Port of Pasco Administrative Office
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Suite 201
P.O. Box 769
Pasco, Washington U.S.A. 99301

September 12, 2024

SUBJECT: Tri Cities Airport ARFF Building Fluid-Applied Roofing
BIDS DUE SEPTEMBER 30, 2024 AT 10:00 AM

Dear Small Works Contractor:

Please find enclosed the bidding documents for the Port of Pasco, Tri Cities Airport ARFF Building Fluid-Applied Roofing project. The project involves application of fluid-applied roofing membrane of approximately 9,234 sf of existing TPO roof area.

We would appreciate your bid proposal or a response indicating that you will not be submitting a bid.

If you have any questions, please feel free to contact me at (509) 547-3378.

Respectfully,

Don Faley

Don Faley
Deputy Director Airport

enclosure

Port of Pasco
INVITATION FOR BIDS
Small Works Roster

Notice to Contractors: The Port of Pasco requests your proposal to furnish labor, equipment, and material to accomplish the project: Tri Cities Airport ARFF Building Fluid-Applied Roofing.

Instructions: Please submit your proposal by mail or by hand not later than **10:00 AM. PST, September 30, 2024**. Bids shall be mailed, or delivered to the Deputy Director Airport, Tri Cities Airport, 3601 N. 20th Ave, Pasco, WA 99301. Questions may be directed to Tracy Friesz, Ph. 509.547.3378. Plans and specifications may be examined or obtained at the Port of Pasco Administrative office at the address listed above or at the Port's web site, www.portofpasco.org under "Business with the Port". Contractors must be on the State wide Small Works Roster to be eligible for bidding on this project. Businesses interested in working with the Port on projects using a roster contracting process must register at www.mrscrosters.org and select the Port of Pasco in your application. If you have roster registration questions, please contact MRSC Rosters at mrscrosters@mrsc.org.

Bid Opening: Bids will immediately be publicly opened and read aloud on the submittal time and date listed above. Bids received after the time for opening cannot be considered.

Bid Award: Opened proposals will be submitted to the Board of Commissioners of the Port of Pasco at the next regular meeting. It is anticipated an award will be made within one week after the presentation to the Board of Commissioners. The work will be awarded to, and a contract negotiated with the lowest responsible bidder or the bid judged to be in the best interest of the Port of Pasco. The successful bidder shall have 10 days after receipt of the Notice of Award to execute the Agreement and furnish required bonds and proof of insurance.

Start Date and Contract Time: Work will begin within 10 days after the execution of the contract, and require completion not to exceed 20 calendar days. Contractor will have until December 15, 2024 to complete project. Contractor shall give Port one weeks' notice prior to start of project.

Pre-Bid Walk-Through: A pre-bid meeting for the project will be held at the Airport Administrative Office, 3601 N. 20th Ave, Pasco, WA on September 19, 2024, at 2:00 PM. A walk-through of the project site will be conducted at the pre-bid meeting.

Bid Proposal Form: Proposals shall be prepared on the standard proposal form attached. The bidder shall make no stipulation on the bid form, nor qualify the bid in any manner. The proposal shall be placed in a sealed envelope marked in the lower left corner with "Proposal for Tri Cities Airport ARFF Building Fluid-Applied Roofing. Please place name of company on front of envelope as well.

Bid Comparisons: Discrepancies between the multiplication of units of Work and unit prices will be resolved in favor of the unit prices. Discrepancies between the indicated sum of any column of figures and the correct sum thereof will be resolved in favor of the correct sum. Discrepancies between figures and numbers written as words shall be resolved in favor of the numbers written as words.

Bid Hold: No Bid may be withdrawn for a period of four weeks after the bid date.

Bid Guarantee: A certified check, cashier's check or bid bond made payable to the Port of Pasco for an amount equal to at least 5% of the total base bid amount shall accompany each bid.

Performance & Payment Bond: The Contractor shall furnish performance and payment bonds, each in an amount at least equal to the Contract Price, as required by R.C.W. 39.08, upon execution of a contract. These bonds shall remain in effect until one year after the date when final payment becomes due. In lieu of the said performance and payment bonds, and in the event the contract is for an amount less than $150,000.00, the Contractor may elect to have the Port retain 10% of the contract amount for a period of forty five (45) days after the date of final acceptance, or until receipt of all necessary releases from the Department of Revenue, Department of Labor and Industries, and the settlement of liens filed under Chapter 60.28 R.C.W., whichever is later. Retained amounts will be held by the Port unless Contractor submits a written request to invest the deposit retainage in accordance with applicable law.

Agreement: Successful bidder will execute the attached Agreement between the Port of Pasco and the Contractor.

Right of the Port to Accept or Reject Bids: The Port of Pasco reserves the right to reject any or all bids, to waive any informalities or irregularities in any bid, or in the bidding, and to accept or reject any bid for reasons based solely on considerations for the best interests of the Port of Pasco.

GENERAL CONDITIONS:

Insurance: The Contractor shall purchase and maintain such insurance as will protect it from claims arising out of Contractor's operations under the contract, whether such operations be by itself or by any subcontractor or by anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable (per Title 48 of the R.C.W.). Said insurance shall include provisions applying to:

A. Claims under workman's compensation, disability benefit and other similar employee benefit acts;

B. Claims for damages because of bodily injury, occupational sickness or disease, or death of its employees, and claims insured by usual personal injury liability coverage;

C. Claims for damages because of bodily injury, sickness or disease, or death of person other than its employees, and claims insured by usual personal injury liability coverage; and

D. Claims for damages because of injury to or destruction of tangible property, including loss of use resulting there from.

The insurance required by this paragraph shall be written for not less than:

A. Commercial General Liability and Contractual Liability Insurance; written on an Occurrence form, and include Premises and Products/Completed Operations; Employers Liability.

Combined Single Limit per Occurrence	$1,000,000
General Aggregate	$2,000,000

B. Commercial Auto Liability; including all Owned, Non-Owned, and Hired Autos:

Combined Single Limit per Occurrence	$1,000,000 each Accident including Bodily Injury and Property Damage Liability
C. Workers Compensation	Statutory Requirements
D. Excess/Umbrella	$1,000,000 Each Occurrence

All such insurance policies shall be issued by a reputable insurance company satisfactory to Port; authorized to do business in the State of Washington and rated A- or better by A. M. Best Company. The insurance company and its agent shall be licensed with the State of Washington Insurance Commissioner per Title 48 of the RCW of Washington.

The policy of Commercial General Liability shall 1) name the Port as an Additional Insured for both "ongoing" and "completed operations", and shall include coverage for the Port's officers, directors, partners, employees, agents, and consultants and 2) be primary coverage for both Defense and Indemnity and Non-Contributory with any insurance maintained by Port, and shall provide for a Waiver of Subrogation rights as to the Port.

Evidence of Insurance shall be filed with the Port prior to the execution of the agreement, which documents that policies providing such coverage and limits of insurance are in full force and effect in a form acceptable to the Port. Attach appropriate endorsement forms evidencing required additional insured parties. Thirty (30) days advance notice shall be given in writing to the PORT prior to cancellation, termination or alteration of said policies of insurance. The insurance company and its agent shall be licensed with the State of Washington Insurance Commissioner per Title 48 of the RCW of Washington.

Warranty: Standard one year Contractors Guarantee covering the work performed and Manufacturers' 15 year Warranty on material, and warranties as otherwise listed in these specifications. Copies of all such warranties to be furnished to the Port of Pasco.

Cancellation of Contract for Violation of Port Policy: This contract pursuant to R.C.W. 49.28.050 and 49.28.060 may be cancelled by the officers or agents of the Port authorized to contract for or supervise the execution of such work, in case such work is not performed in accordance with the policy of the Port relating to such work.

Prevailing Wage: The hourly wages paid to laborers, workmen or mechanics shall not be less than the prevailing rate of wage, R.C.W. 39.12.020. No worker may be paid less than the specified hourly rate. Contractor will submit Intent to Pay Prevailing Wages, Affidavit of Wages Paid, and Request for Release to the Department of Labor and Industries at appropriate times.

The Washington State Prevailing Wage Rates for Public Works Contracts, Franklin County, effective September 30, 2024, is a part of this Invitation and may be accessed from the following website: http://www.lni.wa.gov/TradesLicensing/PrevWage/WageRates/default.asp. A copy is also

available for viewing at the Port of Pasco office, 1110 Osprey Pointe Blvd, Suite 201, Pasco, WA 99301, and can be mailed upon request.

Retainage: Retainage of 5% will be administered in accordance with R.C.W. 60.28 when contractor elects to furnish a performance and payment bond for the project when all requirements are met. If contractor elects not to furnish a performance and payment bond on the project of $150,000 or less, retainage of 10% will be withheld until requirements of R.C.W. 60.28 are met.

Bidder Responsibility Criteria

It is the intent of Owner to award a contract to the lowest, responsible bidder. In accordance with RCW 39.04.350, before award of a public works contract, the bidder must meet the following bidder responsibility criteria to be considered a responsible bidder and qualified to be awarded a public works project. The bidder may be required by the Owner to submit documentation demonstrating compliance with the criteria. The bidder must:

A. Have a current certificate of registration as a contractor at the time of bid submittal, in compliance with chapter 18.27 RCW. In addition, per RCW 39.06.010(1), all electrical and elevator contractors must also be licensed, which must have been in effect at the time of bid submittal;

B. Have a current Washington Unified Business Identifier (UBI) number;

C. If applicable:

   1. Have Industrial Insurance (workers' compensation) coverage for the bidder's employees working in Washington, as required in Title 51 RCW, unless self insured;

   2. Have a Washington Employment Security Department number, as required in Title 50 RCW;

   3. Have a Washington Department of Revenue state excise tax registration number, as required in Title 82 RCW;

   4. Have a Federal Employer Identification number (EIN or Federal Tax ID number)

D. Not be disqualified from bidding on any public works contract under RCW 39.06.010 or 39.12.065(3).

E. If bidding on a public works project subject to the apprenticeship utilization requirements in RCW 39.04.320, not have been found out of compliance by the Washington state apprenticeship and training council for working apprentices out of ratio, without appropriate supervision, or outside their approved work processes as outlined in their standards of apprenticeship under chapter 49.04 RCW for the one-year period immediately preceding the date of the bid solicitation;

F. Have received training on the requirements related to public works and prevailing wage under this chapter and chapter 39.12 RCW. The bidder must designate a person or persons to be trained on these requirements. The training must be provided by the department of labor and industries or by a training provider whose curriculum is approved by the department. The department, in consultation with the prevailing wage advisory committee, must determine the

length of the training. Bidders that have completed three or more public works projects and have had a valid business license in Washington for three or more years are exempt from this subsection. The department of labor and industries must keep records of entities that have satisfied the training requirement or are exempt and make the records available on its web site. Responsible parties may rely on the records made available by the department regarding satisfaction of the training requirement or exemption;

G. Within the three year period immediately preceding the date of the bid solicitation, not have been determined by a final binding citation and notice of assessment issued by the Department of Labor and Industries or through a civil judgement entered by a court of limited or general jurisdiction to have willfully violated, as defined in RCW 49.48.082, any provision of chapter 49.46, 49.48, or 49.52 RCW. This requires the successful bidder to submit to the municipality a signed acknowledged statement under oath verifying under penalty of perjury that the bidder is in compliance with the responsible bidder criteria requirement set forth under this number.

H. In accordance with RCW 39.06, a public works contractor must verify responsibility criteria for each first tier subcontractor, and a subcontractor of any tier that hires other subcontractors must verify responsibility criteria for each of its subcontractors. Verification shall include that each subcontractor, at the time of subcontract execution, meets the responsibility criteria and possesses an electrical contractor license if required by RCW 19.28, or an elevator contractor license, if required by RCW 70.87. This verification requirement, as well as the responsibility criteria, must be included in every public works contract and subcontract of every tier.

TABLE OF CONTENTS

SPECIFICATIONS:

Section 1:

Description of the Work: The project involves application of fluid-applied protected membrane roofing system at existing ARFF Building over existing Thermoplastic Polyolefin (TPO) roofing system. Plans are attached as Drawings G-01, G-02, PH-01, A-01, A-02, A-03, R-01 and R-02. General work includes, but is not limited to, removal of debris and preparation of roof areas for application of fluid-applied membrane roofing system, penetration and equipment preparation for application of fluid-applied membrane roofing system, preparation of existing wall to roof system interfaces for application of fluid-applied membrane roofing system, preparation of existing roof drain areas for application of fluid-applied membrane roofing system, any preparation work as required by manufacturer for application of fluid-applied membrane roofing system.

Project specific requirements are listed below:

DIVISION 01

DIVISION 012600 - CONTRACT MODIFICATION PROCEDURES

PART 1 - GENERAL

1.01 SUMMARY

A. Section includes administrative and procedural requirements for handling and processing contract modifications.

1.02 MINOR CHANGES IN THE WORK

A. Architect will issue supplemental instructions authorizing minor changes in the work, not involving adjustment to the contract sum or the contract time, on AIA Document G710, "Architect's Supplemental Instructions."

1.03 PROPOSAL REQUESTS

A. Owner-Initiated Proposal Requests: Architect will issue a description of proposed changes in the work that may require adjustment to the contract sum or the contract time. Work change proposal requests issued by architect are not instructions either to stop work in progress or to execute the proposed change. Cost shall include a list of quantities of products required or eliminated and unit costs, with total amount of purchases and credits to be made, applicable taxes, delivery charges, equipment rental, and costs of labor and supervision directly attributable to the change.

B. Contractor-Initiated Work Change Proposals: If latent or changed conditions require modifications to the contract, contractor may initiate a claim by submitting a request for a change to architect. Include a statement outlining reasons for the change and the effect of the change on the work. Provide a complete description of the proposed change. Indicate the effect of the proposed change on the contract sum and the contract time. Cost shall include a list of quantities of products required or eliminated and unit costs, with

total amount of purchases and credits to be made, applicable taxes, delivery charges, equipment rental, and costs of labor and supervision directly attributable to the change.

1.04 CHANGE ORDER PROCEDURES

A. On owner's approval of a work changes proposal request, architect will issue a change order for signatures of owner and contractor on AIA Document G701.

1.05 CONSTRUCTION CHANGE DIRECTIVE

A. Construction Change Directive: Architect may issue a construction change directive on AIA Document G714. Construction change directive instructs contractor to proceed with a change in the work, for subsequent inclusion in a change order.

B. Documentation: Maintain detailed records on a time and material basis of work required by the construction change directive. After completion of change, submit an itemized account and supporting data necessary to substantiate cost and time adjustments to the contract.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF DIVISION 012600 - CONTRACT MODIFICATION PROCEDURES

SECTION 012900 - PAYMENT PROCEDURES

PART 1 - GENERAL

1.1 SUMMARY

A. This Section includes administrative and procedural requirements necessary to prepare and process Applications for Payment.

B. Related Requirements:

1. Division 01 Section "Contract Modification Procedures" for administrative procedures for handling changes to the Contract.
2. Division 01 Section "Construction Progress Documentation" for administrative requirements governing the preparation and submittal of the Contractor's construction schedule.

1.2 SCHEDULE OF VALUES

A. Coordination: Coordinate preparation of the schedule of values with preparation of Contractor's construction schedule.

1. Coordinate line items in the schedule of values with other required administrative forms and schedules, including the following:
   a. Application for Payment forms with continuation sheets.

b. Submittal schedule.
c. Items required to be indicated as separate activities in Contractor's construction schedule.

2. Submit the schedule of values to Architect at earliest possible date but no later than seven days before the date scheduled for submittal of initial Applications for Payment.

B. Format and Content: Use Project Manual table of contents as a guide to establish line items for the schedule of values. Provide at least one line item for each Specification Section.

1. Identification: Include the following Project identification on the schedule of values:
   a. Project name and location.
   b. Name of Architect.
   c. Architect's project number.
   d. Contractor's name and address.
   e. Date of submittal.
2. Arrange schedule of values consistent with format of AIA Document G703.
3. Provide a breakdown of the Contract Sum in enough detail to facilitate continued evaluation of Applications for Payment and progress reports. Coordinate with Project Manual table of contents. Provide multiple line items for principal subcontract amounts in excess of five percent of the Contract Sum.
4. Round amounts to nearest whole dollar; total shall equal the Contract Sum.
5. Provide a separate line item in the schedule of values for each part of the Work where Applications for Payment may include materials or equipment purchased or fabricated and stored, but not yet installed.
6. Provide separate line items in the schedule of values for initial cost of materials, for each subsequent stage of completion, and for total installed value of that part of the Work.
7. Each item in the schedule of values and Applications for Payment shall be complete. Include total cost and proportionate share of general overhead and profit for each item.
   a. Temporary facilities and other major cost items that are not direct cost of actual work-in-place may be shown either as separate line items in the schedule of values or distributed as general overhead expense, at Contractor's option.
8. Schedule Updating: Update and resubmit the schedule of values before the next Applications for Payment when Change Orders or Construction Change Directives result in a change in the Contract Sum.

1.3 APPLICATIONS FOR PAYMENT

A. Each Application for Payment shall be consistent with previous applications and payments as certified by Architect and paid for by Owner.

1. Initial Application for Payment, Application for Payment at time of Substantial Completion, and final Application for Payment involve additional requirements.

B. Payment Application Times: The date for each progress payment is indicated in the Agreement between Owner and Contractor. The period of construction work covered by each Application for Payment is the period indicated in the Agreement.

C. Application for Payment Forms: Use AIA Document G702 and AIA Document G703 as the form for Applications for Payment.

D. Application Preparation: Complete every entry on form. Notarize and execute by a person authorized to sign legal documents on behalf of Contractor. Architect will return incomplete applications without action.

1. Entries shall match data on the schedule of values and Contractor's construction schedule. Use updated schedules if revisions were made.
2. Include amounts of Change Orders and Construction Change Directives issued before last day of construction period covered by application.

E. Transmittal: Submit three signed and notarized original copies of each Application for Payment to Architect by a method ensuring receipt within 24 hours. One copy shall include waivers of lien and similar attachments if required.

1. Transmit each copy with a transmittal form listing attachments and recording appropriate information about application.

F. Waivers of Mechanic's Lien: With each Application for Payment, submit waivers of mechanic's lien from entities lawfully entitled to file a mechanic's lien arising out of the Contract and related to the Work covered by the payment.

1. Owner reserves the right to designate which entities involved in the work must submit waivers.
2. Waiver Forms: Submit executed waivers of lien on forms acceptable to Owner.

G. Initial Application for Payment: Administrative actions and submittals that must precede or coincide with submittal of first Application for Payment include the following:

1. Schedule of values.
2. Contractor's construction schedule (preliminary if not final).
3. Submittal schedule (preliminary if not final).
4. List of Contractor's staff assignments.
5. List of Contractor's principal consultants.
6. Copies of building permits.
7. Copies of authorizations and licenses from authorities having jurisdiction for performance of the Work.
8. Initial progress report.
9. Report of preconstruction conference.

H. Application for Payment at Substantial Completion: After Architect issues the Certificate of Substantial Completion, submit an Application for Payment showing 100 percent completion for portion of the Work claimed as substantially complete.

1. Include documentation supporting claim that the Work is substantially complete and a statement showing an accounting of changes to the Contract Sum.
2. This application shall reflect Certificates of Partial Substantial Completion issued previously for Owner occupancy of designated portions of the Work.

I. Final Payment Application: After completing Project closeout requirements, submit final Application for

Payment with releases and supporting documentation not previously submitted and accepted, including, but not limited, to the following:

1. Insurance certificates for products and completed operations where required and proof that taxes, fees, and similar obligations were paid.
2. Updated final statement, accounting for final changes to the Contract Sum.
3. AIA Document G706-1994, "Contractor's Affidavit of Payment of Debts and Claims."
4. AIA Document G706A-1994, "Contractor's Affidavit of Release of Liens."
5. Evidence that claims have been settled.
6. Final meter readings for utilities, a measured record of stored fuel, and similar data as of date of Substantial Completion or when Owner took possession of and assumed responsibility for corresponding elements of the Work.
7. Final liquidated damages settlement statement.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 012900

DIVISION 013100 - PROJECT MANAGEMENT AND COORDINATION

PART 1 – GENERAL

1.01 SUMMARY

A. Section includes administrative provisions for coordinating construction operations on project including, but not limited to Requests for Information (RFIS) and project meetings.

1.02 GENERAL COORDINATION PROCEDURES

A. Coordination: Coordinate construction operations included in different sections of the specifications to ensure efficient and orderly installation of each part of the work. Coordinate construction operations, included in different sections, which depend on each other for proper installation, connection, and operation. Schedule construction operations in sequence required to obtain the best results where installation of one part of the work depends on installation of other components, before or after its own installation. Coordinate installation of different components to ensure maximum performance and accessibility for required maintenance, service, and repair. Make adequate provisions to accommodate items scheduled for later installation.

B. Administrative Procedures: Coordinate scheduling and timing of required administrative procedures with other construction activities to avoid conflicts and to ensure orderly progress of the work. Such administrative activities include, but are not limited to, preparation of contractor's construction schedule, delivery and processing of submittals, progress meetings, pre-installation conferences, project closeout activities, and startup and adjustment of systems.

1.03 REQUESTS FOR INFORMATION (RFIS)

A. General: Immediately on discovery of the need for additional information or interpretation of the contract documents, contractor shall prepare and submit an RFI in the form specified. Architect will return RFIS submitted to architect by other entities controlled by contractor with no response.

B. Content of the RFI: Include a detailed, legible description of item needing information or interpretation and the contractor's suggested resolution. If contractor's solution(s) impacts the contract time or the contract sum, contractor shall state impact in the RFI.

C. RFI forms: AIA Document G716 or approved form, acceptable to architect.

D. Architect's Action: Architect will review each RFI, determine action required, and respond. Allow seven working days for architect's response for each RFI. The following RFIS will be returned without action: Requests for approval of submittals or substitutions and requests for coordination information already indicated in the contract documents.

E. RFI Log: Prepare, maintain, and submit a tabular log of RFIS organized by the RFI number. Include RFI description, date submitted and date architect's response was received. Notify architect within five days if contractor disagrees with response.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF DIVISION 013100 - PROJECT MANAGEMENT AND COORDINATION

SECTION 013200 - CONSTRUCTION PROGRESS DOCUMENTATION

PART 1 - GENERAL

1.1 SUMMARY

A. This Section includes administrative and procedural requirements for documenting the progress of construction during performance of the work, including the following:

1. Contractor's construction schedule.
2. Construction schedule updating reports.
3. Daily construction reports.
4. Site condition reports.

1.2 DEFINITIONS

A. Activity: A discrete part of a project that can be identified for planning, scheduling, monitoring, and controlling the construction project. Activities included in a construction schedule consume time and resources.

1. Critical Activity: An activity on the critical path that must start and finish on the planned early start and finish times.
2. Predecessor Activity: An activity that precedes another activity in the network.

3. Successor Activity: An activity that follows another activity in the network.

B. Critical Path: The longest connected chain of interdependent activities through the network schedule that establishes the minimum overall Project duration and contains no float.

C. Float: The measure of leeway in starting and completing an activity.

1. Float time is not for the exclusive use or benefit of either Owner or Contractor, but is a jointly owned, expiring Project resource available to both parties as needed to meet schedule milestones and Contract completion date.

1.3 INFORMATIONAL SUBMITTALS

A. Format for Submittals: Submit required submittals in the following format:

1. PDF electronic file.

B. Startup Network Diagram: Of size required to display entire network for entire construction period. Show logic ties for activities.

C. Contractor's Construction Schedule: Initial schedule, of size required to display entire schedule for entire construction period.

1.4 COORDINATION

A. Coordinate Contractor's construction schedule with the schedule of values, submittal schedule, progress reports, payment requests, and other required schedules and reports.

1. Secure time commitments for performing critical elements of the Work from entities involved.
2. Coordinate each construction activity in the network with other activities and schedule them in proper sequence.

PART 2 - PRODUCTS

2.1 CONTRACTOR'S CONSTRUCTION SCHEDULE, GENERAL

A. Time Frame: Extend schedule from date established for the Notice to Proceed to date of Substantial Completion.

1. Contract completion date shall not be changed by submission of a schedule that shows an early completion date, unless specifically authorized by Change Order.

B. Activities: Treat each story or separate area as a separate numbered activity for each main element of the Work. Comply with the following:

1. Activity Duration: Define activities so no activity is longer than 90 days, unless specifically allowed by Architect.
2. Procurement Activities: Include procurement process activities for the following long lead items and major items, requiring a cycle of more than 60 days, as separate activities in schedule.

Procurement cycle activities include, but are not limited to, submittals, approvals, purchasing, fabrication, and delivery.

3. Submittal Review Time: Include review and resubmittal times indicated in Division 01 Section "Submittal Procedures" in schedule. Coordinate submittal review times in Contractor's construction schedule with submittal schedule.
4. Substantial Completion: Indicate completion in advance of date established for Substantial Completion, and allow time for Architect's administrative procedures necessary for certification of Substantial Completion.
5. Punch List and Final Completion: Include not more than 30 days for completion of punch list items and final completion.

C. Constraints: Include constraints and work restrictions indicated in the Contract Documents and as follows in schedule, and show how the sequence of the Work is affected.

1. Work Restrictions: Show the effect of the following items on the schedule:
   a. Coordination with existing construction.
   b. Limitations of continued occupancies.
   c. Uninterruptible services.
   d. Environmental control.
2. Work Stages: Indicate important stages of construction for each major portion of the Work.
3. Other Constraints: <Insert constraints not indicated elsewhere>.

D. Milestones: Include milestones indicated in the Contract Documents in schedule, including, but not limited to, the Notice to Proceed, Substantial Completion, and final completion[.][, and the following interim milestones:]

1. <Insert milestones not indicated elsewhere>.

E. Upcoming Work Summary: Prepare summary report indicating activities scheduled to occur or commence prior to submittal of next schedule update. Summarize the following issues:

1. Unresolved issues.
2. Unanswered Requests for Information.
3. Rejected or unreturned submittals.
4. Notations on returned submittals.
5. Pending modifications affecting the Work and Contract Time.

F. Recovery Schedule: When periodic update indicates the Work is 14 or more calendar days behind the current approved schedule, submit a separate recovery schedule indicating means by which Contractor intends to regain compliance with the schedule.

2.2 CONTRACTOR'S CONSTRUCTION SCHEDULE (GANTT CHART)

A. Gantt-Chart Schedule: Submit a comprehensive, fully developed, horizontal, Gantt-chart-type, Contractor's construction schedule within 7 days prior of date established for commencement of the Work.

B. Preparation: Indicate each significant construction activity separately. Identify first workday of each week with a continuous vertical line.

1. For construction activities that require three months or longer to complete, indicate an estimated completion percentage in 10 percent increments within time bar.

2.3 REPORTS

A. Daily Construction Reports: Prepare a daily construction report recording the following information concerning events at Project site:

1. List of subcontractors at Project site.
2. List of separate contractors at Project site.
3. Approximate count of personnel at Project site.
4. Equipment at Project site.
5. Material deliveries.
6. High and low temperatures and general weather conditions, including presence of rain or snow.
7. Accidents.
8. Meetings and significant decisions.
9. Unusual events.
10. Stoppages, delays, shortages, and losses.
11. Emergency procedures.
12. Orders and requests of authorities having jurisdiction.
13. Change Orders received and implemented.
14. Construction Change Directives received and implemented.
15. Services connected and disconnected.
16. Partial completions and occupancies.
17. Substantial Completions authorized.

B. Site Condition Reports: Immediately on discovery of a difference between site conditions and the Contract Documents, prepare and submit a detailed report. Submit with a Request for Information. Include a detailed description of the differing conditions, together with recommendations for changing the Contract Documents.

PART 3 - EXECUTION

3.1 CONTRACTOR'S CONSTRUCTION SCHEDULE

A. Contractor's Construction Schedule Updating: At monthly intervals, update schedule to reflect actual construction progress and activities. Issue schedule one week before each regularly scheduled progress meeting.

1. Revise schedule immediately after each meeting or other activity where revisions have been recognized or made. Issue updated schedule concurrently with the report of each such meeting.
2. Include a report with updated schedule that indicates every change, including, but not limited to, changes in logic, durations, actual starts and finishes, and activity durations.
3. As the Work progresses, indicate final completion percentage for each activity.

B. Distribution: Distribute copies of approved schedule to Architect Owner, separate contractors, testing and inspecting agencies, and other parties identified by Contractor with a need-to-know schedule responsibility.

1. When revisions are made, distribute updated schedules to the same parties and post in the same locations. Delete parties from distribution when they have completed their assigned portion of the Work and are no longer involved in performance of construction activities.

END OF SECTION 013200

SECTION 013300 - SUBMITTAL PROCEDURES

PART 1 - GENERAL

1.1 SUMMARY

A. This Section includes requirements for the submittal schedule and administrative and procedural requirements for submitting Shop Drawings, Product Data, Samples, and other submittals.

B. Related Requirements:

1. Division 01 Section "Construction Progress Documentation" for submitting schedules and reports, including Contractor's construction schedule.
2. Division 01 Section "Operation and Maintenance Data" for submitting operation and maintenance manuals.
3. Division 01 Section "Project Record Documents" for submitting record Drawings, record Specifications, and record Product Data.
4. Division 01 Section "Demonstration and Training" for submitting video recordings of demonstration of equipment and training of Owner's personnel.

1.2 DEFINITIONS

A. Action Submittals: Written and graphic information and physical samples that require Architect's responsive action.

B. Informational Submittals: Written and graphic information and physical samples that do not require Architect's responsive action. Submittals may be rejected for not complying with requirements.

1.3 ACTION SUBMITTALS

A. Submittal Schedule: Submit a schedule of submittals, arranged in chronological order by dates required by construction schedule. Include time required for review, ordering, manufacturing, fabrication, and delivery when establishing dates. Include additional time required for making corrections or revisions to submittals noted by Architect and additional time for handling and reviewing submittals required by those corrections.

1.4 SUBMITTAL ADMINISTRATIVE REQUIREMENTS

A. Architect's Digital Data Files: Electronic copies of digital data files of the Contract Drawings will be provided by Architect for Contractor's use in preparing submittals.

1. Architect will furnish Contractor one set of digital data drawing files of the Contract Drawings for use in preparing Shop Drawings.
    a. Architect makes no representations as to the accuracy or completeness of digital data drawing files as they relate to the Contract Drawings.

B. Coordination: Coordinate preparation and processing of submittals with performance of construction activities.

1. Coordinate each submittal with fabrication, purchasing, testing, delivery, other submittals, and related activities that require sequential activity.

2. Coordinate transmittal of different types of submittals for related parts of the Work so processing will not be delayed because of need to review submittals concurrently for coordination.
    a. Architect reserves the right to withhold action on a submittal requiring coordination with other submittals until related submittals are received.

C. Processing Time: Allow time for submittal review, including time for resubmittals, as follows. Time for review shall commence on Architect's receipt of submittal. No extension of the Contract Time will be authorized because of failure to transmit submittals enough in advance of the Work to permit processing, including resubmittals.

1. Initial Review: Allow 15 days for initial review of each submittal. Allow additional time if coordination with subsequent submittals is required. Architect will advise Contractor when a submittal being processed must be delayed for coordination.
2. Intermediate Review: If intermediate submittal is necessary, process it in same manner as initial submittal.
3. Resubmittal Review: Allow 15 days for review of each resubmittal.

D. Paper Submittals: Place a permanent label or title block on each submittal item for identification.

1. Indicate name of firm or entity that prepared each submittal on label or title block.
2. Provide a space approximately 6 by 8 inches on label or beside title block to record Contractor's review and approval markings and action taken by Architect.
3. Include the following information for processing and recording action taken:
    a. Project name.
    b. Date.
    c. Name of Architect.
    d. Name of Contractor.
    e. Name of subcontractor.
    f. Name of supplier.
    g. Name of manufacturer.
    h. Submittal number or other unique identifier, including revision identifier.
        1) Submittal number shall use Specification Section number followed by a decimal point and then a sequential number (e.g., 061000.01). Resubmittals shall include an alphabetic suffix after another decimal point (e.g., 061000.01.A).
    i. Number and title of appropriate Specification Section.
    j. Drawing number and detail references, as appropriate.

k. Location(s) where product is to be installed, as appropriate.
l. Other necessary identification.

4. Additional Paper Copies: Unless additional copies are required for final submittal, and unless Architect observes noncompliance with provisions in the Contract Documents, initial submittal may serve as final submittal.
   a. Submit one copy of submittal to concurrent reviewer in addition to specified number of copies to Architect.
5. Transmittal for Paper Submittals: Assemble each submittal individually and appropriately for transmittal and handling. Transmit each submittal using a transmittal form. Architect will return without review submittals received from sources other than Contractor.
   a. Transmittal Form for Paper Submittals: Provide locations on form for the following information:
      1) Project name.
      2) Date.Name and address of Architect.
      3) Name of Contractor.
      4) Name of firm or entity that prepared submittal.
      5) Names of subcontractor, manufacturer, and supplier.
      6) Category and type of submittal.
      7) Submittal purpose and description.
      8) Specification Section number and title.
      9) Drawing number and detail references, as appropriate.
      10) Indication of full or partial submittal.
      11) Transmittal number, numbered consecutively.
      12) Submittal and transmittal distribution record.
      13) Remarks.
      14) Signature of transmitter.

E. Electronic Submittals: Identify and incorporate information in each electronic submittal file as follows:

1. Assemble complete submittal package into a single indexed file incorporating submittal requirements of a single Specification Section and transmittal form with links enabling navigation to each item.
2. Name file with submittal number or other unique identifier, including revision identifier.
   a. File name shall use project identifier and Specification Section number followed by a decimal point and then a sequential number (e.g., LNHS-061000.01). Resubmittals shall include an alphabetic suffix after another decimal point (e.g., LNHS-061000.01.A).
3. Provide means for insertion to permanently record Contractor's review and approval markings and action taken by Architect.
4. Transmittal Form for Electronic Submittals: Use electronic form containing the following information:
   a. Project name.
   b. Date.
   c. Name and address of Architect.
   d. Name of Contractor.
   e. Name of firm or entity that prepared submittal.
   f. Names of subcontractor, manufacturer, and supplier.
   g. Category and type of submittal.
   h. Submittal purpose and description.
   i. Specification Section number and title.

j. Specification paragraph number or drawing designation and generic name for each of multiple items.
k. Drawing number and detail references, as appropriate.
l. Location(s) where product is to be installed, as appropriate.
m. Related physical samples submitted directly.
n. Indication of full or partial submittal.
o. Transmittal number, numbered consecutively.
p. Submittal and transmittal distribution record.
q. Other necessary identification.
r. Remarks.

F. Options: Identify options requiring selection by Architect.

G. Deviations: Identify deviations from the Contract Documents on submittals.

H. Resubmittals: Make resubmittals in same form and number of copies as initial submittal.
1. Note date and content of previous submittal.
2. Note date and content of revision in label or title block and clearly indicate extent of revision.
3. Resubmit submittals until they are marked with approval notation from Architect's action stamp.

I. Distribution: Furnish copies of final submittals to manufacturers, subcontractors, suppliers, fabricators, installers, authorities having jurisdiction, and others as necessary for performance of construction activities. Show distribution on transmittal forms.

J. Use for Construction: Retain complete copies of submittals on Project site. Use only final action submittals that are marked with approval notation from Architect's action stamp.

PART 2 - PRODUCTS

2.1 SUBMITTAL PROCEDURES

A. General Submittal Procedure Requirements:

1. Submit electronic submittals via email as PDF electronic files.
   a. Architect will return annotated file. Annotate and retain one copy of file as an electronic Project record document file.
2. Action Submittals: Submit three paper copies of each submittal unless otherwise indicated. Architect will return two copies.
3. Informational Submittals: Submit two paper copies of each submittal unless otherwise indicated. Architect will not return copies.
4. Certificates and Certifications Submittals: Provide a statement that includes signature of entity responsible for preparing certification. Certificates and certifications shall be signed by an officer or other individual authorized to sign documents on behalf of that entity.
   a. Provide a notarized statement on original paper copy certificates and certifications where indicated.

B. Product Data: Collect information into a single submittal for each element of construction and type of

product or equipment.

1. If information must be specially prepared for submittal because standard published data are not suitable for use, submit as Shop Drawings, not as Product Data.
2. Mark each copy of each submittal to show which products and options are applicable.
3. Include the following information, as applicable:
    a. Manufacturer's catalog cuts.
    b. Manufacturer's product specifications.
    c. Standard color charts.
    d. Statement of compliance with specified referenced standards.
    e. Testing by recognized testing agency.
    f. Application of testing agency labels and seals.
    g. Notation of coordination requirements.
    h. Availability and delivery time information.
4. For equipment, include the following in addition to the above, as applicable:
    a. Wiring diagrams showing factory-installed wiring.
    b. Printed performance curves.
    c. Operational range diagrams.
    d. Clearances required to other construction, if not indicated on accompanying Shop Drawings.
5. Submit Product Data before or concurrent with Samples.
6. Submit Product Data in the following format:
    a. Three paper copies of Product Data unless otherwise indicated. Architect will return two copies.

C. Shop Drawings: Prepare Project-specific information, drawn accurately to scale. Do not base Shop Drawings on reproductions of the Contract Documents or standard printed data, unless submittal based on Architect's digital data drawing files is otherwise permitted.

1. Preparation: Fully illustrate requirements in the Contract Documents. Include the following information, as applicable:
    a. Identification of products.
    b. Schedules.
    c. Compliance with specified standards.
    d. Notation of coordination requirements.
    e. Notation of dimensions established by field measurement.
    f. Relationship and attachment to adjoining construction clearly indicated.
    g. Seal and signature of professional engineer if specified.
2. Sheet Size: Except for templates, patterns, and similar full-size drawings, submit Shop Drawings on sheets at least 8 1/2 by 11 inches, but no larger than 30 by 42 inches.
3. Submit Shop Drawings in the following format:
    a. Three opaque copies of each submittal. Architect will retain two copies; remainder will be returned.

D. Samples: Submit Samples for review of kind, color, pattern, and texture for a check of these characteristics with other elements and for a comparison of these characteristics between submittal and actual component as delivered and installed.

1. Transmit Samples that contain multiple, related components such as accessories together in

one submittal package.

2. Identification: Attach label on unexposed side of Samples that includes the following:
   a. Generic description of Sample.
   b. Product name and name of manufacturer.
   c. Sample source.
   d. Number and title of applicable Specification Section.
3. Disposition: Maintain sets of approved Samples at Project site, available for quality- control comparisons throughout the course of construction activity. Sample sets may be used to determine final acceptance of construction associated with each set.
4. Samples for Initial Selection: Submit manufacturer's color charts consisting of units or sections of units showing the full range of colors, textures, and patterns available.
   a. Number of Samples: Submit one full set(s) of available choices where color, pattern, texture, or similar characteristics are required to be selected from manufacturer's product line. Architect will retain submittal and notify contractor of options selected.

E. Product Schedule: As required in individual Specification Sections, prepare a written summary indicating types of products required for the Work and their intended location. Include the following information in tabular form:

   1. Submit product schedule in the following format:
      a. Three paper copies of product schedule or list unless otherwise indicated. Architect will return two copies.

F. Coordination Drawings Submittals: Comply with requirements specified in Division 01 Section "Project Management and Coordination."

G. Contractor's Construction Schedule: Comply with requirements specified in Division 01 Section "Construction Progress Documentation."

H. Application for Payment and Schedule of Values: Comply with requirements specified in Division 01 Section "Payment Procedures."

I. Test and Inspection Reports and Schedule of Tests and Inspections Submittals: Comply with requirements specified in Division 01 Section "Quality Requirements."

J. Closeout Submittals and Maintenance Material Submittals: Comply with requirements specified in Division 01 Section "Closeout Procedures."

K. Maintenance Data: Comply with requirements specified in Division 01 Section "Operation and Maintenance Data."

L. Qualification Data: Prepare written information that demonstrates capabilities and experience of firm or person. Include lists of completed projects with project names and addresses, contact information of architects and owners, and other information specified.

M. Welding Certificates: Prepare written certification that welding procedures and personnel comply with requirements in the Contract Documents. Submit record of Welding Procedure Specification and Procedure Qualification Record on AWS forms. Include names of firms and personnel certified.

N. Installer Certificates: Submit written statements on manufacturer's letterhead certifying that Installer complies with requirements in the Contract Documents and, where required, is authorized by manufacturer for this specific Project.

O. Manufacturer Certificates: Submit written statements on manufacturer's letterhead certifying that manufacturer complies with requirements in the Contract Documents. Include evidence of manufacturing experience where required.

P. Product Certificates: Submit written statements on manufacturer's letterhead certifying that product complies with requirements in the Contract Documents.

Q. Material Certificates: Submit written statements on manufacturer's letterhead certifying that material complies with requirements in the Contract Documents.

R. Material Test Reports: Submit reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting test results of material for compliance with requirements in the Contract Documents.

S. Product Test Reports: Submit written reports indicating that current product produced by manufacturer complies with requirements in the Contract Documents. Base reports on evaluation of tests performed by manufacturer and witnessed by a qualified testing agency, or on comprehensive tests performed by a qualified testing agency.

T. Research Reports: Submit written evidence, from a model code organization acceptable to authorities having jurisdiction, that product complies with building code in effect for Project.

U. Schedule of Tests and Inspections: Comply with requirements specified in Division 01 Section "Quality Requirements."

V. Preconstruction Test Reports: Submit reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of tests performed before installation of product, for compliance with performance requirements in the Contract Documents.

W. Compatibility Test Reports: Submit reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of compatibility tests performed before installation of product. Include written recommendations for primers and substrate preparation needed for adhesion.

X. Field Test Reports: Submit written reports indicating and interpreting results of field tests performed either during installation of product or after product is installed in its final location, for compliance with requirements in the Contract Documents.

Y. Design Data: Prepare and submit written and graphic information, including, but not limited to, performance and design criteria, list of applicable codes and regulations, and calculations. Include list of assumptions and other performance and design criteria and a summary of loads. Include load diagrams if applicable. Provide name and version of software, if any, used for calculations. Include page numbers.

2.2 DELEGATED-DESIGN SERVICES

A. Performance and Design Criteria: Where professional design services or certifications by a design professional are specifically required of Contractor by the Contract Documents, provide products and systems complying with specific performance and design criteria indicated.

1. If criteria indicated are not sufficient to perform services or certification required, submit a written request for additional information to Architect.

B. Delegated-Design Services Certification: In addition to Shop Drawings, Product Data, and other required submittals, submit three paper copies of certificate, signed and sealed by the responsible design professional, for each product and system specifically assigned to Contractor to be designed or certified by a design professional.

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

PART 3 - EXECUTION

3.1 CONTRACTOR'S REVIEW

A. Action and Informational Submittals: Review each submittal and check for coordination with other Work of the Contract and for compliance with the Contract Documents. Note corrections and field dimensions. Mark with approval stamp before submitting to Architect.

B. Project Closeout and Maintenance Material Submittals: See requirements in Division 01 Section "Closeout Procedures."

C. Approval Stamp: Stamp each submittal with a uniform, approval stamp. Include Project name and location, submittal number, Specification Section title and number, name of reviewer, date of Contractor's approval, and statement certifying that submittal has been reviewed, checked, and approved for compliance with the Contract Documents.

3.2 ARCHITECT'S ACTION

A. General: Architect will not review submittals that do not bear Contractor's approval stamp and will return them without action.

B. Action Submittals: Architect will review each submittal, make marks to indicate corrections or revisions required, and return it. Architect will stamp each submittal with an action stamp and will mark stamp appropriately to indicate as follows:

1. No Exceptions Taken.
2. Approved w/Exception.
3. Information/Record.
4. Revise and Resubmit.
5. Rejected.

C. Informational Submittals: Architect will review each submittal and will not return it or will return it if it does not comply with requirements. Architect will forward each submittal to appropriate party.

D. Incomplete submittals are unacceptable, will be considered nonresponsive, and will be returned for resubmittal without review.

E. Submittals not required by the Contract Documents may not be reviewed and may be discarded.

END OF SECTION 013300

DIVISION 014000 - QUALITY REQUIREMENTS

PART 1 - GENERAL

1.01 SUMMARY

A. Section includes administrative and procedural requirements for quality assurance and quality control.

B. Testing and inspecting services are required to verify compliance with requirements specified or indicated in the contract documents for specific test and inspection requirements. These services do not relieve contractor of responsibility for compliance with the contract document requirements.

1.02 CONFLICTING REQUIREMENTS

A. Referenced Standards: If compliance with two or more standards is specified and the standards establish different or conflicting requirements for minimum quantities or quality levels, comply with the most stringent requirement. Refer conflicting requirements that are different, but apparently equal, to architect for a decision before proceeding.

B. Minimum quantity or quality levels: the quantity or quality level shown or specified shall be the minimum provided or performed.

1.03 REPORTS AND DOCUMENTS

A. Test and Inspection Reports: Prepare and submit certified written reports specified in other sections.

B. Manufacturer's Field Reports: Prepare written information documenting tests and inspections specified in other sections.

C. Permits, Licenses, and Certificates: For owner's records, submit copies of permits, licenses, certifications, inspection reports, notices, receipts for fee payments, judgments, correspondence, records, and similar documents, established for compliance with standards and regulations bearing on performance of the work.

D. Testing Agency Qualifications: An independent agency with the experience to conduct testing and inspecting indicated, as documented according to ASTM E 329; and with additional qualifications specified in individual technical sections; and that is acceptable to authorities having jurisdiction.

1.04 QUALITY CONTROL

A. Owner Responsibilities: Where quality-control services are indicated as owner's responsibility, owner will engage a qualified testing agency to perform these services.

B. Contractor Responsibilities: Tests and inspections not explicitly assigned to the owner are contractor's responsibility. Perform additional quality-control activities required to verify that the work complies with requirements, whether specified or not.

C. Manufacturer's Field Services: Where indicated, engage a manufacturer's representative to observe and inspect the work. Manufacturer's representative's services include examination of substrates and conditions, verification of materials, inspection of completed portions of the work, and submittal of written reports.

D. Re-testing/re-inspecting: Regardless of whether original tests or inspections were contractor's responsibility, provide quality-control services, including retesting and re-inspecting, for construction that replaced work that failed to comply with the contract documents.

E. Associated Services: Cooperate with agencies performing required tests, inspections, and similar quality-control services, and provide reasonable auxiliary services as requested. Notify agency sufficiently in advance of operations to permit assignment of personnel. Provide access to the work, and incidental labor and facilities necessary to facilitate tests and inspections.

F. Coordination: Coordinate sequence of activities to accommodate required quality-assurance and control services with a minimum of delay and to avoid necessity of removing and replacing construction to accommodate testing and inspecting.

PART 2 - PRODUCTS (NOT USED)

PART 3 – EXECUTION

3.01 TEST AND INSPECTION LOG

A. Test and inspection log: maintain a record at project site.

3.02 REPAIR AND PROTECTION

A. General: On completion of testing, inspecting, sample taking, and similar services, repair damaged construction and restore substrates and finishes. Repair and protection are contractor's responsibility, regardless of the assignment of responsibility for quality-control services.

END OF DIVISION 014000 - QUALITY REQUIREMENTS

DIVISION 016000 - PRODUCT REQUIREMENTS

PART 1 – GENERAL

1.01 SUMMARY

A. Section includes administrative and procedural requirements for selection of products for use in project; product delivery, storage, handling; manufacturers' standard warranties; special warranties; and comparable products.

1.02 DEFINITIONS

A. Products: Items obtained for incorporating into the work, whether purchased for project or taken from previously purchased stock. The term "Product" includes the terms "Material," "Equipment," "System," and terms of similar intent.

1. Named products: Items identified by manufacturer's product name, make or model number listed in manufacturer's published product literature that is current as of date of the contract documents.

2. New products: Items that have not previously been incorporated into another project or facility. Products salvaged or recycled from other projects are not considered new products.

3. Comparable product: product that is approved through the submittal process to have the indicated qualities related to type, function, dimension, performance, physical properties, appearance, and other characteristics that equal or exceed those of the specified product.

B. Basis-of-design Product Specification: A specification in which a specific manufacturer's product is named, including make or model number or other designation, to establish the significant qualities related to type, function, dimension, performance, physical properties, appearance, and other characteristics for purposes of evaluating comparable products of additional manufacturers named in the specification.

1.03 SUBMITTALS

A. Comparable Product Requests: Submit request for consideration of each comparable product. Identify product or fabrication or installation method to be replaced. Include specification section number and title and drawing numbers and titles.

B. Basis-of-design Product Specification Submittal: Comply with requirements in division 01 section "Submittal Procedures." show compliance with requirements.

1.04 QUALITY ASSURANCE

A. Compatibility of Options: If contractor is given option of selecting between two or more products for use on project, select product compatible with products previously selected, even if previously selected products were also options.

1.05 PRODUCT DELIVERY, STORAGE, AND HANDLING

A. Deliver, store, and handle products using means and methods that will prevent damage, deterioration, and loss, including theft and vandalism. Comply with manufacturer's written instructions. Schedule delivery to minimize long-term storage at project site and to ensure minimum holding time for items that are flammable, hazardous, easily damaged, or sensitive to deterioration. Deliver products to project site in an undamaged condition in manufacturer's original sealed containers, complete with labels and instructions for handling, storing, unpacking, protecting, and installing. Protect stored products from damage and liquids from freezing.

1.06 PRODUCT WARRANTIES

A. Warranties shall be in addition to, and run concurrent with, other provisions of the contract documents. Manufacturer's disclaimers and limitations on product warranties do not relieve contractor of obligations under requirements of the contract documents.

B. Special Warranties: Prepare a written document that contains appropriate terms and identification, ready for execution from Manufacturers.

PART 2 – PRODUCTS

2.01 PRODUCT SELECTION PROCEDURES

A. General Product Requirements: Provide products that comply with the contract documents, are undamaged and, unless otherwise indicated, are new at time of installation. Provide products complete with accessories, trim, finish, fasteners, and other items needed for a complete installation and indicated use and effect.

1. Product: Where specifications name a single manufacturer and product, provide the named product that complies with requirements. Comparable products or substitutions for contractor's convenience will not be considered. Where specifications include a list of names of both available manufacturers and products, provide one of the products listed, or an unnamed product, that complies with requirements.

2. Basis-of-design Product: Where specifications name a product, or refer to a product indicated on drawings, and include a list of manufacturers, provide the specified or indicated product or a comparable product by one of the other named manufacturers. Drawings and specifications indicate sizes, profiles, dimensions, and other characteristics that are based on the product named.

3. Visual Selection Specification: Where specifications include the phrase "as selected from manufacturer's full range" or similar phrase, select a product that complies with requirements. Architect will select color, gloss, pattern, density, or texture from manufacturer's product line that includes both standard and premium items.

2.02 COMPARABLE PRODUCTS & SUBSTITUTIONS

A. Substitutions will be considered up to 5 calendar days prior to bid opening.

B. Substitutions may be considered after contract award only when a product becomes unavailable through no fault of the contractor, or when the Owner deems it to be in the Owner’s best interest to do so.

C. Document each request with complete data substantiating compliance of proposed substitution with Contract Documents.

D. A request constitutes a representation that the Bidder/Contractor:

1. Has investigated proposed product and determined that it meets or exceeds the quality level of the specified product.

2. Will provide the same warranty for the Substitution as for the specified product.

3. Will coordinate installation and make changes to other Work that may be required for the Work to be complete with no additional cost to Owner.

4. Waives claims for additional costs or time extension that may subsequently become apparent.

5. Will reimburse Owner for review or redesign services associated with re-approval by authorities.

E. Substitutions will not be considered when they are indicated or implied on shop drawing or product data submittals, if they have not been previously approved.

F. Substitution Submittal Procedure:

1. All substitution requests shall be accomplished by requesting substitution form from Engineer.

2. Clearly indicate with red arrows on the supporting data the proposed substitution and accessories.

G. Substitution Review Procedure: Engineer will review substitution requests prior to bid within the 10 days prior to bidding. The substitution request form will be required to be filled out. Only approved substitutions will be listed on addenda. All proposed substitutions not listed on addenda shall be considered by the submitter and the Contractor as non-acceptable substitution and shall not be used. Substitutions after bid submission by Contractor will be reviewed only as per item B above or a better quality item is requested for substitution on approval by Engineer.

PART 3 - EXECUTION (NOT USED)

END OF DIVISION 016000 - PRODUCT REQUIREMENTS

SECTION 017300 - EXECUTION

PART 1 - GENERAL

1.1 SUMMARY

A. This Section includes general administrative and procedural requirements governing execution of the Work including, but not limited to, the following:

1. Installation of the work.
2. Cutting and patching.
3. Coordination of Owner-installed products.
4. Progress cleaning.
5. Starting and adjusting.
6. Protection of installed construction.

B. Related Requirements:

1. Section 011000 "Summary" for limits on use of Project site.
2. Section 017700 "Closeout Procedures" for submitting final property survey with Project Record Documents, recording of Owner-accepted deviations from indicated lines and levels, and final

cleaning.

1.2 INFORMATIONAL SUBMITTALS

A. Landfill Receipts: Submit copy of receipts issued by a landfill facility, licensed to accept hazardous materials, for hazardous waste disposal.

1.3 QUALITY ASSURANCE

A. Cutting and Patching: Comply with requirements for and limitations on cutting and patching of construction elements.

1. Structural Elements: When cutting and patching structural elements, notify Architect of locations and details of cutting and await directions from Architect before proceeding. Shore, brace, and support structural element during cutting and patching. Do not cut and patch structural elements in a manner that could change their load-carrying capacity or increase deflection

PART 2 - PRODUCTS

2.1 MATERIALS

A. General: Comply with requirements specified in other Sections.

B. In-Place Materials: Use materials for patching identical to in-place materials. For exposed surfaces, use materials that visually match in-place adjacent surfaces to the fullest extent possible.

1. If identical materials are unavailable or cannot be used, use materials that, when installed, will provide a match acceptable to Architect for the visual and functional performance of in-place materials.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examination and Acceptance of Conditions: Before proceeding with each component of the Work, examine substrates, areas, and conditions, with Installer or Applicator present where indicated, for compliance with requirements for installation tolerances and other conditions affecting performance. Record observations.

1. Examine walls and roofs for suitable conditions where products and systems are to be installed.
2. Verify compatibility with and suitability of substrates, including compatibility with existing finishes or primers.

B. Proceed with installation only after unsatisfactory conditions have been corrected. Proceeding with the Work indicates acceptance of surfaces and conditions.

3.2 PREPARATION

A. Field Measurements: Take field measurements as required to fit the Work properly. Recheck

measurements before installing each product. Where portions of the Work are indicated to fit to other construction, verify dimensions of other construction by field measurements before fabrication. Coordinate fabrication schedule with construction progress to avoid delaying the Work.

B. Space Requirements: Verify space requirements and dimensions of items shown diagrammatically on Drawings.

C. Review of Contract Documents and Field Conditions: Immediately on discovery of the need for clarification of the Contract Documents caused by differing field conditions outside the control of Contractor, submit a request for information to Architect according to requirements in Section 013100 "Project Management and Coordination."

3.3 INSTALLATION

A. General: Locate the Work and components of the Work accurately, in correct alignment and elevation, as indicated.

1. Make vertical work plumb and make horizontal work level.
2. Where space is limited, install components to maximize space available for maintenance and ease of removal for replacement.

B. Comply with manufacturer's written instructions and recommendations for installing products in applications indicated.

C. Install products at the time and under conditions that will ensure the best possible results. Maintain conditions required for product performance until Substantial Completion.

D. Conduct construction operations so no part of the work is subjected to damaging operations or loading in excess of that expected during normal conditions of occupancy.

E. Sequence the Work and allow adequate clearances to accommodate movement of construction items on site and placement in permanent locations.

F. Tools and Equipment: Do not use tools or equipment that produce harmful noise levels.

G. Attachment: Provide blocking and attachment plates and anchors and fasteners of adequate size and number to securely anchor each component in place, accurately located and aligned with other portions of the Work. Where size and type of attachments are not indicated, verify size and type required for load conditions.

1. Mounting Heights: Where mounting heights are not indicated, mount components at heights directed by Architect.
2. Allow for building movement, including thermal expansion and contraction.
3. Coordinate installation of anchorages. Furnish setting drawings, templates, and directions for installing anchorages, including sleeves, concrete inserts, anchor bolts, and items with integral anchors, that are to be embedded in concrete or masonry. Deliver such items to Project site in time for installation.

H. Joints: Make joints of uniform width. Where joint locations in exposed work are not indicated, arrange joints for the best visual effect. Fit exposed connections together to form hairline joints.

I. Hazardous Materials: Use products, cleaners, and installation materials that are not considered hazardous.

3.4 CUTTING AND PATCHING

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

1. Cut in-place construction to provide for installation of other components or performance of other construction, and subsequently patch as required to restore surfaces to their original condition.

B. Temporary Support: Provide temporary support of work to be cut.

C. Protection: Protect in-place construction during cutting and patching to prevent damage. Provide protection from adverse weather conditions for portions of Project that might be exposed during cutting and patching operations.

D. Adjacent Occupied Areas: Avoid interference with use of adjoining areas or interruption of free passage to adjoining areas.

E. Existing Utility Services and Mechanical/Electrical Systems: Where existing services/systems are required to be removed, relocated, or abandoned, bypass such services/systems before cutting to minimize interruption to occupied areas.

F. Cutting: Cut in-place construction by sawing, drilling, breaking, chipping, grinding, and similar operations, including excavation, using methods least likely to damage elements retained or adjoining construction. If possible, review proposed procedures with original Installer; comply with original Installer's written recommendations.

1. In general, use hand or small power tools designed for sawing and grinding, not hammering and chopping. Cut holes and slots neatly to minimum size required, and with minimum disturbance of adjacent surfaces. Temporarily cover openings when not in use.
2. Finished Surfaces: Cut or drill from the exposed or finished side into concealed surfaces.
3. Concrete and Masonry: Cut using a cutting machine, such as an abrasive saw or a diamond-core drill.
4. Mechanical and Electrical Services: Cut off pipe or conduit in walls or partitions to be removed. Cap, valve, or plug and seal remaining portion of pipe or conduit to prevent entrance of moisture or other foreign matter after cutting.
5. Proceed with patching after construction operations requiring cutting are complete.

G. Patching: Patch construction by filling, repairing, refinishing, closing up, and similar operations following performance of other work. Patch with durable seams that are as invisible as practicable. Provide materials and comply with installation requirements specified in other Sections, where applicable.
1. Inspection: Where feasible, test and inspect patched areas after completion to demonstrate physical integrity of installation.
2. Exposed Finishes: Restore exposed finishes of patched areas and extend finish restoration into retained adjoining construction in a manner that will minimize evidence of patching and

refinishing.

3. Exterior Building Enclosure: Patch components in a manner that restores enclosure to a weathertight condition and ensures thermal and moisture integrity of building enclosure.

H. Cleaning: Clean areas and spaces where cutting and patching are performed. Remove sawdust, mortar, and similar materials from adjacent finished surfaces.

3.5 PROGRESS CLEANING

A. General: Clean Project site and work areas daily, including common areas. Enforce requirements strictly. Dispose of materials lawfully.

1. Containerize hazardous waste materials separately from other waste. Mark containers appropriately and dispose of legally, according to regulations.

B. Roof and Site: Maintain Project site free of waste materials and debris.

C. Work Areas: Clean areas where work is in progress to the level of cleanliness necessary for proper execution of the Work.

1. Remove liquid spills promptly.
2. Where dust would impair proper execution of the work, broom-clean or vacuum the entire work area, as appropriate.

D. Installed Work: Keep installed work clean. Clean installed surfaces according to written instructions of manufacturer or fabricator of product installed, using only cleaning materials specifically recommended. If specific cleaning materials are not recommended, use cleaning materials that are not hazardous to health or property and that will not damage exposed surfaces.

E. Concealed Spaces: Remove debris from concealed spaces before enclosing the space.

F. Exposed Surfaces in Finished Areas: Clean exposed surfaces and protect as necessary to ensure freedom from damage and deterioration at time of Substantial Completion.

G. Waste Disposal: Do not bury or burn waste materials on-site. Do not wash waste materials down sewers or into waterways.

H. During installation, clean and protect construction in progress and adjoining materials already in place. Apply protective covering where required to ensure protection from damage or deterioration at Substantial Completion.

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

3.6 PROTECTION OF INSTALLED CONSTRUCTION

A. Provide final protection and maintain conditions that ensure installed Work is without damage or deterioration at time of Substantial Completion.

B. Comply with manufacturer's written instructions for temperature and relative humidity.

END OF SECTION 017300

DIVISION 017700 – CLOSEOUT PROCEDURES

PART 1 - GENERAL

1.1 SUMMARY

A. This Section includes administrative and procedural requirements for contract closeout, including, but not limited to, the following:

1. Substantial Completion procedures.
2. Final completion procedures.
3. Warranties.
4. Final cleaning.
5. Repair of the Work.

1.2 ACTION SUBMITTALS

A. Product Data: For cleaning agents.

B. Contractor's List of Incomplete Items: Initial submittal at Substantial Completion.

C. Certified List of Incomplete Items: Final submittal at Final Completion.

1.3 CLOSEOUT SUBMITTALS

A. Certificates of Release: From Authorities Having Jurisdiction.

B. Certificate of Insurance: For continuing coverage.

1.4 SUBSTANTIAL COMPLETION PROCEDURES

A. Contractor's List of Incomplete Items: Prepare and submit a list of items to be completed and corrected (Contractor's punch list), indicating the value of each item on the list and reasons why the Work is incomplete.

B. Submittals Prior to Substantial Completion: Complete the following a minimum of 5 days prior to requesting inspection for determining date of Substantial Completion. List items below that are incomplete at time of request.

1. Certificates of Release: Obtain and submit releases from Authorities Having Jurisdiction permitting Owner unrestricted use of the Work and access to services and utilities. Include occupancy permits, operating certificates, and similar releases.
2. Submit closeout submittals specified in other Division 01 Sections, including, maintenance manuals, final completion, and similar final record information.

3. Submit closeout submittals specified including specific warranties, final certifications, and similar documents.
4. Submit test/adjust/balance records.

C. Procedures Prior to Substantial Completion: Complete the following a minimum of 5 days prior to requesting inspection for determining date of Substantial Completion. List items below that are incomplete at time of request.

1. Terminate and remove temporary facilities from Project site, construction tools, and similar elements.
2. Complete final cleaning requirements, including touchup painting.
3. Touch up and otherwise repair and restore marred exposed finishes to eliminate visual defects.

D. Observation: Submit a written request for Observation to determine Substantial Completion a minimum of 5 days prior to date the work will be completed and ready for final observation and tests. On receipt of request, Architect will either proceed with observation or notify Contractor of unfulfilled requirements. Architect will prepare the Certificate of Substantial Completion after the observation or will notify Contractor of items, either on Contractor's list or additional items identified by Architect, that must be completed or corrected before certificate will be issued.

1. Reobservation: Request reobservation when the Work identified in previous observations as incomplete is completed or corrected.
2. Results of completed observation will form the basis of requirements for final completion.

1.5 FINAL COMPLETION PROCEDURES

A. Preliminary Procedures: Before requesting final observation for determining final completion, complete the following:

1. Submit a final Application for Payment according to Division 01 Section "Payment Procedures."
2. Certified List of Incomplete Items: Submit certified copy of Architect's Substantial Completion inspection list of items to be completed or corrected (punch list), endorsed and dated by Architect. Certified copy of the list shall state that each item has been completed or otherwise resolved for acceptance.

B. Observation: Submit a written request for final observation to determine acceptance. On receipt of request, Architect will either proceed with observation or notify Contractor of unfulfilled requirements. Architect will prepare a final Certificate for Payment after observation or will notify Contractor of construction that must be completed or corrected before certificate will be issued.

1. Reobservation: Request reobservation when the Work identified in previous observations as incomplete is completed or corrected.

1.6 LIST OF INCOMPLETE ITEMS (PUNCH LIST)

A. Organization of List: Include name and identification of each space and area affected by construction operations for incomplete items and items needing correction including, if necessary, areas disturbed by Contractor that are outside the limits of construction.

1. Organize list of spaces in sequential order, starting with exterior parapets areas first**.**
2. Submit list of incomplete items in the following format:
   a. PDF electronic file. Architect will return annotated copy.

1.7 SUBMITTAL OF PROJECT WARRANTIES

A. Time of Submittal: Submit written warranties on request of Architect for designated portions of the Work where commencement of warranties other than date of Substantial Completion is indicated, or when delay in submittal of warranties might limit Owner's rights under warranty.

B. Organize warranty documents into an orderly sequence based on the table of contents of the Project Manual.

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

C. Provide additional copies of each warranty to include in maintenance manuals.

PART 2 - PRODUCTS

2.1 MATERIALS

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

PART 3 - EXECUTION

3.1 FINAL CLEANING

A. General: Perform final cleaning. Conduct cleaning and waste-removal operations to comply with local laws and ordinances and Federal and local environmental and antipollution regulations.

B. Cleaning: Employ experienced workers or professional cleaners for final cleaning. Clean each surface or unit to condition expected in an average commercial building cleaning and maintenance program. Comply with manufacturer's written instructions.

   1. Complete the following cleaning operations before requesting inspection for certification of Substantial Completion for entire Project or for a designated portion of Project:
      a. Clean Project site, yard, and grounds, in areas disturbed by construction activities, including landscape development areas, of rubbish, waste material, litter, and other foreign substances.

b. Sweep roof areas broom clean. Remove petrochemical spills, stains, and other foreign deposits.
c. Remove tools, construction equipment, machinery, and surplus material from Project site.
d. Remove snow and ice to provide safe access to building.
e. Remove debris and surface dust from limited access spaces, including roofs, plenums, shafts, trenches, equipment vaults, manholes, attics, and similar spaces.
f. Sweep concrete floors broom clean in unoccupied spaces.

3.2 REPAIR OF THE WORK

A. Complete repair and restoration operations before requesting inspection for determination of Substantial Completion.

B. Repair or remove and replace defective construction. Repairing includes replacing defective parts, refinishing damaged surfaces, touching up with matching materials, and properly adjusting existing operating equipment. Where damaged or worn items cannot be repaired or restored, provide replacements. Remove and replace operating components that cannot be repaired. Restore damaged construction and permanent facilities used during construction to specified condition.

1. Remove and replace chipped, scratched, and broken glass, reflective surfaces, and other damaged transparent materials.
2. Touch up and otherwise repair and restore marred or exposed finishes and surfaces. Replace finishes and surfaces that that already show evidence of repair or restoration.
   a. Do not paint over "UL" and other required labels and identification, including mechanical and electrical nameplates. Remove paint applied to required labels and identification.

END OF SECTION 017700

SECTION 017823 - MAINTENANCE DATA PART 1 - GENERAL

1.1 SUMMARY

A. This Section includes administrative and procedural requirements for preparing maintenance manuals, including the following:

1. Product maintenance manuals.

1.2 CLOSEOUT SUBMITTALS

A. Manual Content: Maintenance manual content is specified in individual Specification Sections to be reviewed at the time of Section submittals. Submit reviewed manual content formatted and organized as required by this Section.

1. Architect will comment on whether content of maintenance submittals are acceptable.
2. Where applicable, clarify and update reviewed manual content to correspond to revisions and field conditions.

B. Format: Submit operations and maintenance manuals in the following format:

1. PDF electronic file. Assemble each manual into a composite electronically indexed file. Submit on digital media acceptable to Architect.
   a. Name each indexed document file in composite electronic index with applicable item name. Include a complete electronically linked operation and maintenance directory.
   b. Enable inserted reviewer comments on draft submittals.
2. Three paper copies. Include a complete operation and maintenance directory. Enclose title pages and directories in clear plastic sleeves. Architect will return two copies.

C. Manual Submittal: Submit each manual in final form prior to requesting inspection for Substantial Completion. Architect will return copy with comments.

1. Correct or revise each manual to comply with Architect's comments. Submit copies of each corrected manual within 5 days of receipt of Architect's comments.

PART 2 - PRODUCTS

2.1 REQUIREMENTS MAINTENANCE MANUALS

A. Organization: Unless otherwise indicated, organize each manual into a separate section for each system and subsystem, and a separate section for each piece of equipment not part of a system. Each manual shall contain the following materials, in the order listed:

1. Title page.
2. Table of contents.
3. Manual contents.

B. Title Page: Include the following information:

1. Subject matter included in manual.
2. Name and address of Project.
3. Name and address of Owner.
4. Date of submittal.
5. Name and contact information for Contractor.
6. Name and contact information for Architect.

C. Table of Contents: List each product included in manual, identified by product name, indexed to the content of the volume, and cross-referenced to Specification Section number in Project Manual.

D. Manual Contents: Organize into sets of manageable size. Arrange contents alphabetically by system, subsystem, and equipment. If possible, assemble instructions for subsystems, equipment, and components of one system into a single binder.

E. Manuals, Paper Copy: Submit manuals in the form of hard copy, bound and labeled volumes.
1. Binders: Heavy-duty, three-ring, vinyl-covered, loose-leaf binders, in thickness necessary to accommodate contents, sized to hold 8 1/2 x 11 inch paper; with clear plastic sleeve on spine to hold label describing contents and with pockets inside covers to hold folded oversize sheets.

a. Identify each binder on front and spine, with printed title "MAINTENANCE MANUAL," Project title or name, and subject matter of contents, and indicate Specification Section number on bottom of spine]. Indicate volume number for multiple-volume sets.

2. Dividers: Heavy-paper dividers with plastic-covered tabs for each section of the manual. Mark each tab to indicate contents. Include typed list of products and major components of equipment included in the section on each divider, cross-referenced to Specification Section number and title of Project Manual.

2.2 PRODUCT MAINTENANCE MANUALS

A. Content: Organize manual into a separate section for each product, material, and finish. Include source information, product information, maintenance procedures, repair materials and sources, and warranties and bonds, as described below.

B. Source Information: List each product included in the manual, identified by product name and arranged to match manual's table of contents. For each product, list name, address, and telephone number of Installer or supplier and maintenance service agent, and cross-reference Specification Section number and title in Project Manual.

C. Product Information: Include the following, as applicable:

1. Product name and model number.
2. Manufacturer's name.
3. Color, pattern, and texture.
4. Material and chemical composition.

D. Maintenance Procedures: Include manufacturer's written recommendations and the following:

1. Inspection procedures.
2. Types of cleaning agents to be used and methods of cleaning.
3. Schedule for routine maintenance.
4. Repair instructions.

E. Warranties and Bonds: Include copies of warranties and bonds and lists of circumstances and conditions that would affect validity of warranties or bonds.

PART 3 - EXECUTION

3.1 MANUAL PREPARATION

A. Product Maintenance Manual: Assemble a complete set of maintenance data indicating care and maintenance of each product, material, and finish incorporated into the Work.

B. Manufacturers' Data: Where manuals contain manufacturers' standard printed data, include only sheets pertinent to product or component installed. Mark each sheet to identify each product or component incorporated into the Work. If data include more than one item in a tabular format, identify each item

using appropriate references from the Contract Documents. Identify data applicable to the Work and delete references to information not applicable.

C. Comply with Division 01 Section "Closeout Procedures" for schedule for submitting maintenance documentation.

END OF SECTION 017823

DIVISION 017839 - PROJECT RECORD DOCUMENTS

PART 1 – GENERAL

1.01 SUMMARY

A. Section includes administrative and procedural requirements for project record documents, including record drawings and specifications.

1.02 SUBMITTALS

A. Record drawings: Submit one complete paper-copy set of marked-up record prints.

PART 2 – PRODUCTS

2.01 RECORD DRAWINGS

A. Record Prints: Maintain one set of marked-up paper copies of the contract drawings and shop drawings, incorporating new and revised drawings as modifications are issued. Mark record prints to show the actual installation where installation varies from that shown originally. Give particular attention to information on concealed elements that would be difficult to identify or measure and record later. Note construction change directive numbers, alternates, change order numbers, and similar identification, where applicable.

PART 3 – EXECUTION

3.01 RECORDING AND MAINTENANCE

A. Recording: Maintain one copy of each submittal during the construction period for project record document purposes. Post changes and revisions to project record documents as they occur.

B. Maintenance of Record Documents: Store record documents apart from the contract documents used for construction. Do not use project record documents for construction purposes. Maintain record documents in good order and in a clean, dry, legible condition, protected from deterioration and loss. Provide access to project record documents for architect's reference during normal working hours.

END OF DIVISION 017839 - PROJECT RECORD DOCUMENTS

DIVISION 02

DIVISION 024119 – SELECTIVE DEMOLITION

PART 1 - GENERAL

1.01 SUMMARY

A. This section consists of furnishing all labor, materials and equipment necessary and incidental to selective demolition and removal of existing structures and miscellaneous items at the locations indicated on the Contract Drawings or required to perform installation of TPO roofing system. All associated removal, and miscellaneous items unless otherwise noted, is included in the work described in this section, as shown on drawings and referenced in these specifications to complete water tight TPO roofing system at all penetrations, openings, walls, etc.

1.02 RELATED WORK

A. Coordinate the work of this section with all other sections of the project-specific Specifications and the Contract Drawings, but more specifically the following sections:

1. Division 07, Thermoplastic Polyolifin (TPO) Roofing, Sheet Metal Flashing and Trim

1.03 FIELD CONDITIONS

A. Tenant will occupy existing building and buildings immediately adjacent to selective demolition area. Conduct selective demolition so Tenant operations will be disrupted to the least extent.

B. Conditions existing at time of inspection for bidding purpose will be maintained by Owner as far as practical.

C. Hazardous Materials: It is not expected that hazardous materials will be encountered in the Work.

1. If suspected hazardous materials are encountered, do not disturb; immediately notify the Port. Hazardous materials will be removed by the Port under a separate contract.

D. Utility Service: Maintain existing utilities and protect them against damage during selective demolition operations.

PART 2 – PRODUCTS

2.01 PERFORMANCE REQUIREMENTS

A. Regulatory Requirements: Comply with governing EPA notification regulations before beginning selective demolition. Comply with hauling and disposal regulations of authorities having jurisdiction.

PART 3 – EXECUTION

3.01 EXAMINATION

A. Verify utility locations before starting selective demolition operations.

B. Review record documents of existing construction provided by the Port. Port does not guarantee that existing conditions are same as those indicated in record documents.

C. Survey existing conditions and correlate with requirements indicated to determine extent of selective demolition required.

3.02 PREPARATION

A. Site Access and Temporary Controls: Conduct selective demolition and debris-removal operations to ensure minimum interference with roads, Fire Station activity, and other adjacent occupied and used facilities.

B. Temporary Facilities: Provide temporary barricades and other protection required to prevent injury to people and damage to adjacent buildings and facilities to remain.

1. Provide protection to ensure safe passage of people around selective demolition area and to and from occupied portions of buildings.

3.03 SELECTIVE DEMOLITION, GENERAL

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

1. Neatly cut openings and holes plumb, square, and true to dimensions required. Use cutting methods least likely to damage construction to remain or adjoining construction. Use hand tools or small power tools designed for sawing or grinding, not hammering and chopping, to minimize disturbance of adjacent surfaces. Temporarily cover openings to remain.

2. Dispose of demolished items and materials promptly.

3.04 DISPOSAL OF DEMOLISHED MATERIALS

A. General: Remove demolished materials from Project site and legally dispose of these materials.

1. Do not allow demolished materials to accumulate on-site.

2. Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.

B. Burning: Do not burn demolished materials.

C. Disposal: Transport demolished materials off Owner's property and legally dispose of them.

END OF SECTION 024119

DIVISION 07

SECTION 075556 – FLUID-APPLIED MEMBRANE ROOFING

GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

A. Provide labor, materials, equipment and supervision necessary to install a seamless, fully adhered fluid-applied roof coating system over properly prepared new or existing fully adhered and/or mechanically fastened single-ply roof surfaces.

B. Not intended for use over ballasted single-ply roof membranes.

C. The manufacturer's application instructions for each product used are considered part of this specification and should be followed at all times.

1. Work includes bridging and sealing air leakage and water intrusion pathways and gaps including connections of the walls to the roof air barrier, and penetrations of the building envelope including piping, conduit, ducts and similar items. Work includes sealing of all cap flashings to parapet wall, wall to roof flashing and similar items. Contractor shall provide all work as recommended by manufacturer at roof drains, penetrations, flashings, etc. for a water tight fluid-applied membrane roofing system.

D. Related Work: Contractor shall review all sections of the project specifications to determine items of work that may interface with the application of the fluid-applied membrane roofing system.

1.3 REFERENCES

A. American Society for Testing and Materials Publication (ASTM)

B. Underwriters Laboratory (UL)

C. American Society of Civil Engineers (ASCE)

D. Sheet Metal and Air Conditioning Contractors Association (SMACNA)

E. National Roofing Contractors Association (NRCA)

F. Manufacturer's literature and application notes, details and drawings

1.4 SYSTEM DESCRIPTION

A. Elasta-Gard SP Aliphatic shall be complete system of compatible materials to create a seamless waterproof fluid-applied roof coating system.

B. Elasta-Gard SP Aliphatic shall be designated for application on the specific type of substrate as indicated on the drawings and specifications.

1.5 SUBMITTALS

A. Submittals: Comply with project requirements for submittals as specified in Division 01. Submit manufacturer's application instructions and technical data sheets or catalog cuts on materials

B. Product Data: For each product.

C. Shop Drawings: Manufacturer's standard details and shop drawings for the specified system if required by manufacturer.

D. Installer's Authorization: Installer shall provide written documentation from the manufacturer of their authorization to install the system, and eligibility to obtain the warranty specified in this section.

E. Sample copy of Manufacturer's warranty to be issued upon successful completion of the project.

1.6 QUALITY ASSURANCE

A. Manufacturer's Qualifications: Manufacturer shall demonstrate qualifications to supply materials of this section by certifying the following:

1. Membrane Manufacturer shall show evidence that the specified membrane has been manufactured by the same organization or direct affiliate for fifteen years.
2. Membrane Manufacturer shall have available an in-house technical staff to assist the contractor when necessary in the application of the products and site review of the assembly.

B. Installer's Qualifications: The Contractor shall demonstrate qualifications to perform the Work of this Section by submitting certification or license by the fluid-applied membrane manufacturer as a trained and authorized applicator of the product the installer intends to use and in good standing at the time of the work and shall coordinate with the Manufacturer prior to bidding and commencement of work regarding any Manufacturer's warranty to be issued upon successful completion of the project.

C. Contractor represents and warrants that it is experienced in and qualified to perform the work described herein and can provide the necessary equipment, supervision, and trained personnel capable of completing the work in a safe, prompt, diligent, professional, and workmanlike manner and in accordance with all federal, state and local laws, rules and regulations, this Specification and good roofing practice.

D. Contractor shall inspect the project to examine the actual job and site conditions and must be familiar with the local conditions and all things required to complete the work that will have bearing on its costs and completion.

E. Contractor shall have Manufacturer's approval as required for warranty specified. Any site visits by Manufacturer or requirements for approval of specified warranty shall be included.

F. Contractor shall be thoroughly familiar with all codes, regulations and standards governing the work to be performed and shall provide written proof of all required licenses and permits prior to project commencement.

G. Contractor is responsible for insuring a trained foreman is onsite during the application of the coating system and any related work.

H. Contractor shall check wet film thickness during application of the coatings to ensure achievement of required coverage rates for specified warranty period.

I. Source Limitations: All components listed in this section shall be provided by a single manufacturer or approved by the primary fluid-applied roofing manufacturer.

J. Materials Compatibility: All materials included in the fluid-applied roofing membrane assembly, as well as associated materials adhered to/applied beneath the roofing membrane shall have been tested and verified to be compatible. Include written testing documentation and test reports if requested by Architect.

K. Final Inspection: Manufacturer's representative shall provide to the Owner a comprehensive site visit report after the completion of the fluid-applied membrane roofing system required for specified warranty.

L. Applicable Regulations: Comply with local code and requirements of authorities having jurisdiction. Do not exceed VOC regulations as established by the State in which they are being installed, including total VOC content, in grams per liter, for all system components (i.e. primers, adhesives, coatings, and similar items).

M. Roofing Terminology: Refer to ASTM D1079 and the glossary of the National Roofing Contractors Association (NRCA) Roofing and Waterproofing Manual for definitions of roofing terms related to this section.

N. Adhesion Test: An adhesion test is recommended to ensure sufficient adhesion will exist between the substrate and fluid-applied roof coatings.

1.7 DELIVERY, STORAGE AND HANDLING

A. Deliver all fluid-applied roofing materials to the site in original, unopened, undamaged containers, with factory seals intact bearing Manufacturer's original labels. Package labels shall be clearly visible on pallets. Verify products are within Manufacturer's recommended shelf life. Do not stack pallets more than two high.

B. Store all pail goods in their original undamaged containers in a clean, dry location within their specified temperature range. If these storage conditions are not possible, special consideration in storage must be taken.

C. Do not expose materials to moisture in any form before, during, or after delivery to the site. Reject delivery of materials that show evidence of contact with moisture.

D. Do not subject existing roof to unnecessary loading of stockpiled products or other materials.

E. Store and dispose of all products and materials used on the project in accordance with all federal, state, and local requirements for the proper handling and disposal of such products and materials.

F. Materials shall be stored above 75°F (23°C) a minimum of 24 hours prior to application and or in accordance with Manufacturer's instructions.

1.8 PROJECT CONDITIONS

A. Conditions of Existing Substrate: Contractor shall thoroughly inspect and determine the condition of the roof system and substrate to be coated, and the suitability of the roof system for the application and performance of the coating system.

B. Prior to starting work, read and follow the Safety Data Sheet (SDS) and container labels for detailed health and safety information.

C. Environmental Conditions: Contractor shall proceed with fluid-applied membrane roofing work only when the existing and forecasted weather conditions and surface temperatures will permit work to be performed in accordance with Manufacturer's recommendations and good roofing practice. The fluid-applied membrane system shall be applied when weather conditions permit proper application and drying. Applications will not be permitted during inclement weather conditions. Do not attempt application when rain, inclement weather conditions or temperatures do not meet minimum conditions and are expected within 48 hours after application. Extra precaution is needed when applying material in windy conditions. Never spray material when excessive wind conditions exist. Contractor should monitor wind condition to prevent over-spray. If winds become excessive, spraying should stop.

D. All surfaces to receive the roofing/waterproofing membrane shall be free from visible water, dew, frost, snow and ice. Application of fluid-applied roofing membrane shall be conducted in well ventilated areas.

E. All surfaces and substrates which are to be coated must be properly prepared, clean, dry, structurally sound, and free from any moisture, dirt, contaminants or any other conditions which may interfere with the application and performance of the coating system. Contractor shall approve the condition of the roof system and substrate prior to application of the roof coating system.

F. Fluid-applied Roofing Membrane:

1. Adhere to Manufacturer's recommendations for fluid-applied roofing membrane minimum and maximum installation temperatures. See technical data sheets for limitations, i.e., hot pipes and vents or direct steam venting.
2. Consult container, packaging labels and Material Safety Data Sheets (MSDS) for specific safety information.
3. Consult Manufacturer if any exposure to foreign materials or chemical discharges. Conditions shall be presented to membrane manufacturer for evaluation to determine any impact on the waterproof membrane assembly performance prior to warranty issuance.

G. Contractor shall ensure adequate protection during installation of the roofing/waterproofing system.

H. Contractor shall take proper precautions to protect owners property against damage and overspray. The use of shield boards, maskings and protective coverings shall be used as necessary. Owner is not responsible for damages caused by the overspray of any products used.

I. Tenant will occupy the premises during the work. This is an operational Airport Fire Station. Contractor will cooperate with the Owner to allow for the continued use of the facilities during the work.

J. Contractor shall coordinate scheduling with the Owner/Tenant to relocate or protect vehicles, equipment, building occupants, building contents and unrelated work from damages.

K. Site cleanup during and after completion of the work shall be completed to Owner's reasonable satisfaction.

1.9 REGULATORY AND SAFETY

A. Contractor will perform all work in a safe, professional, timely and workmanlike manner and in accordance with all federal, state, and local laws, rules and regulations related to the work to be performed hereunder, the Specifications and good roofing practice.

B. Contractor shall be thoroughly familiar with all codes, regulations and standards governing the work to be performed and shall provide written proof of all required licenses and permits prior to project commencement.

C. Contractor shall establish and enforce a safety program for its work and employees which meets or exceeds all federal, state, and local laws and regulations, including proper fall protection and all other applicable requirements of the Occupational Safety and Health Act (OSHA), and all other requirements which may be necessary for the safety of its employees, Owners, tenants and the public.

1.10 WARRANTY

A. Warranty: Provide manufacturer's standard warranty. Workmanship Warranty by Contractor shall be for a minimum of one year starting at the date of Substantial Completion. System warranty shall be for the following duration in accordance with specified system.

1. Warranty Length: 15 years labor and material.

PART 2 - PRODUCTS

2.1 MANUFACTURER

A. Basis-of-Design Manufacturer: Neogard, a part of Hempel, 2728 Empire Central, Dallas, TX 75235, 214-353-1600. Or written approved equal by the Architect.

2.2 ROOFING SYSTEM

A. Fluid-Applied Membrane System, 15 Year Labor and Material Warranty: Elasta-Gard SP Aliphatic:

Primers: 7797/7798 (254JB) urethane primer.

1. Liquid Flashing: 70620-CA (474JB) single component moisture-cured polyurethane coating.
2. Reinforcing Fabric: 86220 (63BJB) reinforcing fabric (Tietex T-272).
3. Sealant: 70991 (47XJB) urethane sealant.
4. Mastic: 70690 (47CJB) Roof Mastic.
5. Base Coat: 70620-CA (474JB) single component moisture cured polyurethane coating.
6. Intermediate Coat and Topcoat: 7490-CA (47YJB10000) single component aliphatic polyurethane.
7. Optional Granule Coat: 7490-CA (47JYB10000) single component aliphatic polyurethane.

8. Cleaning Solvent: 08080 Xylene Thinner or 7055 (086JB) Odorless Reducer.

2.3 MATERIAL PERFORMANCE CRITERIA

A. Typical physical properties of cured 70620-CA urethane used on this project are:

1. Tensile Strength, ASTM D412, 1,000 psi
2. Elongation, ASTM D412, 375%
3. Permanent Set, ASTM D412, <10%
4. Tear Resistance, ASTM D1004, 100 pli
5. Water Resistance, ASTM D471, <3%
6. Shore A, ASTM D2240, 50-55

B. Typical physical properties of cured 7490-CA urethane used on this project are:

1. Tensile Strength, ASTM D412, 2,300 psi
2. Elongation, ASTM D412, 230%.
3. Permanent Set, ASTM D412, 10%
4. Tear Resistance, ASTM D1004, 200 pli
5. Water Resistance, ASTM D471, <2% (7 days)
6. Taber Abrasion, ASTM D4060, 16 mg (1,000 CS-17)
7. MVT (20 mils), ASTM E96, 0.9 perms
8. Shore A, ASTM D2240, 85
9. Fire Resistance, ASTM E108, Pass (as part of a tested system)

C. Elasta-Gard SP Aliphatic is certified as compliant with ANSI/UL 790, “Standard for Standard Test Methods for Fire Test of Roof Coverings”.

D. The above tested results are typical values. Individual lots may vary up to 10% from the typical value. Further technical information can be found at www.neogard.com.

2.4 ACCESSORIES

A. Fabric reinforcement and waterproofing coverings for expansion joints shall be compatible with specified fluid-applied roof coating system.

B. Miscellaneous materials such as adhesives, metal primers, metal vents and drains shall be composite part of the roof system and shall be compatible with the specified fluid-applied roof coating system.

C. Granules (Optional): Granules shall be number 11 screen size, dust free, ceramic-coated roofing granules.

2.5 PRIMERS

A. Primer for concrete, roof cover boards, masonry and previously coated surfaces shall be as per Manufacturer’s required installation instructions.

B. EPDM/TPO membrane roofing primer shall be as per Manufacturer’s required installation instructions to improve adhesion to flexible EPDM and TPO roofing membranes

C. Membrane over-coating primer shall be as per Manufacturer’s required installation instructions, specifically designed for the reactivation of existing roof /waterproofing system applications prior

to membrane over-coating OR a single component, rapid curing, high solids, moisture cured primer.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Verify that surfaces and conditions are ready to accept the Work of this section. Notify Owner in writing of any discrepancies. Commencement of the Work in an area shall indicate Installer's acceptance of the substrate.

B. Surfaces shall be sound, dry, clean and free of oil, grease, dirt, excess mortar or other contaminants. Fill voids, gaps and spalled areas in substrate to provide an even plane. Strike masonry joints full flush.

C. Verify all roof penetrations, mechanical equipment, cants, edge metal, and other on-roof items are in place and secure.

D. Verify all roof drains are clean and in working order.

E. Verify that all air conditioning, air intake, exhaust vents or intakes, etc. are suitably protected or closed.

F. Based on inspection and testing, a roof plan shall be made to show all areas of water intrusion, ponding water, wet insulation, and any deteriorated or damaged decking or other materials.

G. Prior to application of the fluid-applied roofing membrane system, Contractor shall perform adhesion testing as required per Manufacturer's recommendations including previously coated and non-coated roof membranes.

3.2 SURFACE PREPARATION

A. Verify that the roof surface is clean and smooth, free of depressions, waves, or projections, and properly sloped to drains, valleys, eaves, scuppers or gutters. Verify that all roof openings or penetrations through the roof are secured back to solid blocking. Ensure all preparatory Work is complete prior to applying membrane.

B. After inspection and testing, the Contractor shall make all necessary repairs to the roofing system. Contractor shall not proceed with application of the coating system until all repairs have been made and any unsatisfactory conditions have been corrected, including repairs which may be recommended by the Manufacturer or any design professional. Preparation of the roof substrate is the responsibility of the Contractor.

C. All existing HVAC and other equipment shall be protected from any damage that could be caused by the fluid-applied roof coating application.

D. Raising, re-setting, and protection of air conditioning equipment, ventilators, and exhaust fans may be required.

E. Protect all adjoining areas that are not to receive the fluid-applied roof coatings and provide a suitable work station to mix the coating materials.

F. Prior to power washing, Contractor shall repair splits, open seams, tears, cuts and blisters in the membrane and flashings, and any other conditions affecting the water tightness of the roof. The membrane must be made sound and watertight. All repairs shall be made in accordance NRCA guidelines and good roofing practice.

G. Remove all abandoned, unnecessary and non-functioning equipment, deteriorated and/or water saturated roofing materials, adhesives and foreign materials down to sound substrate. Replace these areas with materials and components to match existing roof system and seal water tight. The width, adhesion and/or fastening requirements of the new materials must be compatible with the existing roof and meet local codes.

H. All TPO or PVC patches shall be examined to determine whether or not the patch is aged or new. All new patches must be sanded to develop a suitable profile before coating materials are applied for repair or overcoat.

I. Repair deteriorated flashings, seams, cracks, blisters, splits, fishmouths, holes and other surface imperfections including but not limited to all vertical/horizontal interfaces, roof termination points, base of all vent pipes and other protrusions, HVAC units and other roof mounted equipment. Treatment options are as follows:

1. Neogard 70690 mastic, applied as required.
2. Base Coat Material with Tietex Fabric: Apply 24 wet mils of 70620-CA and center 6" wide Tietex fabric over wet 70620-CA. Work the reinforcing fabric into wet coating material using a brush or roller to eliminate air pockets, wrinkles and gaps. Apply additional 16 wet mils of base coat material over the repair and allow to cure.

J. All roof surfaces, whether old or new, shall be cleaned using Neogard 8500 BioDegradable Cleaner (089JB) at the rate of 1 part concentrate to 10 parts water. Apply the diluted cleaning solution under low pressure spray at a rate of 450 square feet per gallon and allow to stand for 15 minutes. Do not allow the solution to dry. Thoroughly rinse with fresh water under high pressure to remove the cleaning solution. The use of stiff-bristle brooms or mechanical scrubbers may be required to remove heavy deposits of dirt or other contaminants from surfaces. Allow roof surface to thoroughly dry. Note: If algae is present on the surface, the cleaning must include bleach in the washing of the substrate. Follow local ordinances regarding runoff from this procedure.

K. All surfaces shall be blown clean using best methods to remove any remaining loose debris.

L. All cracks and voids greater than 0.040 inches shall be routed and caulked with a polyurethane sealant. Allow to cure per roof /waterproofing membrane manufacturer's technical data sheets prior to over-coating with the specified roof /waterproofing membrane system or fiberseal caulk.

M. Use tape lines to achieve a straight edge detail. Remove tape while application is still wet for clean lines.

N. Before proceeding with coating application, ensure that substrate and repairs are clean, sound, dry (cured) and secure.

3.3 PARAPET AND WALL FLASHINGS

A. Clean, prepare and prime flashing substrate surfaces ready to receive membrane flashing applications.

B. All parapet, wall, and curb flashings shall be provided with a cant bead sealant, cant with Flexitape or tape reinforcement prior to flashing application.

C. Terminate roofing/waterproofing membrane system at raked-out mortar joints, termination saw cut joint, or under installed counter-flashing materials. Seal all mortar joints and saw cut joints with polyurethane sealant.

D. Install metal counter flashings in accordance with Manufacturer or Architectural details.

3.4 DRIP EDGES AND OTHER METAL FLANGED FLASHING

A. Clean, prepare and prime metal flange surfaces ready to receive membrane flashing applications.

B. Metal flanges are typically encapsulated between two membrane layers, usually by providing membrane flashing as a stripping ply over the metal flange, with the field or flashing membrane extending beneath the metal flange. It is also acceptable to install the stripping ply under the metal flange and extend the field or flashing membrane over the metal flange.

C. For insulated roof assemblies, metal flanges shall be mechanically fastened through the first membrane layer to wood nailers. For direct to substrate membrane applications where the roof / waterproofing membrane is applied directly to the structural deck, metal flanges shall be mechanically fastened through the first membrane layer to the structural deck.

3.5 ROOF DRAINS

A. Clean, prepare and prime surfaces ready to receive membrane applications. Block drain bowl opening to avoid roofing/waterproofing material from entering the drainage system.

B. Remove strainer baskets and clamping rings from the drain bowl assembly. Temporarily replace the bolts back into assembly to avoid miss-alignment of connections after membrane applications are completed.

C. Extend the liquid roofing/ waterproofing material and membrane reinforcement directly into the throat of the prepared drain.

D. Remove drain blocks and allow the roofing/waterproofing system to fully cure dry prior to re-connecting the drain bowl assembly.

3.6 ROOF PENETRATIONS

A. Clean, prepare and prime surfaces ready to receive membrane flashing applications. Ensure that penetrations are secured to prevent movement.

3.7 EXPANSION JOINTS

A. Clean, prepare and prime surfaces ready to receive membrane flashing applications. For insulated roof assemblies, wood nailers shall be installed as insulation stops prior to expansion joint flashing application.

B. Expansion joints shall be sealed with a compressible filler such as batt insulation to prevent condensation and to provide support for the flashing bellows.

3.8 APPLICATION OF PENETRATION SEALANT

A. Seal reglet-based membrane terminations, heads of exposed mechanical fasteners, around penetrations, duct work, electrical and other apparatus extending through the fluid-applied roofing membrane with specified penetration sealant and details recommended by Manufacturer.

3.9 ROOF PROTECTION

A. Protect roofing/waterproofing Work from other trades until completion.

B. Stage materials in such a manner that avoids foot traffic over completed roof areas.

C. Provide temporary walkways and platforms to protect completed Work from traffic and point loading during the application process.

D. Provide temporary membrane tie-ins and water-stops at the end of each workday and remove prior to commencement of Work the following day.

3.10 APPLICATION

A. Factors That Affect Dry Film Thickness: Volume of solids, thinning, surface profile, application technique and equipment, overspray, squeegee, brush and roller wet out, container residue, spills and other waste are among the many factors that affect the amount of wet coating required to yield proper dry film thickness. To ensure that specified dry film thickness is achieved, use a wet mil gauge to verify actual thickness of wet coating applied, adjusting as needed for those factors which directly affect the dry film build.

B. Primer:

1. Thoroughly mix and apply 7797/7798 (254J9/946JB) urethane primer at 400 sf/gal (0.25 gal/100sf)

C. Seam Detail: All seams on the roof must be sealed. Treatment options are as follows:

1. Roof Mastic: Apply a 2” wide band of 70690 mastic to the seam at a rate sufficient to create a smooth transition, minimum 80 wet mils. Taper the edges to the existing substrate.
2. Base Coat Material with Tietex Fabric: Apply 24 wet mils of elastomeric base coat material, 10” wide, over seam. Apply and center 6” wide Tietex fabric over wet base coat material. Work the reinforcing fabric into wet coating material using a brush or roller to eliminate air pockets, wrinkles and gaps. Apply additional 16 wet mils of base coat over the entire seam detail and allow to cure.

D. 15-year Warranty System:

1. Base Coat: Thoroughly mix and apply 70620-CA at approximately 66 sf/gal (1.5 gal/100 sf or 24 wet mils) to yield 18 dry mils and allow to cure.
2. Intermediate Coat: Thoroughly mix and apply 7490-CA at approximately 100 sf/gal (1.0 gal/100 sf or 16 wet mils) to yield 12 dry mils and allow to cure.
3. Top Coat: Thoroughly mix and apply 7490-CA at approximately 100 sf/gal (1.0 gal/100 sf or 16 wet mils) to yield 12 dry mils and allow to cure.
4. Optional Granule Coat: Thoroughly mix and apply 7490-CA at approximately 100 sf/gal (1.0 gal/100 sf or 16 wet mils) and immediately broadcast #11 roofing granules at the rate of 30 lbs/100 sf. After cure, remove loose granules from roof surface.

5. Coating Thickness Requirements: Total coating system thickness shall average 42 dry mils (DFT), exclusive of Optional Granule Coat and granules. Note: Rough surface profiles may increase the number of coats required to achieve uniform film coverage and minimum dry film thickness requirements.

3.11 FIELD QAULITY CONTROL

A. Manufacturer's Field Services: Inspection by an independent 3rd party or coating manufacturer's representative may be required to verify the proper installation of the fluid-applied roof coating system. Any areas that do not meet the minimum standards for application as specified herein shall be corrected at the applicator's expense. Manufacturer's inspection or verification shall not constitute acceptance of responsibility for any improper surface preparation or application of material. All costs for inspection or re-inspection services shall be paid by Contractor.

B. Applicator is responsible for ensuring sufficient coating is applied to the roof.

3.12 PROTECTION

A. After completion of application, do not allow traffic on coated surfaces for a period of at least 48 hours at 75°F/23°C and 50% relative humidity, or until completely cured, and/or recommended by Manufacturer.

3.13 CLEAN-UP

A. Surfaces not intended to receive the Elasta-Gard SP Aliphatic fluid-applied coating system shall be protected during application of the system. Should this protection not be effective, or not be provided, the respective surfaces shall be restored to their proper conditions by cleaning, repairing or replacing.

B. Work areas are to be kept clean, clear and free of debris at all times.

C. Do not allow trash, waste, and/or debris to collect on the roof deck area. Trash, waste, and/or debris shall be removed from the roof on a daily basis.

D. All tools and unused materials shall be collected at the end of each workday and stored properly off of the finished roof surface and protected from exposure to the elements.

E. Dispose of or recycle all trash and excess material in a manner conforming to current EPA regulations and local laws.

F. Properly clean the finished roof surface after completion, and make sure the drains and gutters are not clogged.

G. Clean and restore all damaged surfaces to their original condition

END OF SECTION 075556 FLUID-APPLIED MEMBRANE ROOFING

Section 2:

Permits: Contractor shall be responsible for obtaining all City of Pasco Building Department, Hazardous Materials removal and any state, county or local governmental permits and any costs and fees associated with and applicable to this project for these permits and applications. Contractor shall be responsible for the costs of disposal of all building debris associated with project.

Section 3:

Disposal & Notification: Contractor shall be responsible for the disposal of all debris in a legal manner according to all applicable laws, codes and regulations. Notification of proper authorities for hazardous materials removal if required shall be the responsibility of the contractor. All fees associated with disposal of hazardous materials and general construction debris shall be included in Contractors scope of work.

Section 4:

Utilities: Contractor shall be responsible to coordinate with Port of Pasco, tenant and other local utility companies for the proper shutting down of power or other utilities as required to perform work.

Section 5:

Security: Contractor shall erect temporary construction fencing as determined by contractor to extent they determine necessary to secure the site during construction and maintain public safety. Materials shall be stored to protect nearby properties from wind-blown debris.

Section 6:

Health and Safety: The Contractor's attention is alerted to the strict enforcement and requirements of the "Occupational Safety and Health Act" (OSHA) and "The Washington Industrial Safety and Health Act of 1973" (WISHA), which apply to all operations within this contract. The Contractor shall comply with all provisions thereof and make such reports and maintain such records as the acts require. The Contractor shall prepare a project-specific health and safety plan in full compliance with OSHA and WISHA requirements. The Contractor shall be solely and completely responsible for conditions of the job site including safety of all persons and property during performance of the work. This requirement will apply continuously and not be limited to normal working hours.

Section 7:

Plans: The plans are for reference only. Dimensions are estimated and location details are general in nature.

Section 8:

Cleanup: Contractor shall leave the job site clean on a daily basis.

BID FORM
Small Works Contract

To: Port Of Pasco
1110 Osprey Pointe Blvd, Suite 201
P O Box 769
Pasco, WA 99301

Project: Tri Cities Airport ARFF Building Fluid-Applied Roofing

Submitted By: _____
(Full Name)

_____
(Address)

_____
(City, State and Zip Code)

_____ _____
(Phone Number) (Employment Security Dept. Number)

Offer: Furnish labor, equipment, and material, to complete "Tri Cities Airport ARFF Building Fluid-Applied Roofing" according to the specifications and other descriptive documents, for the amount of (including Washington Sales Tax):

1	Base Bid	LS	$
	WSST 8.9%	LS	$
Total Base Bid Incl. WSST		(use numbers)	$
		(use words)	dollars

_____ _____
Signature Date

_____ _____
Print Name (Contractor License Number)

Title:_____ _____
If Corporation please affix Corporate Seal. (Contractor UBI Number)

_____
(Federal Employer ID Number)

CERTIFICATION OF COMPLIANCE WITH WAGE PAYMENT STATUS

PORT OF PASCO

Certification of Compliance with Wage Payment Statutes

The bidder hereby certifies that, within the three-year period immediately preceding the bid solicitation date (September 30, 2024), the bidder is not a "willful" violator, as defined in RCW 49.48.082, of any provision of chapters 49.46, 49.48, or 49.52 RCW, as determined by a final and binding citation and notice of assessment issued by the Department of Labor and Industries or through a civil judgment entered by a court of limited or general jurisdiction.

I certify under penalty of perjury under the laws of the State of Washington that the foregoing is true and correct.

_____
Bidder's Business Name

_____
Signature of Authorized Official*

_____
Printed Name

_____
Title

_____ _____ _____
Date City State

Check One:

Sole Proprietorship ☐ Partnership ☐ Joint Venture ☐ Corporation ☐

State of Incorporation, or if not a corporation, State where business entity was formed:

_____

If a co-partnership, give firm name under which business is transacted:

_____

**** If a corporation, proposal must be executed in the corporate name by the president or vice-president (or any other corporate officer accompanied by evidence of authority to sign). If a co-partnership, proposal must be executed by a partner.***

Port of Pasco
BIDDERS'S CHECKLIST

The bidder's attention is especially called to the following forms which must be completed in full as required and submitted collectively as the bid proposal package:

____1. Proposal Form- The unit prices must be shown in the space provided. Show all unit prices in both words and figures when indicated.
____2. Bid Bond- Surety bond or Cashier's Check. The amount of the bid bond shall not be less than five percent (5%) of the total amount of the bid.
____3. Addenda- All Addenda shall be signed and included in sealed bid.
____4. Certification of Compliance with Wage Payment Status. Certification of Compliance with Wage Payment Status form shall be completed, signed and included in sealed bid.
____5. Sealed Envelope- Proposals shall be prepared on the standard proposal form attached. The proposal shall be placed in a sealed envelope marked in the lower left corner with "Proposal for *Job Name*". Please place name of company on front of envelope as well. See bidder instructions for further information.

The following forms shall be executed and submitted within ten (10) calendar days after Notice of Award.

____1. Contract- To be executed by the successful bidder.
____2. Payment and Performance Bonds- Separate performance and payment bonds shall be completed on Standard AIA bond forms by Contractor's Surety and submitted with Contractor executed Contracts.
____3. Certificate of Insurance- Contractor shall furnish Certificate of Insurance and all applicable Endorsements naming the Port of Pasco as additional insured on its Commercial General Liability and Automobile Liability Policies per General Instructions under Insurance in bid specifications Instructions to Bidders.
____4. Construction Schedule- To be submitted by Contractor prior to scheduled Pre-Construction meeting.
____5. Schedule of Values- To be submitted by Contractor with executed Contract.
____6. List of Subcontractors- To be submitted by Contractor with executed Contract.
____7. Contractor's W-9- To be submitted by Contractor with executed Contract.

The following shall be filed prior to Notice to Proceed.

____1. Statement of Intent to Pay Prevailing Wages- To be filed immediately by the Prime Contractor after Contract is awarded and before work begins and subsequently by all those providing labor on the project.

AGREEMENT

Agreement between Port of Pasco and Contractor

Small Works Contract

THIS AGREEMENT is made on the 14 day of August, 2024 between the Port of Pasco (hereinafter "the Port") and the contractor, XYZ, (hereinafter "the Contractor"), who in consideration of the mutual promises contained herein, agree as follows:

ARTICLE 1: The Work

1.1 The Contractor shall perform all the work required by the contract documents identified in Article 5 and by this reference incorporated herein, for the project entitled Tri Cities Airport ARFF Building Fluid-Applied Roofing.

ARTICLE 2: Time of Commencement and Completion

2.1 The work to be performed under this contract shall commence not later than Notice to Proceed date and shall be completed not later than 20 calendar days following the date of commencement (hereinafter the "completion date").

ARTICLE 3: Contract Sum

3.1 The Port will pay the Contractor, for the satisfactory performance of the work, a contract sum of ($), which includes applicable Washington State sales tax.

ARTICLE 4: Payment

4.1 Monthly progress payments will be made for invoices submitted by the first of the month. Invoices should reflect work completed to date and are subject to approval by the Engineer. Materials and equipment not incorporated in the Work, but delivered, suitably stored, and accompanied by documentation satisfactory to the Port will be paid at 75% of cost (with the balance being retainage until fully incorporated into the Work).

4.2 Upon final acceptance of the work by the Port, the Contractor shall submit a final invoice in the amount of 100% of the contract sum, plus 100% of the applicable Washington State sales tax.

4.3 The Port may withhold payment (or a portion thereof) otherwise due the Contractor on account of:

A. defective work not remedied;
B. claims filed;
C. failure of the Contractor to make payment properly to subcontractors or for labor, materials or equipment;
D. damages to another Contractor; or
E. unsatisfactory performance of the work by the Contractor.

4.4 The acceptance of the final payment by the Contractor shall constitute a waiver of all claims, of whatever sort or nature, by the Contractor against the Port.

4.5 Unless withheld pursuant to paragraph 4.3, final payment to the Contractor shall be made upon occurrence of the following:

A. The expiration of 45 days following the final acceptance of the project, and
B. The receipt by the Port of the department of revenue certificate of payment of state excise taxes if contract is for a sum of $35,000.00 or more, and
C. Satisfaction of the Port that the claims of materialmen and laborers incurred in filing and processing such claims have been paid or provided for, and
D. All requirements of RCW 39.12 relating to Prevailing Wage have been met.

4.6 Retainage of 5% will be withheld until the requirements in Section 4.5 hereinabove and RCW 60.28 are met when contractor elects to furnish a performance and payment bond for the project of $150,000 or less. If contractor elects not to furnish a performance and payment bond on project of $150,000 or less, retainage of 10% will be withheld until the requirements in Section 4.5 hereinabove and RCW 60.28 are met.

ARTICLE 5: The Contract Documents

5.1 The contract documents, which by this reference are incorporated herein, consist of those documents listed below specifically:

A. This Agreement.
B. Invitation for Bids, Addenda, Small Works Roster.
C. General Conditions

D. Specifications.
E. Bid Form submitted by Bidder
F. Drawings.
G. Prevailing Wages Schedule.

5.2 The contract documents set forth above form the entire and integrated agreement between the Parties hereto, and supersede all prior negotiations, representation, or agreements, either written or oral. The contract may be amended or modified only by a written amendment to the contract signed by both parties or by a change order.

5.3 By his execution of the contract, the Contractor represents that he has visited the site of the work and familiarized himself with all conditions under which the work is to be performed.

5.4 The Contractor shall comply with all applicable Federal/State laws, City/County ordinances, and rules and regulations of all authorities having jurisdiction of project construction. Said laws will be deemed to be included the same as though written out in full.

ARTICLE 6: Owner

6.1 The Port of Pasco, as owner, shall issue all instructions to the Contractor through an authorized representative. The Port shall at all times have access to the work wherever it is in preparation or progress.

ARTICLE 7: Contractor

7.1 The Contractor shall be solely responsible for all construction means, methods, techniques, sequences and procedures, and for performing, scheduling and coordinating all portions of the work under the contract in a proper fashion and in strict compliance with all applicable codes, rules, regulations and laws.

7.2 Contractor shall carry on the Work in a safe manner, and shall comply with all applicable federal, state and local laws, regulations, standards, and recognized trade practices for the protection and safety of its employees and other persons about its Work, including without limitation those governing labor, safety, health, sanitation, and protection of the environment.

7.3 Contractor is solely responsible for protection and safety of its employees, for final selection of safety methods and means, and for

establishing, supervising, inspecting and enforcing its safety obligations in accord with this Agreement and applicable law.

7.4 Contractor shall defend, indemnify and hold the Port, its officers, officials, employees, engineer and volunteers harmless from any and all claims, injuries, damages, losses or suits including attorney fees, arising out of or resulting from the acts, errors or omissions of the Contractor, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them in performance of this Agreement, except for injuries and damages caused by the sole negligence of the Port. Should a court of competent jurisdiction determine that this Agreement is subject to RCW 4.24.115, then, in the event of liability for damages arising out of bodily injury to persons or damages to property caused by or resulting from the concurrent negligence of the Contractor, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them and the Port, its officers, officials, employees, engineer and volunteers, the Contractor's liability, including the duty and cost to defend, hereunder shall be only to the extent of the Contractor's negligence, or of any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them. It is further specifically and expressly understood that the indemnification provided herein constitutes the Contractor's waiver of immunity under Industrial Insurance, Title 51 RCW, solely for the purposes of this indemnification. This waiver has been mutually negotiated by the parties. The provisions of this section shall survive the expiration or termination of this Agreement.

7.5 Unless otherwise specifically noted, the Contractor shall provide and pay for all labor and materials, equipment, tools, construction equipment and machinery, water, heat, utilities, transportation, and other facilities and services necessary for the proper execution and completion of the work.

7.6 The Contractor shall pay prevailing wages, all sales, consumer, use, and other similar taxes required by law, and shall secure and pay for all permits, fees, and licenses necessary for execution of the work.

7.7 The Contractor will warrant to the Port that all materials and equipment furnished under the contract will be new unless otherwise specified, and that all work will be of good quality, free from faults and defects and in conformance with the specifications. All work not so conforming to these standards may be considered defective. If required by the Port, the Contractor shall furnish satisfactory evidence as to the kind and

quality of materials and equipment. This warranty shall be in addition to and not in limitation of any other warranty or remedy afforded by law.

7.8 RCW 39.06.020 requires a public works contractor to verify responsibility criteria for each first tier subcontractor, and a subcontractor of any tier that hires other subcontractors must verify responsibility criteria for each of its subcontractors. Verification is to include that, at the time of subcontract execution, each subcontractor meets the responsibility criteria listed above and in RCW 39.04.350(1) and additionally – if applicable – possesses an electrical contractor license or an elevator contractor license.

ARTICLE 8: Separate Contracts

8.1 The Port reserves the right to award other contracts in connection with other portions of the project.

ARTICLE 9: Time

9.1 All time limits stated in the contract documents are of the essence of the contract.

ARTICLE 10: Independent Contractor

10.1 Contractor represents, warrants and understands that it is an independent contractor and employing unit, duly licensed to perform the Work (including without limitation state contractor registration), subject to all applicable Social Security, Unemployment Compensation and Workers' Compensation statutes, and shall keep records and make reports and payments of all taxes or contributions required. Contractor agrees to indemnify, defend and hold Port harmless from any expenses or liability incurred under such statutes in connection with employees of Contractor.

10.2 If any Work hereunder is performed by principals of Contractor who are not covered by Workers' Compensation, the principals agree that they shall have no claim against Port or its insurers or its Workers' Compensation coverage in the event they are injured while performing such Work.

ARTICLE 11: Miscellaneous Provisions

11.1 This agreement is executed on the day first above written.

11.2 In the event of any dispute between Port and Contractor arising out of or relating to this Agreement, the prevailing party shall be entitled, whether or not a suit, action, or arbitration proceeding is instituted, to recover all costs incurred in connection with the dispute, including without limitation reasonable attorneys' and expert witness fees, whether at trial, on appeal or denial of any petition for review, or in connection with enforcement of any judgment.

11.3 This Agreement shall be interpreted in accordance with the laws and court rules of the State of Washington in effect on the date of execution of this Agreement. In the event any party deems it necessary to institute legal action or proceedings to ensure any right or obligation under this Agreement, the parties agree that such action shall be brought in a court of competent jurisdiction situated in Franklin County, Washington.

11.4 The Defend Trade Secrets Act provides that an individual may not be held criminally or civilly liable under any federal or state trade secret law for disclosure of a trade secret: (1) made in confidence to a government official, either directly or indirectly, or to an attorney, solely for the purpose of reporting or investigating a suspected violation of law; and/or (2) in a complaint or other document filed in a lawsuit or other proceeding, if such filing is made under seal. Additionally, an individual suing an employer for retaliation based on the reporting of a suspected violation of law may disclose a trade secret to his or her attorney and use the trade secret information in the court proceeding, so long as any document containing the trade secret is filed under seal and the individual does not disclose the trade secret except pursuant to court order.

PORT OF PASCO:	CONTRACTOR: XYZ
By: _____	By: _____
Title: _____	Title: _____
By: _____	By: _____
Title: _____	Title: _____
	Washington State Contractors License No.: _____

PREVAILING WAGES

DRAWINGS

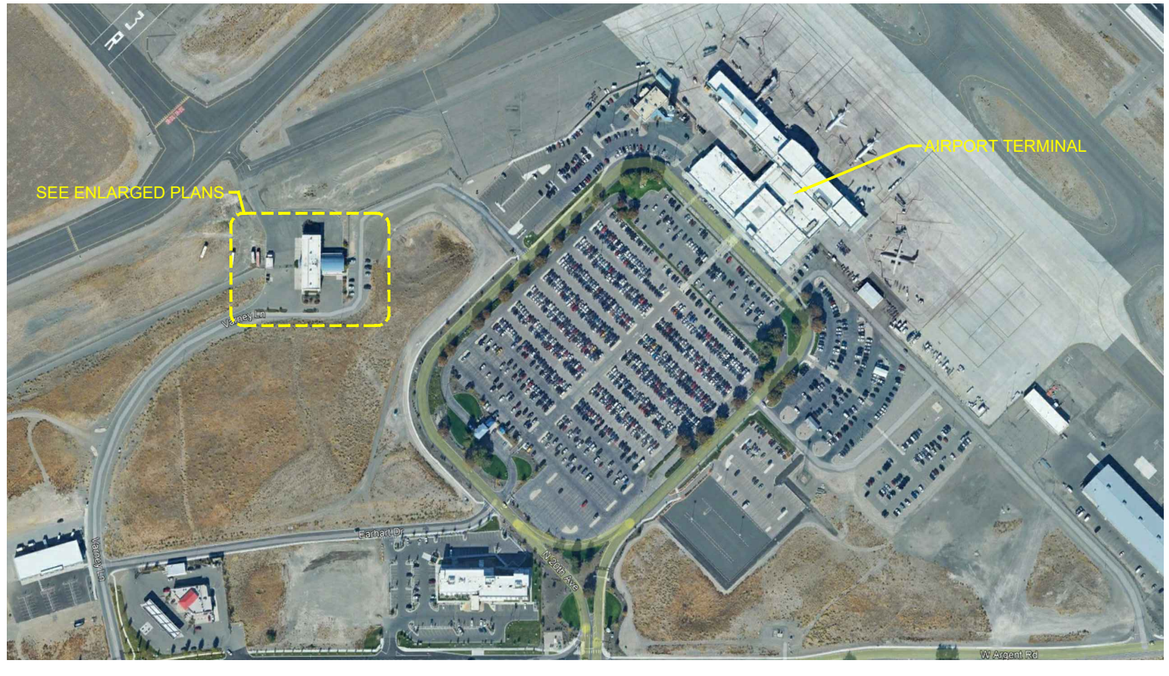
TRI CITIES AIRPORT
ARFF BUILDING
FLUID-APPLIED MEMBRANE ROOFING

3502 Varney Lane

PASCO, WA

SHEET INDEX

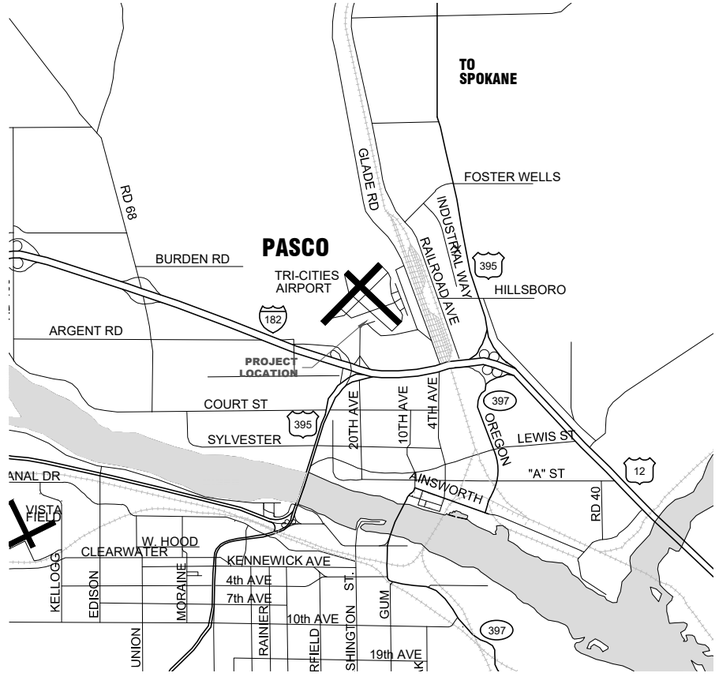
SHEET NO.	TITLE
G-01	PROJECT LOCATION & INDEX
G-02	GENERAL NOTES & ABBREVIATIONS
PH-01	PHOTOGRAPHS OF ROOF AREAS
	DRAWINGS
A-01	FLOOR PLAN
A-02	BUILDING SECTIONS
A-03	BUILDING WALL SECTIONS
R-01	ROOF PLAN
R-02	DETAILS



north

PROJECT LOCATION

NTS



PROJECT VICINITY MAP

TRI-CITIES AIRPORT • PSC
3601 N. 20th Avenue
Pasco, WA 99301
P: 509.547.6352
F: 509.547.9040
www.portofpasco.org

No.	REVISIONS	DATE	DRWN	CHKD	DESIGN	APPD

APPROVAL		
DRAWN	TF	9/11/24
DESIGN		
CHECKED		
APPROVED		

TRI CITIES AIRPORT
ARFF BUILDING
PASCO, WA

PROJECT LOCATION & INDEX

DWG. No.
G-01

SCALE:

CADFILE: 24-08G01

JOB No. 24-08

REV. 0

GENERAL

1. CONTRACTORS SHALL VISIT AND FAMILIARIZE THEMSELVES WITH THE SITE AND SHALL BRING ANY DISCREPANCIES IN THE DRAWINGS OR SPECIFICATIONS TO THE ATTENTION OF THE ARCHITECT/ENGINEER PRIOR TO BIDDING OR UNDERTAKING THE AFFECTED WORK.

2. ANY DISCREPANCIES IN THESE DRAWINGS, SPECIFICATIONS, THESE NOTES AND SITE CONDITIONS SHALL BE REPORTED TO THE ENGINEER WHO SHALL CORRECT SUCH DISCREPANCY IN WRITING AFTER REVIEWING ANY CHANGES PRIOR TO BIDDING THE WORK. ANY WORK PERFORMED BY THE CONTRACTOR AFTER THE DISCOVERY OF SUCH DISCREPANCY SHALL VERIFY AND COORDINATE THE DIMENSIONS AMONG ALL DRAWINGS PRIOR TO PROCEEDING WITH ANY WORK.

3. APPROVALS BY BUILDING OFFICIAL SHALL NOT CONSTITUTE AUTHORITY TO DEVIATE FROM PLANS AND SPECIFICATIONS (CONSTRUCTION DOCUMENTS).

4. OMISSIONS IN THE EVENT CERTAIN FEATURES OF THE CONSTRUCTION ARE NOT FULLY SHOWN ON THE DRAWINGS, THEIR CONSTRUCTION SHALL BE OF THE SAME CHARACTER AS SIMILAR CONDITIONS THAT ARE SHOWN. IF FEATURES ARE STILL UNCLEAR, CONTACT ARCHITECT/ENGINEER FOR CLARIFICATION.

5. THE CONTRACTOR SHALL PROVIDE QUALIFIED PERSONNEL THROUGHOUT THE WORK. THE CONTRACTOR IS RESPONSIBLE TO SEE THAT WORK IN THE FIELD IS DONE IN ACCORDANCE WITH ALL CURRENT APPLICABLE NATIONAL, STATE AND LOCAL CODES, ORDINANCES, REQUIREMENTS, ETC. ARE SPECIFICALLY SHOWN ON DRAWINGS AND/OR CALLED FOR IN THE SPECIFICATIONS.

6. THE CONTRACTOR SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR THE JOB SITE CONDITIONS DURING CONSTRUCTION OF THE PROJECT INCLUDING SAFETY OF ALL PERSONS AND PROPERTY CONTINUOUSLY DURING, BUT NOT LIMITED TO, NORMAL WORKING HOURS. THE CONTRACTOR SHALL DEFEND, INDEMNIFY, AND HOLD THE OWNER AND THE ARCHITECT/ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PROJECT, EXCEPT FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR ARCHITECT/ENGINEER. THE OWNER AND ARCHITECT/ENGINEER SHALL BE NAMED AS ADDITIONAL INSURED ON THE CONTRACTORS LIABILITY INSURANCE COVERAGE PER CONTRACT DOCUMENTS.

7. ALL MANUFACTURED MATERIALS, COMPONENTS, FASTENERS, ASSEMBLIES, ETC. SHALL BE HANDLED AND INSTALLED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS AND PROVISIONS OF APPLICABLE ICBO RESEARCH RECOMMENDATIONS. WHERE SPECIFIC MANUFACTURED PRODUCTS ARE CALLED FOR, PRODUCTS OF EQUAL QUALITY WHICH MEET APPLICABLE STANDARDS AND SPECIFICATIONS MAY BE USED, BUT ONLY IF APPROVED BY ARCHITECT/ENGINEER UNLESS SPECIFICALLY NOTE IN THE CONTRACT.

8. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR FINAL DIMENSIONS, QUANTITIES, COORDINATION OF THE WORK OF ALL TRADES, QUALITY CONTROL, AND CONSTRUCTION STANDARDS FOR THIS PROJECT.

9. ARCHITECT OR ENGINEERED STAMPED DRAWINGS CANNOT BE MODIFIED IN ANY WAY EXCEPT BY THE ARCHITECT OR ENGINEER. PLANS MODIFIED BY OTHERS WILL NOT BE ACCEPTED.

10. DIMENSIONS: WRITTEN DIMENSIONS HAVE PRECEDENCE OVER SCALED DIMENSIONS UNLESS NOTED OTHERWISE. ALL DIMENSIONS ARE SHOWN AS NOTED ON DRAWINGS FROM FACE OR CENTERLINE.

11. DRAWINGS SHALL NOT BE SCALED TO DETERMINE ANY DIMENSIONS. REFER ONLY TO WRITTEN INFORMATION AND DETAIL DRAWINGS, OR USE FIGURED DIMENSIONS. DIMENSIONAL DISCREPANCIES SHALL BE CALLED TO THE ATTENTION OF THE ARCHITECT/ENGINEER PRIOR TO CONSTRUCTION.

12. STRUCTURAL MEMBERS SHALL NOT BE CUT FOR PIPES, DUCTS, SLEEVES, ETC. UNLESS SPECIFICALLY NOTED OR DETAILED.

13. NO FIELD CHANGES WILL BE PERMITTED WITHOUT DIRECT WRITTEN AUTHORIZATION.

14. THE CONTRACTOR AND ALL SUBCONTRACTORS SHALL BE LICENSED AND BONDED TO DO WORK IN THE PUBLIC RIGHT–OF–WAY AND HAVE A CURRENT CITY OF PASCO BUSINESS LICENSE.

15. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY AND ALL CONSTRUCTION DEFICIENCIES FOR A PERIOD OF ONE YEAR FROM THE DATE OF ACCEPTANCE BY THE PORT OF PASCO OR AS SPECIFIED IN THE BID DOCUMENTS..

16. ALL WORK SHALL BE IN ACCORDANCE WITH ALL APPLICABLE LOCAL, COUNTY, STATE AND FEDERAL JURISDICTION REQUIREMENTS. CONSTRUCTION SHALL CONFORM TO CURRENT EDITION OF THE INTERNATIONAL BUILDING CODE (IBC) AND ALL OTHER CODES AS LOCALLY ADOPTED AND AMENDED.

17. IN THE EVENT OF CONFLICT BETWEEN PERTINENT CODES AND REGULATIONS AND REFERENCED STANDARDS OF THESE DRAWINGS, THE MORE STRINGENT PROVISIONS SHALL GOVERN.

18. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR DEVELOPING A SAFETY PLAN TO PROTECT WORKERS AND THE PUBLIC FROM INJURY OR HARM CONFORMING TO ALL LOCAL, STATE AND FEDERAL REQUIREMENTS AND FOR ENFORCING IT ON THE PROJECT SITE.

19. IF THERE IS ANY DISCREPANCY BETWEEN THE DRAWINGS AND SPECIFICATIONS, THE MORE STRINGENT OR HIGHER VALUE ALTERNATIVE WILL TAKE PRECEDENT.

20. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DEVELOPING AND MAINTAINING A DUST CONTROL PLAN. DUST CONTROL SHALL BE IN ACCORDANCE WITH ALL LOCAL ORDINANCES AND/OR WITH SECTION 2–07 OF THE STANDARD SPECIFICATIONS. WHEN UTILIZING A DIRECT CONNECTION TO A PUBLIC WATER SOURCE (I.E. FIRE HYDRANT METER, ETC.) NO IRRIGATION LINES OR OTHER IRRIGATION/SPRINKLING TYPE WATERING DEVICES ARE ALLOWED. DUST CONTROL TO BE DONE WITH A PERSON OPERATED WATERING DEVICE (I.E. WATER TRUCK, WATER WAGON, ETC.): AND NOT UNATTENDED WATER ALLOWED. THE CONTRACTOR CAN MAKE ARRANGEMENTS WITH CITY OF PASCO FOR APPLICABLE METERING DEVICES FOR WATER USAGE IF NOT ON PORT PROPERTY.

21. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROCURE ALL APPLICABLE PERMITS, LICENSES AND CERTIFICATES RELATIVE TO THE TRADES TO COMPLETE THE PROJECT AND FOR THE USE OF SUCH WORK WHEN COMPLETED. COMPLIANCE SHALL BE AT ALL LEVELS, FEDERAL, STATE AND CITY, RELATING TO THE PERFORMANCE OF THIS WORK.

22. NOTIFY PORT OF PASCO MAINTENANCE DEPARTMENT AND OR PROPER UTILITY PRIOR TO INTERRUPTION OF ANY BASE UTILITIES.

23. ALL WORK SHALL BE IN ACCORDANCE WITH THE 2021 INTERNATIONAL BUILDING CODE (IBC), NATIONAL ELECTRIC CODE, INTERNATIONAL PLUMBING CODE AND ANY CITY OF PASCO REQUIREMENTS.

24. CONTRACTOR IS RESPONSIBLE FOR VERIFICATION OF SITE CONDITIONS, INSTALLATION STANDARDS AND CONSTRUCTION CONDITIONS. FIELD VERIFY ALL NECESSARY DIMENSIONS. DISCREPANCIES BETWEEN EXISTING CONDITIONS AND THE CONSTRUCTION DRAWINGS SHALL BE CALLED TO THE ATTENTION OF THE ARCHITECT. WORK DONE WITHOUT THE ARCHITECT'S APPROVAL IS THE RESPONSIBILITY OF THE CONTRACTOR.

25. ALL DIMENSIONS TO CENTER LINE OR AS NOTED.

26. DRAWINGS MAY BE REDUCED, VERIFY SCALE.

27. THE CONTRACTOR ALONE SHALL BE RESPONSIBLE FOR SAFETY. THE CONTRACTOR SHALL PROVIDE ADEQUATE SAFEGUARDS, SAFETY DEVICES AND PROTECTIVE EQUIPMENT, AND TAKE ANY OTHER NEEDED ACTIONS NECESSARY TO PROTECT THE LIFE, HEALTH AND SAFETY OF THE PUBLIC AND TO PROTECT PROPERTY IN CONNECTION WITH THE WORK COVERED BY THE CONTRACT.

UTILITIES

1. ALL UTILITIES MUST BE VERIFIED PRIOR TO CONSTRUCTION. PRIOR TO ANY EXCAVATION, THE CONTRACTOR IS REQUIRED TO CALL THE UNDERGROUND ALERT CENTER AT 811 AT LEAST 2 BUSINESS DAYS PRIOR TO STARTING SUCH EXCAVATION.

2. IT SHALL BE THE CONTRACTOR'S OWN RESPONSIBILITY TO PROTECT, IN PLACE, ALL UTILITIES AND/OR THEIR STRUCTURES WHETHER OR NOT THEY ARE SHOWN ON THE PLANS. DAMAGE DUE TO THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE TO CURRENT AGENCY STANDARDS.

3. IT IS THE RESPONSIBILITY OF THE CONTRACTOR WHEN IN THE VICINITY OF ANY UTILITY LINES TO NOTIFY ALL UTILITIES/AGENCIES WHEN CONSTRUCTION WORK BEGINS AND TO ARRANGE FOR A REPRESENTATIVE OF THE UTILITY/AGENCY TO BE PRESENT. THE CONTRACTOR SHALL COORDINATE ITS ACTIVITIES WITH ALL UTILITIES/AGENCIES.

ABBREVIATIONS

(E)	EXISTING
AFF	ABOVE FINISHED FLOOR
ALUM	ALUMINUM
ANDZ	ANODIZED
BOB	BOTTOM OF BEAM
C/C	CENTER TO CENTER
CD	
CLG	
CLR	
CMU	
CONC	CONDENSATE DRAIN
CONT	CEILING
DN	CLEAR
ELEV	CONCRETE MASONRY UNIT
ENAM	CONCRETE
EPOX	CONTINUOUS
EQP	DOWN
EXPD	ELEVATION
FBO	ENAMEL
FD	EPOXY
FE	EQUIPMENT
FEC	EXPOSED
FF	FURNISHED BY OTHERS
FM	FLOOR DRAIN
GA	FIRE EXTINGUISHER
GALV	FIRE EXTINGUISHER CABINET
GCS	FINISHED FLOOR
GWB	FACTORY MUTUAL
HC	GAUGE
HM	GALVANIZED
HORIZ	GALVANIZED CARBON STEEL
HR	GYPSUM WALL BOARD
IFC	HOLLOW CORE
MATL	HOLLOW METAL
MAX	HORIZONTAL
	HOUR
	INTERNATIONAL FIRE CODE
	MATERIAL
	MAXIMUM
MFRS	MANUFACTURERS
MIN	MINIMUM
MISC	MISCELLANEOUS
MTL	METAL
NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
	NOT IN CONTRACT
NIC	NOT TO SCALE
NTS	ORIENTED STRAND BOARD
OSB	PLYWOOD
PLWD	PRESSED METAL
PM	PRE FINISHED
PRE	PRESSURE TREATED
PT	REVERSED OR REVISION
REV	ROOF DRAIN
RD	ROOM
RM	ROUGH OPENING
RO	RAIN WATER LEADER
RWL	SOUND ATTENUATION INSULATION
SAI	SOLID CORE
SC	SQUARE FEET
SF	SHEET
SH	SIMILAR
SIM	SPECIFICATION
SPEC	STAINLESS STEEL
SST	TOP AND BOTTOM
T&B	TONGUE AND GROOVE
T&G	TOP OF CONCRETE
TOC	THERMOPLASTIC POLYOLIFEN
TPO	TOP OF MASONRY
TOM	TYPICAL
TYP	UNDERWITERS LABORATORIES
UL	UNLESS NOTED OTHERWISE
UNO	VERTICAL
VERT	VINYL
VIN	WOOD
WD	WORK POINT / WATER PROOF
WP	

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GENERAL NOTES, ABBREVIATIONS

DWG. No.
G–02

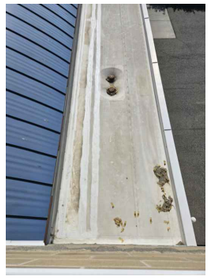
SCALE:

CADFILE: 24–08G02

JOB No. 24–08

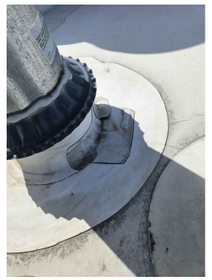
REV. 0

N. LOWER ROOF AREA



S. LOWER ROOF AREA

TYP. LOWER & UPPER ROOF AREA ROOF DRAINS



TYP. UPPER ROOF AREA VENTS

EXIST. TPO FLASHING UPPER ROOF AREA

EXIST. METAL FLASHING UPPER ROOF AREA

EXIST. METAL FLASHING UPPER ROOF AREA

UPPER ROOF AREA WALKWAY & VENTS LOOKING NORTH

UPPER ROOF AREA WALKWAY & VENTS LOOKING NORTH

UPPER ROOF AREA WALKWAY & VENTS LOOKING SOUTH

UPPER ROOF AREA WALKWAY & VENTS LOOKING NORTHEAST

AERIAL VIEW OF UPPER AND LOWER ROOF AREAS

N

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PHOTOGRAPHS–ROOF AREAS

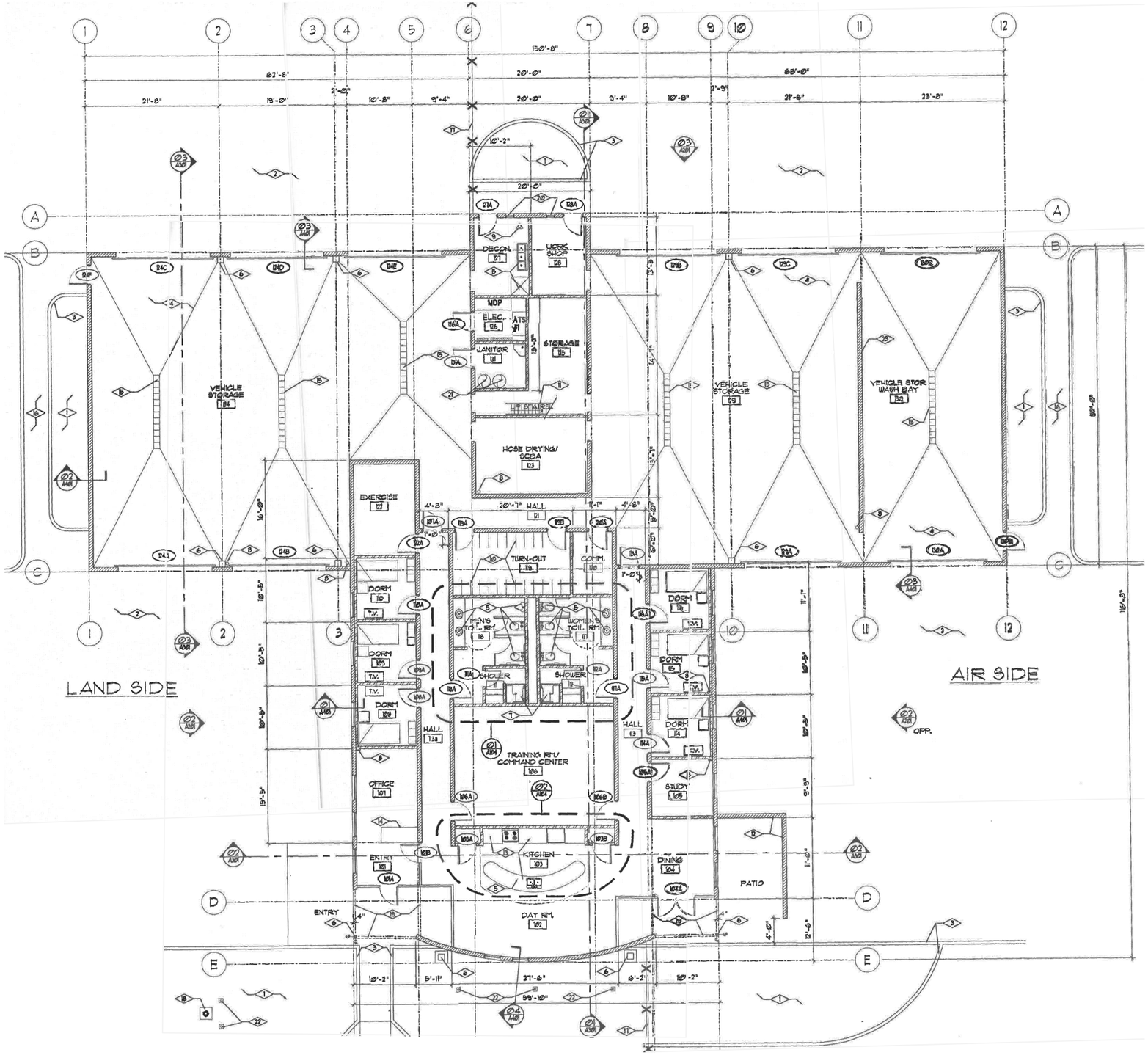
DWG. No.
PH–01

SCALE:

CADFILE: 24–08PH01

JOB No. 24–08

REV. 0



REFERENCE NOTES

1. LANDSCAPED AREA. SEE LANDSCAPING SHEETS.
2. ASPHALT PAVING ON GRANULAR BASE. SEE CIVIL SHEETS.
3. CONT. REINF. 6" CONC. CURB. SEE CIVIL SHEETS.
4. 6" CONC. SLAB ON GRANULAR BASE SLOPED TO DRAIN. SEE STRUCT. SHEETS.
5. PLUMBING FIXTURE. SEE PLUMBING SHEETS.
6. PAINTED STRUCT. STEEL COLUMN. SEE STRUCT. SHEETS.
7. ACCESSIBLE SHOWER STALL.
8. ROOF DRAIN. SEE PLUMBING SHEETS.
9. FIRE SPRINKLER SYSTEM RISER.
10. RELOCATED, SALVAGED RACKS.
11. ALUMINUM SHIPS LADDER.
12. 4' HIGH 8" COLORED CMU SCREEN WALL.
13. PLAST. LAM. KITCHEN COUNTERS & CABINETS.
14. BUILT-IN PLAST. LAM. COUNTER/ CASEWORK.
15. PRE-FAB. FLOOR TRENCH DRAIN/ EXHAUST AIR GRILLE. SEE PLUMB./ MECH. SHEETS.
16. 4" CONC. SLAB ON GRANULAR BASE. SEE CIVIL SHEETS.
17. 10' HIGH CHAIN-LINK FENCE W/ BARB-WIRE. SEE SITE PLAN.
18. FLAG POLE.
19. CANOPY.
20. ANOD. ALUM. LOUVER. SEE MECH. SHEETS.
21. MECH. DUCT. SEE MECH. SHEETS.
22. EXT. LIGHTING. SEE ELEC. SHEETS.
23. 8'-0" HIGH GLAZED MASONRY UNIT WALL.

SYMBOL LEGEND

- 3-5/8" MTL. STUD FRAMED WALL W/5/8" PAINTED GYP. BD. @ EA. SIDE.
- 8" C.M.U. WALL.
- 8' HIGH CHAIN-LINK FENCE W/ BARBED WIRE.

NOTE:
THIS IS FROM ORIGINAL ARCHITECTURAL DRAWINGS FOR BUILDING.

FLOOR PLAN

NTS

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FLOOR PLAN

DWG. No.
A-01

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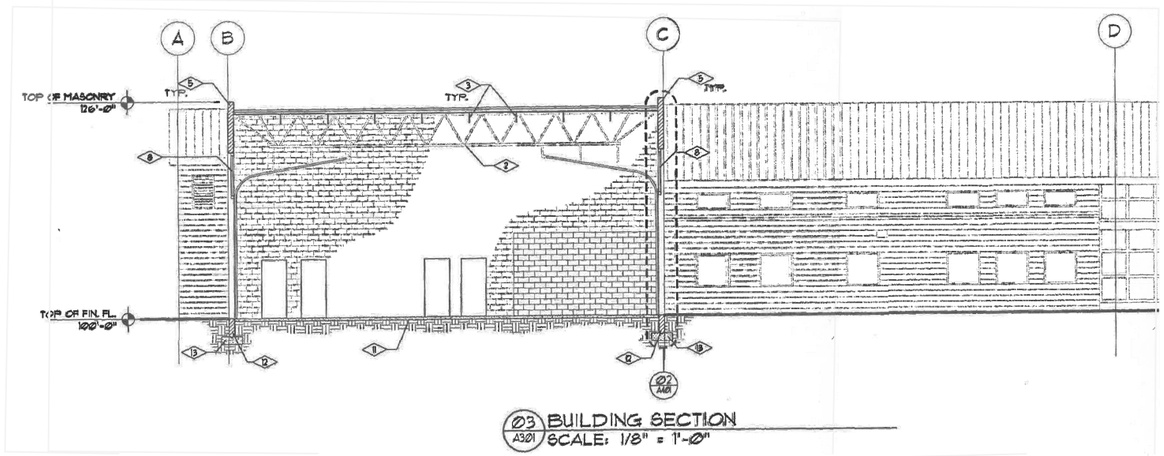
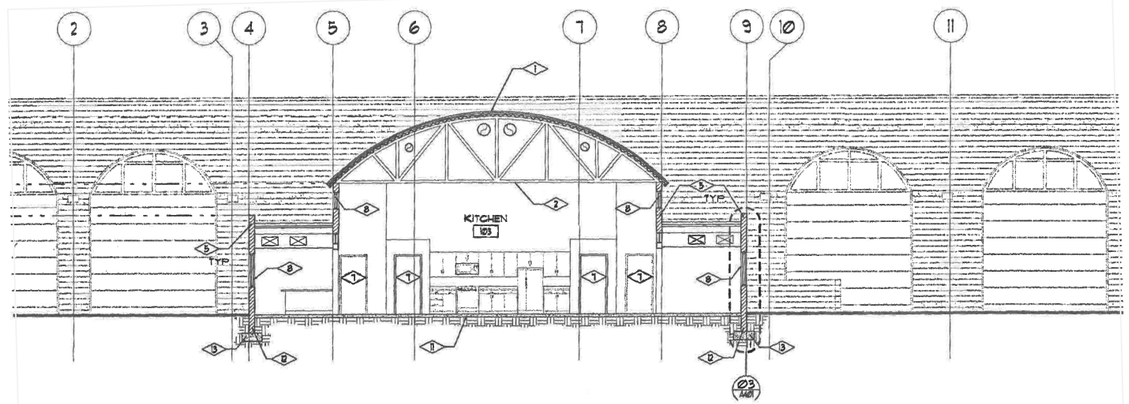
CADFILE: 24-08A-01
JOB No. 24-08
REV. 0



Ø3 A301 BUILDING SECTION
SCALE: 1/8" = 1'-0"



Ø2 A301 BUILDING SECTION
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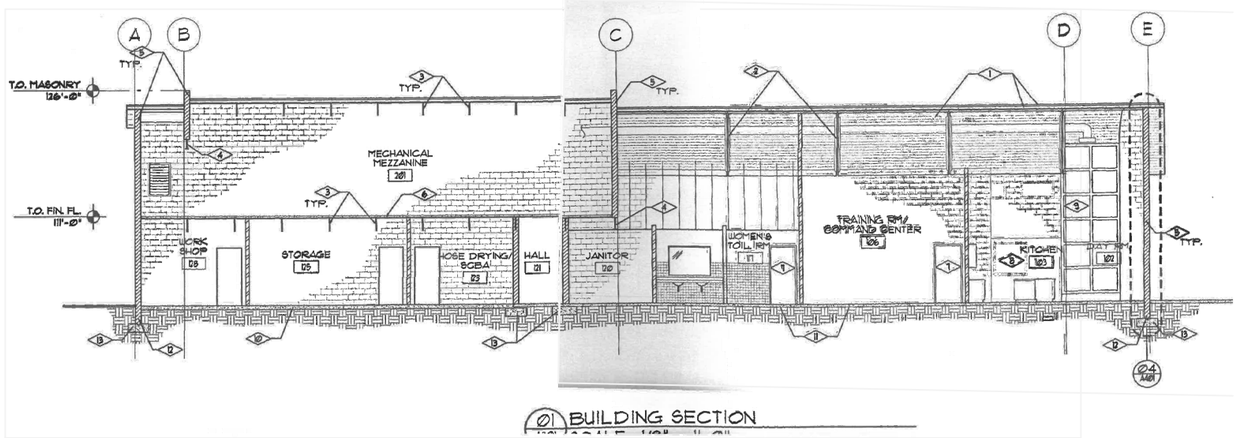

Ø1 BUILDING SECTION

NOTE:
THESE SECTIONS ARE FROM ORIGINAL ARCHITECTURAL DRAWINGS FOR BUILDING. THESE ARE EXISTING CONDITIONS AT PRESENT FOR BUILDING STRUCTURE.

BUILDING SECTIONS

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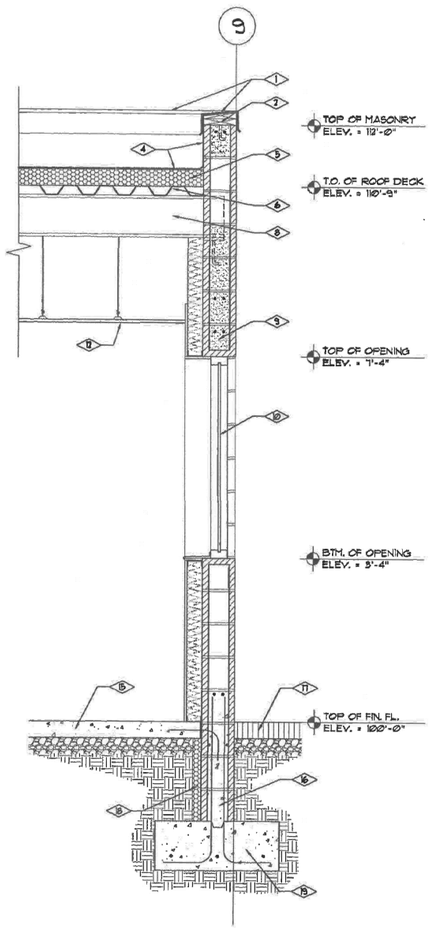
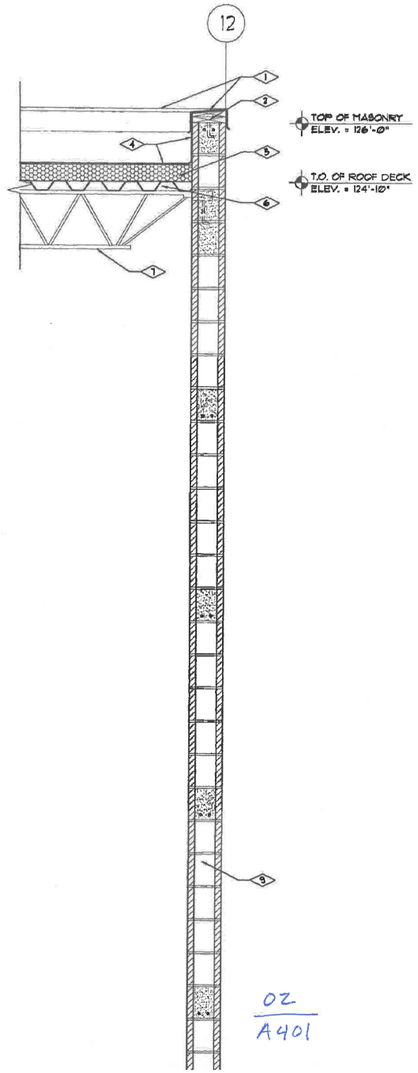
BUILDING SECTIONS

DWG. No.
A-02

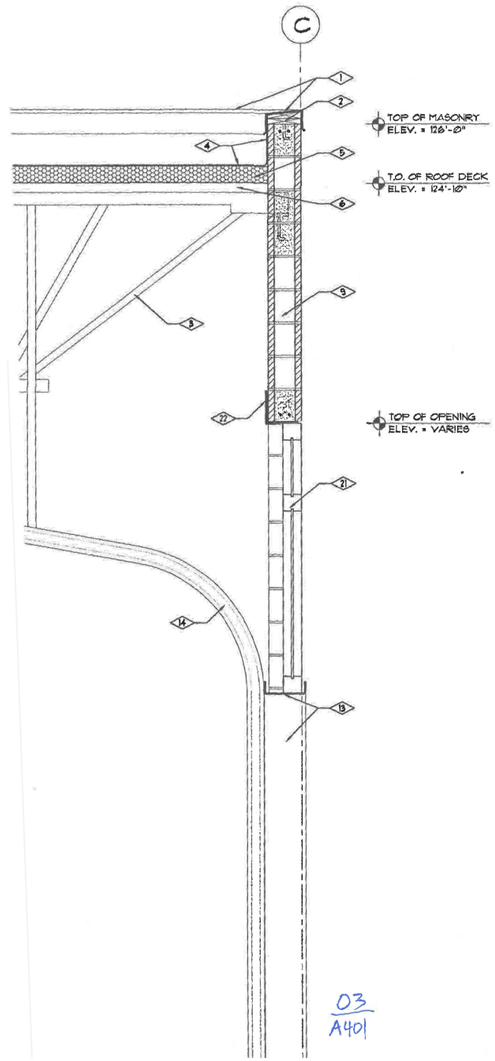
SCALE: NOTED
CADFILE: 24-08A-02
JOB No. 24-08
REV. 0



01 / A401 WALL SECTION
SCALE: 3/4" = 1'-0"



02 / A401



03 / A401

REFERENCE NOTES

1. CONT. 24 GA. KYNAR COATED MTL. CAP FLASHING. COLOR PER ARCH.
2. CONT. DBL. 2x8 PRESS. TREATED WD. TOP PLATES ANCHORED TO MASONRY.
3. PAINTED STRUCT. STEEL ROOF TRUSS. SEE STRUCT. SHEETS.
4. SINGLE-PLY MEMBRANE ROOF SYSTEM.
5. 4" MIN. POLYISO. RIGID INSUL.
6. PAINTED STRUCT. MTL. ROOF DECK. SEE STRUCT. SHEETS.
7. STRUCT. STEEL ROOF JOIST. SEE STRUCT. SHEETS.
8. STRUCT. STEEL ROOF BEAM. SEE STRUCT. SHEETS.
9. 8" CMU. WALL CONST. SEE STRUCT. SHEETS.
10. CLR. ANOD. ALUM. FRAME WINDOW UNIT.
11. 6" CONC. SLAB ON 4" GRANULAR BASE. SEE STRUCT. SHEETS.
12. SUSPENDED CEILING SYSTEM AS SCHEDULED.
13. PAINTED STEEL CHANNEL FRAME AT HEAD/JAMB OF OPENING. COLOR PER ARCH.
14. GUIDE/ TRACK FOR SECTIONAL OVERHEAD DOOR.
15. FLOORING AS SCHEDULED ON 4" CONC. SLAB ON GRANULAR BASE. SEE STRUCT. SHEETS.
16. SOLID GROUTED 8" REINF. CMU FDTN. WALL. SEE STRUCT. SHEETS.
17. 4" EXT. ASPH. PAVING ON GRANULAR BASE. SEE CIVIL SHEETS.
18. 2" RIGID INSUL. @ FDTN. WALL.
19. CONT. REINF. CONC. FTG. . SEE STRUCT. SHEETS.
20. INSTALL DAMP PROOFING COATING AT FOUNDATION WALL.
21. CLR. ANOD. ALUM. FRAME AND GLAZING STORE FRONT SYSTEM.
22. PAINTED CURVED STRUCT. STEEL ANGLE LINTEL. SEE STRUCT. SHEETS. COLOR PER ARCH.
23. DBL. ¾" EXT. PLYWD. FASCIA BACKING CUT TO CURVE ATTACHED TO MTL. CLIPS WELDED TO ROOF DECK.
24. PERF. MTL. ACOUST. PANEL CEILING ATTACHED TO ROOF DECK.
25. 2" RIGID INSUL..
26. KYNAR COATED STANDING SEAM MTL. ROOF SYSTEM. COLOR PER ARCH.
27. 24 GA. KYNAR COATED MTL. FASCIA.
28. PRE-FINISHED ALUM. SOFFIT.

NOTE:
THESE SECTIONS ARE FROM ORIGINAL ARCHITECTURAL DRAWINGS FOR BUILDING. THESE ARE EXISTING CONDITIONS AT PRESENT FOR BUILDING STRUCTURE.

BUILDING WALL SECTIONS NTS

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BUILDING WALL SECTIONS

DWG. No. A-03

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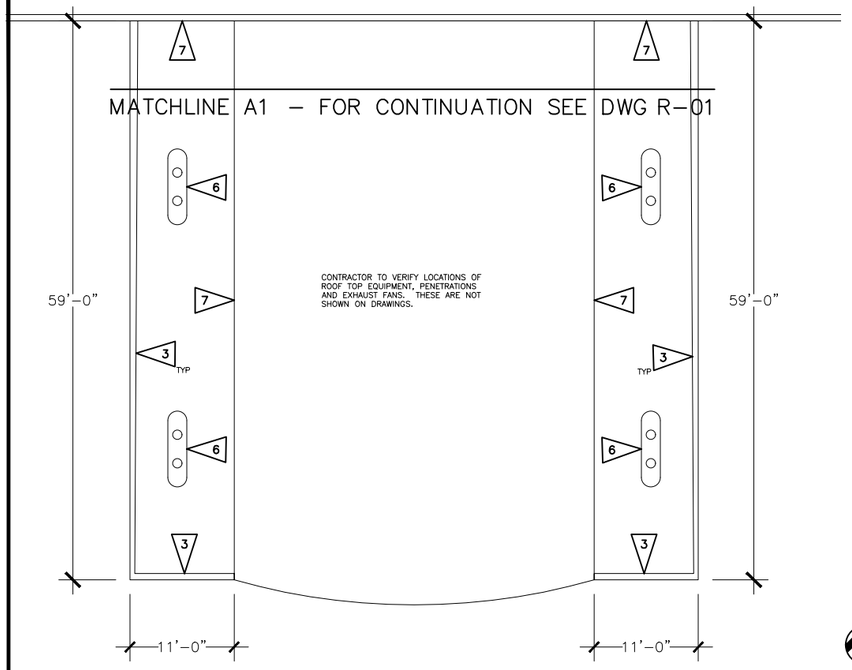
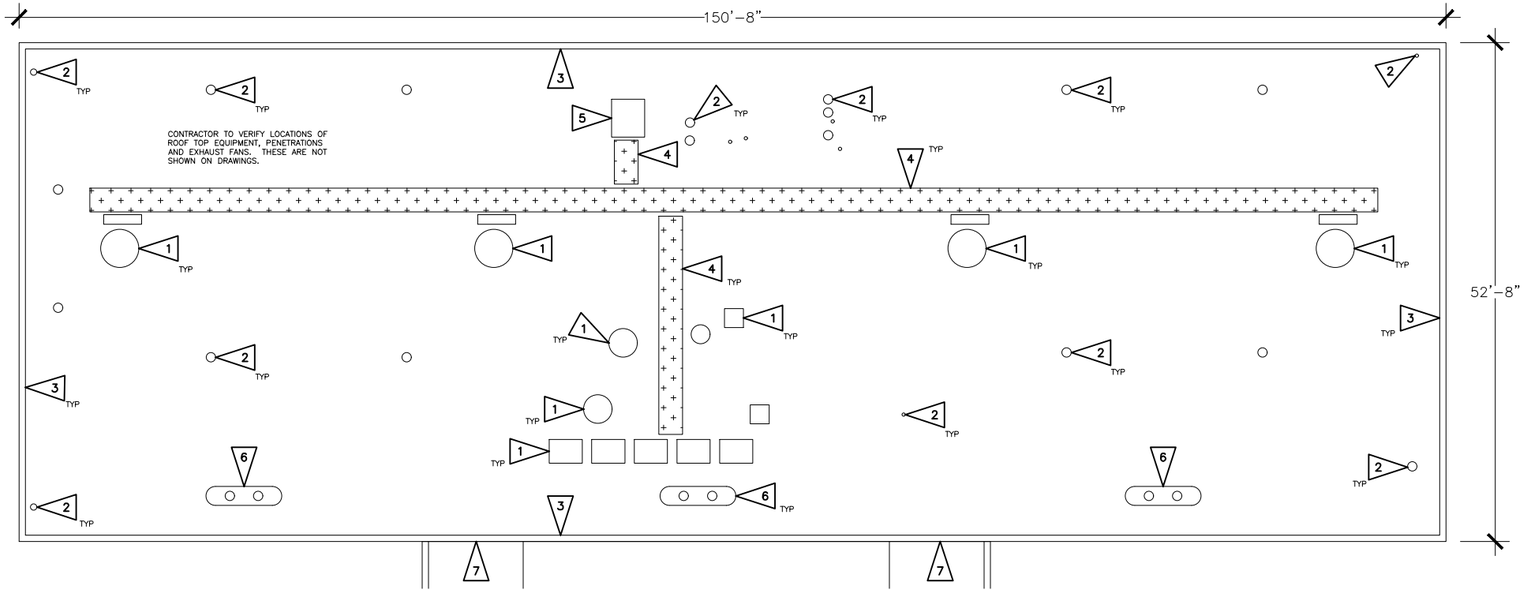


ROOF PLAN ARFF BUILDING LOWER ROOF SECTIONS

1/16"= 1'–0"



ROOF PLAN ARFF BUILDING UPPER ROOF SECTION

1/16"= 1'–0"

1. FIELD VERIFY ALL EXISTING DIMENSIONS AS REQUIRED FOR PROJECT.
2. CONTRACTOR TO VERIFY DRAWING SCALE.

NOTES

1. REMOVE AND REINSTALL EXISTING EQUIPMENT AS NECESSARY/REQUIRED FOR INSTALLATION OF FLUID–APPLIED MEMBRANE ROOFING. INSTALL REQUIRED FLASHING, REINFORCING FABRIC, ETC. AT CURBS, PENETRATIONS, EQUIPMENT, ETC. PER FLUID–APPLIED MEMBRANE ROOFING MANUFACTURERS RECOMMENDED INSTALLATION INSTRUCTIONS AND OR PER DETAILS ON DRAWING R–02.
2. EXISTING CONDUIT PENETRATIONS, VENTS, ETC. FLASH PER FLUID–APPLIED MEMBRANE ROOFING MANUFACTURERS STANDARD DETAILS AND INSTALLATION INSTRUCTIONS. TYPICAL FOR ALL PENETRATIONS FOR EQUIPMENT AND ROOF PENETRATIONS.
3. EXISTING CMU WALL. INSTALL NEW MEMBRANE ROOFING PER FLUID–APPLIED MEMBRANE ROOFING MANUFACTURERS DETAILS AND INSTRUCTIONS OR DETAILS ON DRAWING R–02. APPLY PRIMER AND SEALANTS AS REQUIRED BY MANUFACTURER'S INSTALLATION INSTRUCTIONS TO ENSURE THAT THE COPING IS WEATHER TIGHT AND SECURELY FASTENED.
4. PROVIDE RECOMMENDED PRIMERS AND COATING AT 2'–6" WIDE WALKWAY PADS FROM MANUFACTURER'S RECOMMENDED INSTALLATION INSTRUCTIONS.
5. EXISTING ROOF ACCESS.
6. EXISTING ROOF DRAINS.
7. FLASH, CAULK AND INSTALL FLUID–APPLIED MEMBRANE ALONG EXISTING CMU WALL PER FLUID–APPLIED MEMBRANE ROOFING MANUFACTURERS RECOMMENDED STANDARD DETAILS OR OR INSTRUCTIONS.

FLAG NOTES

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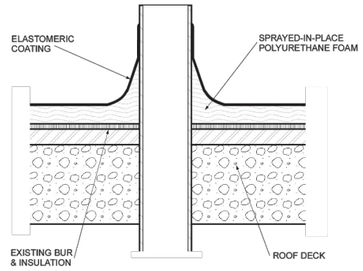
ROOF PLAN

DWG. No.
R–01

SCALE: NOTED
CADFILE: 24–08R–01
JOB No. 24–08
REV. 0



Note: This detail is utilized in the specification and design of fluid-applied roofing, in both new and retrofit applications. It is provided to show a generally recommended procedure for dealing with the condition shown. It will not and cannot provide a specific solution for every condition likely to be encountered in field application. Where field conditions differ, the use of applicable portions of the detail shown or its adaptation by an experienced and conscientious applicator should result in a quality project.

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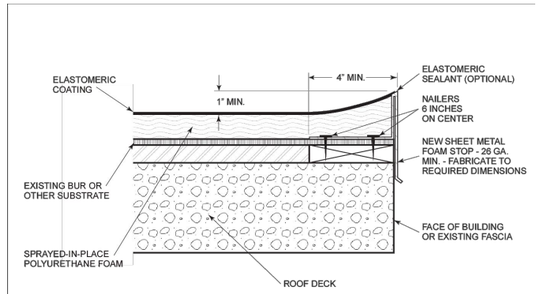
Project: Vertical Projection

Drawn by	Scale	Date	Drawing/Sheet No.
K. Kirby	NTS	04/01/2020	ROOF_vert-proj-04012020

1–VERTICAL PROJECTION NTS



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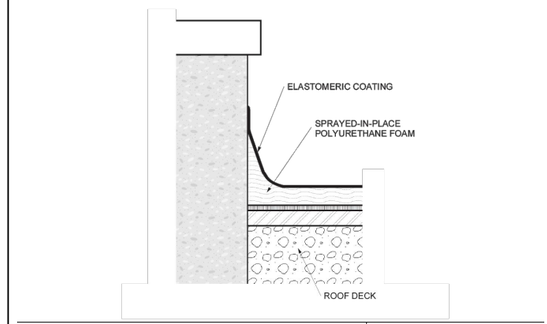
Project: Foam Stop, Interior Drain Roofs

Drawn by	Scale	Date	Drawing/Sheet No.
K. Kirby	NTS	04/01/2020	ROOF_foam-stop-interior-drain-04012020

2–FOAM STOP INTERIOR DRAIN DETAIL NTS



Note: This detail is utilized in the specification and design of fluid-applied roofing, in both new and retrofit applications. It is provided to show a generally recommended procedure for dealing with the condition shown. It will not and cannot provide a specific solution for every condition likely to be encountered in field application. Where field conditions differ, the use of applicable portions of the detail shown or its adaptation by an experienced and conscientious applicator should result in a quality project.

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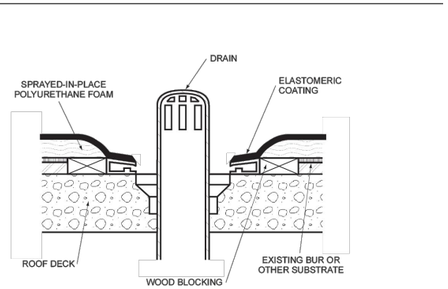
Project: Roof Parapet Wall

Drawn by	Scale	Date	Drawing/Sheet No.
K. Kirby	NTS	04/01/2020	ROOF_parapet-wall-04012020

3–ROOF PARAPET WALL DETAIL NTS



Note: This detail is utilized in the specification and design of fluid-applied roofing, in both new and retrofit applications. It is provided to show a generally recommended procedure for dealing with the condition shown. It will not and cannot provide a specific solution for every condition likely to be encountered in field application. Where field conditions differ, the use of applicable portions of the detail shown or its adaptation by an experienced and conscientious applicator should result in a quality project.

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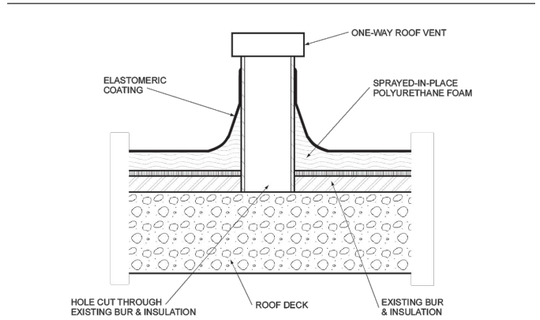
Project: Roof Drain

Drawn by	Scale	Date	Drawing/Sheet No.
K. Kirby	NTS	04/01/2020	ROOF_rpf-drain-04012020

4–ROOF DRAIN DETAIL NTS



Note: This detail is utilized in the specification and design of fluid-applied roofing, in both new and retrofit applications. It is provided to show a generally recommended procedure for dealing with the condition shown. It will not and cannot provide a specific solution for every condition likely to be encountered in field application. Where field conditions differ, the use of applicable portions of the detail shown or its adaptation by an experienced and conscientious applicator should result in a quality project.

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Project: Roof Vent

Drawn by	Scale	Date	Drawing/Sheet No.
K. Kirby	NTS	04/01/2020	ROOF_vent-04012020

5–ROOF VENT DETAIL NTS

1. SEE G–02, R–01 FOR FURTHER NOTES.
2. THE EXISTING ROOF INSULATION IS SHOWN AS 4" THICK. BUT LIKELY VARIES. ASSUME SCREW LENGTH UP TO 6" MAY BE NEEDED.

NOTES

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No.	REVISIONS	DATE	DRWN	CHKD	DESIGN	APPD

APPROVAL

DRAWN	TF	9/11/24
DESIGN		
CHECKED		
APPROVED		

TRI CITIES AIRPORT
ARFF BUILDING
PASCO, WA

ROOFING & WALL DETAILS

DWG. No.
R–02

SCALE: NOTED
CADFILE: 24–08R–02
JOB No. 24–08
REV. 0