, at no additional cost to Owner, re-clean areas found to be contaminated.

End of Section

Section 07 92 00
Joint Sealants

PART 1 - General

1.1 Summary
- A. Section includes sealants, joint backing, and accessories.

1.2 References
- A. ASTM C834 – Latex Sealing Compounds.
- B. ASTM C919 – Practice for Use of Sealants in Acoustical Applications.
- C. ASTM C920 – Elastomeric Joint Sealants.
- D. ASTM C1193 – Guide for Use of Joint Sealants.
- E. ASTM D1056 – Flexible Cellular Materials – Sponge or Expanded Rubber.
- F. ASTM D1565 – Flexible Cellular Materials – Vinyl Chloride Polymers and Co-Polymers (Open Cell Foam).
- G. ASTM D1667 – Flexible Cellular Materials – Vinyl Chloride Polymers and Co-Polymers (Closed Cell Foam).
- H. ASTM D2628 – Preformed Polychloroprene Elastomeric Joint Seals for Concrete Pavements.

1.3 Submittals
- A. Product Data: Submit data indicating sealant chemical characteristics, performance criteria, substrate preparation, limitations, and color availability.
- B. Manufacturer's Installation Instructions: Submit special procedures, surface preparation, and perimeter conditions requiring special attention.
- C. Warranty: Include coverage for installed sealants and accessories failing to achieve airtight seal, watertight seal, exhibiting loss of adhesion or cohesion, and sealants which do not cure.

1.4 Environmental Requirements
- A. Maintain temperature and humidity recommended by sealant manufacturer during and after installation.

1.5 Coordination
- A. Coordinate sealant installation with work of sections referencing this section.

PART 2 - Products

2.1 Joint Sealers:
- A. High Performance General Purpose Exterior (Non-traffic) Sealant: Polyurethane, ASTM C920, Grade NS, Class 25, Uses NT, M, A, and O, Type S or M (single or multi-component):
  1. Color: Colors as selected from manufacturer's standard colors to match adjoining surfaces.
  2. Applications: Use for:
     - a. Control, expansion, and soft joints in masonry.
     - b. Joints between concrete and other materials.
     - c. Joints between metal frames and other materials.
     - d. Other exterior non-traffic joints for which no other sealant is specified.

2.2 Accessories

A. Primer: Non-staining type, recommended by sealant manufacturer to suit application.
B. Joint Cleaner: Non-corrosive and non-staining type, recommended by sealant manufacturer, compatible with joint forming materials.
C. Joint Backing: Round foam rod compatible with sealant, oversized 30 to 50 percent larger than joint width.
D. Bond Breaker: Pressure sensitive tape recommended by sealant manufacturer to suit application.

PART 3 - Execution

3.1 Examination

A. Verify substrate surfaces and joint openings are ready to receive work.
B. Verify joint backing and release tapes are compatible with sealant.

3.2 Preparation

A. Remove loose materials and foreign matter impairing adhesion of sealant.
B. Clean and prime joints.
C. Perform preparation in accordance with ASTM C1193.
D. Protect elements surrounding work of this section from damage or disfiguration.

3.3 Installation

A. Perform installation in accordance with ASTM C1193.
B. Perform acoustical sealant application work in accordance with ASTM C919.
C. Measure joint dimensions and size joint backers to achieve the following, unless otherwise specified by the manufacturer's installation directions:
    1. Width / depth ration of 2:1.
    2. Neck dimension no greater than ½ of joint width.
    3. Surface bond area on each side not less than 75 percent of joint width.
D. Install bond breaker at bottom of joint where backing is not used to prevent three-sided adhesion.
E. Install sealant free of air pockets, foreign embedded matter, ridges, and sags.
F. Apply sealant within recommended application temperature range. Consult sealant manufacturer when sealant cannot be applied within this range.
G. Tool joints concave.

3.4 Cleaning

A. Clean adjacent soiled surfaces.

3.5 Protection of Installed Construction

A. Protect sealants until cured.
B. Any sealants that become contaminated before they have cured shall be removed and replaced.

End of Section

Section 09 90 00
Paints and Coatings

PART 1 - General

1.1 Summary
- A. Section includes surface preparation and field application of paints.
- B. Related Sections:
  1. Section 02 83 19: Lead Based Paint Remediation.

1.2 References
- A. ASTM D16 – Terminology Relating to Paint, Varnish, Lacquer, and Related Products.
- B. ASTM D4442 – Test Methods for Direct Moisture Content Measurement of Wood and Wood-base Materials.
- C. NACE (National Association of Corrosion Engineers) – Industrial Maintenance Painting.
- D. PDCA (Painting and Decorating Contractors of America) – Architectural Specifications Manual.
- E. SSPC (Steel Structures Painting Council) – Steel Structures Painting Manual.

1.3 Definitions
- A. Conform to ASTM D16 for interpretation of terms used in this section.

1.4 Submittals
- A. Product Data: Submit data on finishing products.
- B. Manufacturers' Installation Instructions: Submit special surface preparation procedures and substrate conditions requiring special attention.
- C. Safety Data Sheets: Submit SDS for each product used.

1.5 Delivery, Storage, and Handling
- A. Deliver products to site in sealed and labeled containers.
- B. Paint Materials: Store at minimum ambient temperature of 45° F and maximum of 90° F, in ventilated area, or as required by manufacturer's instructions.

1.6 Environmental Requirements
- A. Do not apply materials when surface or ambient temperatures are outside temperature ranges recommended by paint manufacturer.
- B. Do not apply exterior coatings during rain or snow, when relative humidity is outside range recommended by manufacturer, or when moisture content of surfaces exceeds that recommended by manufacturer.
- C. Minimum application temperature for latex paints shall be 50° F for exteriors unless stated otherwise, in writing, by the manufacturer.
- D. Provide lighting level of 80 fc measured mid-height at substrate surface.

1.7 Sequencing
- A. Do not apply finish coats until paintable sealant is applied.

PART 2 - Products

2.1 Paints and Coatings
- A. Manufacturers: Scheduled products establish standard for quality of materials. Provide materials by one of the following manufacturers:

1. Sherwin Williams
2. Benjamin Moore
3. Pittsburgh Paints
4. Pratt and Lambert
5. Thoro
6. Chemprobe Technologies Inc.
7. Substitutions: Division 1 – Product Requirements.

2.2 Components

A. Coatings: Ready mixed, except field-catalyzed coatings. Prepare coatings:
   1. To soft paste consistency, capable of being readily and uniformly dispersed to homogenous coating.
   2. For good flow and brushing properties.
   3. Capable of drying or curing free of streaks and sags.

B. Accessory materials: Linseed oil, shellac, turpentine, paint thinners, and other materials not specifically indicated but required to achieve finishes specified; commercial quality.

C. Patching materials: Latex filler.

D. Fastener head cover materials: Latex filler.

PART 3 - Execution

3.1 Examination

A. Verify surfaces and substrates are ready to receive work as instructed by product manufacturer.

B. Examine surfaces scheduled to be finished prior to commencement of work. Report conditions capable of affecting proper application.

C. Measure moisture content of material using electronic moisture meter. Do not apply finishes unless moisture content of surface is below the following:
   1. Plaster and gypsum wallboard: 12 percent.
   2. Masonry, concrete, and concrete unit masonry: 12 percent.
   3. Interior and exterior wood: 15 percent, measured in accordance with ASTM D4442.
   4. Concrete floors: 8 percent.

3.2 Preparation

A. Surface Appurtenances: Remove electrical plates, hardware, light fixture trim, escutcheons, and fittings prior to preparing surfaces or finishing. Mask items which cannot be removed.

B. Surfaces: Correct defects and clean surfaces capable of affecting the work of this section. Remove or repair existing coatings exhibiting surface defects.

C. Marks: Seal with shellac those that may bleed through finish.

D. Impervious surfaces: Remove mildew by scrubbing with solution of tri-sodium phosphate and bleach. Rinse with clean water and allow surface to dry.

E. Galvanized surfaces: Remove surface contamination and oils and wash with solvent per SSPC-SP1. Apply coat of etching primer.

F. Uncoated steel and iron surfaces: Remove grease, mill scale, weld splatter, dirt, and rust. Clean with hand tools per SSPC-SP2 or power tools per SSPC-SP3, removing loose rust, mill scale, and other loose contaminants. Ensure weld joints, bolts, and nuts are similarly cleaned.

G. Exterior wood items schedule to receive paint finish: Remove dust, grit, and foreign matter. Seal knots, pitch streaks, and sappy sections. Fill nail holes with tinted exterior caulking compound after primer coat has dried.

3.3 Protection

A. Protect elements surrounding the work of this section from damage.

B. Furnish drop clothes, shields, and protective methods to prevent spray or droppings from disfiguring other surfaces.

3.4 Existing Work

A. Extend existing paint and coating installations using materials and methods compatible with existing installations and as specified.

3.5 Application

A. Apply finishes in accordance with manufacturer's directions.

B. Do not apply finishes to surfaces that are not dry. Allow applied coats to dry before next coat is applied.

C. Apply each coat to uniform appearance.

D. Sand wood and metal surfaces lightly between coats to achieve required finish.

E. Vacuum surfaces clean of loose particles. Use tack cloth to remove dust and particles just prior to applying next coat.

3.6 Cleaning

A. Collect waste material that may constitute a fire hazard, place in a sealed metal container, and remove from site daily.

B. As work proceeds, promptly remove paint where spilled, splashed, or splattered.

3.7 Schedule – Exterior Surfaces

A. Wood – Painted

1. One coat of Sherwin-Williams exterior wood primer or equal.
2. Two coats of Sherwin-Williams Pro Industrial Acrylic or equal.

B. Steel – Unprimed

1. One coat of Sherwin-Williams Pro Industrial Pro-Cryl Primer or equal.
2. Two coats of Sherwin-Williams Pro Industrial Acrylic or equal.

C. Steel – Galvanized

1. Two coats of Sherwin-Williams Pro Industrial Acrylic or equal.

3.8 Schedule – Colors

A. PNT-1: SW6078 Realist Beige – egg shell sheen.

B. PNT-2: SW7048 Urbane Bronze – egg shell sheen.

End of Section

Section 10 81 13
Bird Control Devices

PART 1 - General

1.1 Summary
- A. Section includes bird control devices and associated installation hardware.

1.2 Submittals
- A. Product Data: Submit data on bird control devices describing size, materials, finish, and attachment methods.
- B. Installation Instructions: Submit manufacturer's installation instructions.

1.3 Delivery, Storage, and Handling
- A. Deliver bird control devices and mounting hardware in suitable packaging and protect from damage before, during, and after installation.

1.4 Project/Site Conditions
- A. Verify installation conditions and field measure before ordering product.

PART 2 - Products

2.1 Bird Spikes
- A. 4″ high (10.2cm), 6″ wide (15.2cm), no less than 48 wire points per foot. Full 180-degree wire coverage.
- B. 4″ high (10.2cm), 3″ wide (7.6 cm), no less than 24 wire points per foot, 90 degree wire coverage. For single exposed surfaces less than 3″ in depth (7.6cm).
- C. Finish: Natural stainless steel.

2.2 Fastening
- A. Provide mechanical fastening system recommended by manufacturer.

PART 3 - Execution

3.1 Examination
- A. Visually inspect all installation surfaces. Make sure all surfaces are clean, dry and free from debris or other conditions that could impede the workflow of this section.
- B. Notify architect of detrimental conditions. Do not proceed until these conditions have been corrected.

3.2 Preparation
- A. Field Measurements: Verify dimensions of each installation surface.
- B. Make sure all installation surface finishing requirements have been accomplished before installing bird spikes. Bird spikes shall be the last item installed on specified surfaces. Do not apply any surface coating or treatment (paint, sealer, etc.) over the installed bird spikes.

3.3 Installation
- A. Install bird spikes in strict accordance with manufacturer's strip spacing and installation guidelines. Protect all surfaces.
- B. Protect the entire surface, not just the outside edges. No gaps are allowed in the bird spike coverage. Cut strips where necessary to fit the surface properly.

C. Wires of bird spikes to be flush with the outside edge of surface. Bird strips to extend over any open end of surface by at least 1/2″ (1.2cm).

D. Fasten bird spikes to the surface with the mounting hardware recommended by the manufacturer.

End of Section