



CITY OF PEACHTREE CORNERS REQUEST FOR PROPOSAL RFP 2019-010

Issue Date: Friday March 8, 2019	RFP Number: RFP 2019-010	RFP Title: City Hall Roof Replacement
RFP Due Date and Time: Friday, April 5, 2019 11 AM, EST		City Contact: Brandon Branham bbranham@peachtreecornersga.gov

INSTRUCTIONS TO RESPONDENTS

Return Proposal to: City of Peachtree Corners City Hall 310 Technology Parkway Peachtree Corners, GA 30092	Mark Face of Envelope/Package: Respondent's Name and Address RFP 2019-010 City Hall Roof RFP Due Date & Time: Friday, April 5 11 AM
	Special Instructions:

RESPONDENTS MUST COMPLETE THE FOLLOWING

Respondent Name/Address:	Authorized Respondent Signatory: (Please print name and sign in ink)
Respondent Phone Number(s):	Respondent FAX Number:
Respondent Federal I.D. Number:	Respondent E-mail Address and website address (if available):
Primary Contact Person Name:	Primary Contact Person E-mail Address:

RESPONDENTS MUST RETURN THIS COVER SHEET WITH RFP RESPONSE

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1. SCHEDULE OF EVENTS

<u>EVENT</u>	<u>DATE</u>
RFP Issue Date.....	3/8/2019
Site Walk (schedule with Brandon Branham).....	3/14, 3/15, & 3/18/2019
Deadline for Receipt of E-Mail Questions from Respondents.....	3/25/2019
Deadline for Posting of Written Answers to City Website	3/27/2019
RFP Response Due Date.....	4/05/2019
Completion of Response Review.....	4/05/2019
Interviews (if required)	4/8/2019
Recommendation to Mayor and Council	4/9/2019
Anticipated Start Date.....	4/10/2019
Anticipated Completion Date.....	5/8/2019

2. PURPOSE OF RFP

Just 13 miles from Atlanta, the City of Peachtree Corners, Georgia is the newest and largest city in Gwinnett County, with 40,000 residents and a leadership committed to igniting economic and social activity, and improving livability in the city. Chartered in 2012, and consisting of 17 square miles, the City of Peachtree Corners is known for its 500-acre Technology Park and upscale neighborhoods. Replacement of the City Hall roof will assist with the continued service delivery of the City.

Responding firms should have experience in all areas of expertise required by the scope of services.

Responding firms should submit three examples of projects reflective of the subject of this RFP with at least one project of similar scale.

3. SCOPE OF PROJECT

Consultants are anticipated to provide the services for the replacement of the roof of City Hall.

The project involves:

- 1) Refer to Technical Document

4. SPECIFIC TASKS

All tasks are outlined in the Technical Document

5. QUALIFICATIONS AND EVALUATION FACTORS

The successful consultant should have proven construction experience as it pertains to roof replacement along with a record of excellence. In addition, the consultant should provide the following:

- (1) History of firm and resources
- (2) Key personnel/qualifications, identification of project manager, and percentage of time key staff will be assigned to the project
- (3) Project approach
- (4) Examples of comparable projects
- (5) Current workload
- (6) References
- (7) Fee proposal

The City will evaluate proposals based on the qualifications and capability of the consultant firm, as follows:

Firm Qualifications and Organization	30%
Project Approach	30%
Previous Comparable Experience	20%
<u>Project Fee</u>	<u>20%</u>
Total	100%

6. KEY REQUIREMENTS

A. Proposal Deadline.

All proposals must be received by 11:00 AM on April 5, 2019 to be considered. There will be no exceptions made. five (5) identical hard copies must be submitted to the City of Peachtree Corners and delivered to: City of Peachtree Corners, City Hall, 310 Technology Parkway, Peachtree Corners, Georgia, 30092.

B. Public Information Notification.

The City considers all materials, information, communications and correspondence in any form from the respondents to this RFP to be non-propriety and non-confidential and, therefore, subject to public disclosure under Georgia Law once the contract is awarded.

C. Format of Proposal should be organized in the manner stipulated below:

- 1) Report Cover (optional)
- 2) RFP mandatory Cover Sheet (completed)
- 3) Table of Contents
- 4) Tabbed Dividers -Each proposal should have tabbed dividers separating each of the following six sections and matching the following headings:

Section #1: *Team Information.* Provide firm name, address, telephone number, e-mail addresses, and firm web addresses. Include this information for any subcontractor, as well. Also note the years the firms have been in business, names of principals in firms, organizational description and the primary contact person for this project. Include project organizational chart and resume of key personnel. (5 pages max.)

Section #2: *Letter of Interest* (1-page max.)

Section #3: *Proposed Approach* – Describe the objectives of the project and how they will be achieved by the consultant including descriptions that detail the components of the project. (5-pages max.)

Section #4: *Proposed Project Timeline*- Include a timeline from anticipated start date of 4/9/19 to 5/08/19 project completion. Identify current workload and time commitments to other projects.

Section #5: Comparable Experience – Include documents showing previous, comparable projects and note team member’s participation in each project. (8 pages max.)

Section #6: Fee Proposal – Complete and submit Section 000300-Bid Form

7. QUESTIONS AND RESPONSES

- A. Questions, requests for clarification or interpretation of any section within this RFP must be addressed by e-mail to bbranham@peachtreecornersga.gov on or before **3/25/19**. Each inquiry must provide clear reference to the section, page, and item in question. Questions received after the deadline may not be considered.
- B. The City will provide by **3/27/19** a response to all questions received by the above noted deadline. The City's response will be by posting on the City’s website (<http://peachtreecornersga.gov>). Answers to e-mail questions will be posted as soon after they are received as possible with every effort made to post responses no later than the day after questions are received.
- C. Any addenda to this RFP will also be posted on the City’s website.
- D. Although there are no pre-proposal meetings scheduled, the City reserves the right to call a pre-proposal meeting if deemed necessary. Notification of any such meeting will be posted on Peachtree Corners’ website at least 48 hours in advance of the meeting. In addition, individuals who want to be notified may send an e-mail to bbranham@peachtreecornersga.gov requesting e-mail notification.
- E. Respondents may *not* contact City officials concerning any aspect of this RFP. All inquiries regarding this RFP must be directed to Brandon Branham at bbranham@peachtreecornersga.gov.

8. SELECTION PROCESS

- City staff and its consultant will evaluate the proposals received, following the application deadline and expects to shortlist firms that demonstrate their capability and experience to undertake and complete the project.
- City staff may arrange to interview firms before making a final recommendation to the City Council.
- Following its evaluation, city staff will make a recommendation which will include the first and second ranked firms to the City Council.
- The City Council is expected to award the contract at its regular meeting on April 9, 2019.

9. ADDITIONAL INFORMATION / SUPPLEMENTARY PROVISIONS

- Responding to this RFP constitutes understanding and agreement to methods of evaluation and selection.
- The City reserves the right to reject any and all proposals or to contract with the respondent it

deems would be best able to satisfy the requirements and qualifications set forth previously.
The criteria used in the selection process will be at the sole discretion of the City.

- This Project shall be coordinated through the Peachtree Corners Community Development Department.
- The terms contained in this RFP shall be incorporated into the final contract.



**TECHNICAL DOCUMENTS
FOR
ROOF REPLACEMENT
AT THE
CITY HALL BUILDING
PEACHTREE CORNERS GEORGIA**

ADDRESS: 310 Technology Parkway
Atlanta, Georgia.

NOVA PROJECT NUMBER: 10102-0519012

OWNER: City of Peachtree Corners

OWNER'S REPRESENTATIVE: Comprehensive Program Services
Megan Kocikowski

CONSULTANT: MARK GIRTON
NOVA ENGINEERING AND ENVIRONMENT
3900 KENNESAW 75 PARKWAY, SUITE 100
KENNESAW, GEORGIA 30144
MGIRTON@USANOVA.COM

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DOCUMENT 00003 - TABLE OF CONTENTS

Document 00001 - Title Page 1 page

SPECIFICATIONS

Division 1 - General Requirements

Section

01010 - Summary of Work	5 pages
01075 - Definitions	3 pages
01120 - Alterations Project Procedures	4 pages
01200 - Project Meetings	3 pages
01220 - Fire Prevention Precautions for Hot Work	2 pages
01300 - Submittals	4 pages
01400 - Quality Control	2 pages
01500 - Temporary Facilities and Controls	5 pages
- Welding or Cutting Permit	1 pages
01600 - Material and Equipment	2 pages
- Substitution Request Form	2 pages
01700 - Contract Closeout	2 pages
01710 - Cleaning	2 pages

Division 2 - Sitework

02072 - Demolition and Renovation Work 7 pages

Division 3 - Concrete

NOT USED

Division 4 - Masonry

NOT USED

Division 5 - Metals

NOT USED

Division 6 - Wood and Plastics

NOT USED

Division 7 - Thermal and Moisture Protection

07220 - Roof and Deck Insulation	5 pages
07533 - Thermoplastic Membrane Roofing- Fully Adhered	9 pages
07620 - Sheet Metal Flashing and Trim	2 pages

Division 8 - Doors and Windows

Not used

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Division 9 - Finishes

Not used

Division 15 - Mechanical

Not used

Division 16 - Electrical

Not used

INDEX OF DRAWINGS

0.0 COVER PAGE

1.1 ROOF PLAN

2.0 DETAILS

2.1 DETAILS

END OF TABLE OF CONTENTS

END OF SECTION

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SECTION 01075 - DEFINITIONS

PART ONE - GENERAL

1.01 SECTION INCLUDES:

- A. Definitions for construction terminology not otherwise defined in Contract Documents.
- B. Definitions for special terminology used for this Project.

1.02 ABANDONED - (NO LONGER NECESSARY OR IN USE):

- A. "Remove" items so noted, or later defined, as an all-inclusive responsibility within this contract. Pay for all work in connection with removal of these items, including municipal, disposal, utility, and service charges. Dispose of all "Excess".

1.03 ADDITION - (TO ADD TO AND BE INCORPORATED) ALSO TO "ADD":

- A. Work supplementary to that indicated to accomplish that which is required by the Contract Documents. To bring to a new condition; to extend, fasten, patch, and match to that which is existing.

1.04 DESIGNER/CONSULTANT

- A. Reference to mean NOVA Engineering and Environmental.

1.05 DEFECTIVE - (NOT ACCEPTABLE):

- A. Refer to Conditions of the Contract, that which does not conform to the Contract Documents. As it applies to "Salvage", in addition to the above, shall mean "unsuitable".

1.05 EXCESS - (NOT REQUIRED):

- A. More quantity than required to conform to the Contract Documents and not desired by the Owner. Debris shall be considered "Excess" and not be used as fill or be buried on this site. Remove "Excess" from the site and legally dispose of. "Excess" "Suitable" "Salvage" shall be property of Contractor unless otherwise specified.

1.06 EXISTING - (PRESENTLY THERE):

- A. Also may be noted "original". Present conditions and assumed locations, if known, as of the Date of Contract Documents.

1.07 NEW - (TO BE INCORPORATED) NOT EXISTING:

- A. Refer to various specification sections for requirements of Work to be incorporated.

1.08 REINSTALL - (TO INCORPORATE AS WAS ONCE DONE):

- A. "Remove" and "salvage" existing from its location, if it does exist. "Restore", "Renovate", or "Remodel" and "Reinstall: in its existing location. Reincorporate and "re-work" the original work to the extent required by the Contract Documents.

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- B. If the "Existing" item, so indicated, is missing, defective, or unsuitable as "Existing", then "Reconstruct" only that portion with "New" products and incorporate as was original. Syn. Replace.

1.09 RELOCATE - ("REINSTALL" IN A NEW LOCATION):

- A. "Reinstall" in a new location as indicated on Drawings.

1.10 REMAIN - (TO LEAVE WHERE IT IS EXISTING):

- A. The final location of an item in its "existing" position, however, this shall not mandate the fact that this item will not move during this contract, specifically in order to "Preserve" or "Rework".

1.11 REMOVE - (TO TAKE FROM EXISTING LOCATION):

- A. Work required to extract a portion or whole by one or a combination of methods and moved to a new location.
 1. "Abandoned": Remove items by dismantling, excavation, extraction, or demolition, if acceptable.
 2. Salvage: Remove by disassembly. "Relocate".
 3. Products: Where a specific portion of component of an assembly or whole is to be removed, take all precautions to prevent damage, defacement, and displacement to the "existing" to remain (i.e., mortar, bricks, and finishes).

1.12 RENOVATE - (TO REPAIR AND MAKE NEW):

- A. The process required to bring an item to a present new standard of condition required by the Contract Documents (e.g., to "rework" "existing" "suitable" "salvage" "products" and perform "new" work and "additions" required). (Syn. rehabilitate, recondition, repair.)

1.13 REPLACE - (TO TAKE THE PLACE OF):

- A. "Remove" "existing" unserviceable product and provide "new" product in place of unserviceable product.

1.14 REUSE - (TO USE AS ONCE WAS):

- A. The use of "suitable" "salvage" for incorporation or re-incorporation in the Work. "Remove", "Relocate", and "Reinstall" as required for "Reuse".

1.15 SALVAGE - (TO BECOME ABANDONED):

- A. "Remove", protect, "preserve" incomplete material condition as found "existing". Also to "Save". Determine suitability for incorporation in this Contract. Store at a location mutually agreed upon. Dispose of all "Excess".

1.16 UNKNOWN - (NOT SHOWN ON DRAWINGS):

- A. Products beneath surfaces indicated by drawings and encountered during the Work. Immediately support, shore, and protect. Immediately notify the Consultant and authority having jurisdiction. Allow free access for inspection. "Preserve" in proper

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condition until the Consultant determines definition and interpretation of Work. Take such measures as required for protection, reinforcement, or adjustment.

PART TWO - PRODUCTS

Not Used.

PART THREE - EXECUTION

Not Used.

END OF SECTION

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SECTION 01120 - ALTERATIONS PROJECT PROCEDURES

PART ONE - GENERAL

1.01 DESCRIPTION:

- A. Summary: The procedures and administrative requirements of this Section apply to all of the following Sections of the Specification which are involved in alterations to the existing building.
- B. Extent Notes: Cut into or partially remove portions of the existing building as necessary to make way for new construction. Include such work as:
 - 1. Cutting, moving, or removal of items shown to be cut, moved, or removed.
 - 2. Cutting, moving, or removal of items not shown to be cut, moved, or removed, but which must be cut, moved, or removed to allow new work to proceed. Work or items which are to remain in the finished work shall be patched or reinstalled after their cutting, moving, or removal, and their joints and finishes made to match adjacent or similar work.
 - 3. Removal of existing surface finishes as needed to install new work and finishes.
 - 4. Removal of abandoned items and removal of items serving no useful purpose, such as abandoned piping.
 - 5. Repair or removal of dangerous or unsanitary conditions resulting from alterations work.

1.02 SCHEDULING AND ACCESS:

- A. Work Sequence: Contractor shall submit detailed project plan with work sequence and phasing schedule.
- B. Security:
 - 1. Be solely responsible for job site security.
 - 2. Protect completed work and stored items from vandalism and theft.
 - 3. Contact Owner for access to all security areas.
- C. Maintenance of Access and Operations:
 - 1. During period of construction, Owner will continue to perform normal activities in existing building. Maintain proper and safe access to Owner-occupied areas at all times.
 - 2. Schedule demolition and remodeling operations with Owner in such a manner as to allow Owner operations to continue with minimum interruption.
 - 3. During period of construction, do not obstruct existing exit ways of Owner-occupied areas in any manner.
- D. Maintenance of Existing Services:
 - 1. Maintain environmental control in existing building, especially temperature, humidity, and dust control.
 - 2. Provide temporary lines and connections as required to maintain existing mechanical and electrical services in building.
 - 3. Equipment handling shall be limited to Owner-approved hours and may be limited to night time hours.

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4. Notify Owner a minimum of forty-eight hours prior to each required interruption of mechanical or electrical service in building. Such interruptions shall be only at such times and for lengths of time as approved by Owner. In no event shall interruption occur without prior approval of Owner.
 5. Schedule material installation that may create smoke or fumes around air intakes or openings in the building. Coordinate all work of this type with the facility mechanical contact appointed at the project start. Failure to comply may result in project delays due to work stoppage and may require working after hours at no added expense to the owner.
- E. Temporary Barricades:
1. Provide and erect barricades as necessary to protect ground personnel, employees, passersby, etc., from hazards resulting from the Work during construction operation.
 2. Prevent public access to construction activities, equipment, and storage areas. Where access cannot be blocked provide suitable overhead protection. Submit a plan of reflecting protection of site with initial submittal package.
- F. Building Access:
1. Contractor will limit access to building interior except:
 - a. To install temporary enclosures, protections, and equipment.
 - b. During A/C modification and roof vent handling operations.
 - c. For project or medical emergency.
 2. Access to roof construction areas shall be by way of contractor-provided exterior scaffolding or other conveyance for construction personnel, material loading, and debris removal. Contractor shall secure such structures 24 hours 7 days a week for the duration of the project.

1.03 ALTERATIONS, CUTTING AND PROTECTION:

- A. Extent:
1. Perform cutting and removal of deck work so as not to cut or remove more than is necessary and so as not to damage adjacent work.
 2. Conduct work in such a manner as to minimize noise and to minimize accumulation and spread of dirt and dust.
- B. Perform cutting for ductwork and other rectangular openings with carborundum saw with approved dust arrestor.
- C. Securement of Openings: Protect all openings made in existing roofs, etc., with barricades to prevent accidents to Owner's and Contractor's personnel. If required by Owner, provide a workman at ground level inside the building at all times during the tear-off operations and when the roof deck or roofing is being installed. It will be the responsibility of this individual to alert personnel in the area of the work being performed overhead, to watch for falling debris, and to broom clean the area each day of any dirt that may result from the roof replacement operations.
- D. Responsibility and Assignment of Trades:
1. Contractor shall assign the work of moving, removal, cutting, patching, and repair to trades under his supervision so as to cause the least damage to each type of work encountered, and so as to return the building as much as

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possible to the appearance of new work.

2. Patching of finish materials shall be assigned to mechanics skilled in the work of the finish trade involved.
- E. Protection:
1. Protect remaining finishes, equipment, and adjacent work from damage caused by cutting, moving, removal, and patching operations. Protect surfaces which will remain a part of the finished work.
 2. Cover existing walls and floors where necessary to prevent damage from construction operations.
 3. During demolition, cutting, and construction, provide positive dust control by wetting dusty debris and by completely sealing openings to Owner-occupied areas with temporary seals so as to prevent spread of dust and dirt to interior areas.
 4. After materials are installed, properly protect Work until final acceptance.
 5. Repair any damage resulting from construction operations without cost to Owner.
 6. Provide continuous security at openings cut into existing exterior walls and roofs during non-working hours. Prevent unauthorized entry into the existing facility through areas demolished or accessed as part of the Work.
- F. Special Protection:
1. Comply with welding and cutting precautions specified in Section 01500 - Temporary Facilities and Controls. In addition, provide Type I fire retardant enclosure around area of welding.
 2. Provide temporary weather protection over open roof penetrations until final flashing is completed.
 3. During equipment handling, provide a roof applicator at project with sufficient materials for temporary patching and sealing.
 4. Provide roof applicator at jobsite continuously during rainstorms which may occur while job is in progress to make temporary or emergency repairs.
- G. Debris:
1. Remove debris from the site daily. Removed material becomes property of the Contractor. Load removed material directly on trucks for removal from site. Dispose of removed material legally. Do not allow debris to enter sewers.
 2. Do not allow material accumulations to endanger structure.
 3. Cover and secure material accumulations as necessary to prevent the material from spreading over the rooftop or becoming airborne.
 4. Submit material storage and disposal plan for review prior to job start.

1.04 PATCHING, EXTENDING, AND MATCHING:

- A. Patch and extend existing work using skilled mechanics who are capable of matching the existing quality of workmanship. The quality of patched or extended work shall not be less than that which exists.
- B. In areas where any portion of an existing finished surface is damaged, lifted, stained, or otherwise made or found to be imperfect, patch or replace the imperfect portion of

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the surface with matching material.

- C. Provide adequate support or substrate for patching of finishes.
- D. Quality:
 - 1. In the Sections of the product and execution of Specifications which follow these General Requirements, no concerted attempt has been made to describe each of the various existing products that must be used to patch, match, extend, or replace existing work. Obtain all such products in time to complete the Work on schedule. Such products shall be provided in quality which is in no way inferior to the existing products.
 - 2. The quality of the products that exist in the building, as apparent during pre-bid site visits, shall serve as the Specification requirement for strength, appearance, and other characteristics.
- E. Transitions:
 - 1. Where new work abuts or finishes flush with existing work, make the transition as smooth and workmanlike as possible. Patched work shall match existing adjacent work in texture and appearance so as to make the patch or transition invisible to the eye at a distance of no closer than 3 feet (1m).
 - 2. Where masonry or other finished surface is cut in such a way that a smooth transition with new work is not possible, terminate the existing surface in a neat fashion along a straight line at a natural line of division and provide trim appropriate to the finished surface.
- F. Restore existing work that is damaged during construction to a condition equal to its condition at the time of the start of the Work, and to satisfaction of Owner.

1.05 REPAIR:

- A. Replace work damaged in the course of alterations, except at areas approved by Owner for repair.
- B. Where full removal of extensive amounts of almost-suitable work would be needed to replace damaged portions, then filling, straightening, and similar repair techniques, followed by finishing, will be permitted.
- C. If the repaired work is not brought up to the standard for new work, Owner will direct that it be cut out and replaced with new work.
- D. Water leaks during construction may require clean-up by an owner approved licensed disaster response company to address damage/cleanup caused by leak.

PART TWO - PRODUCTS

Not Used.

PART THREE - EXECUTION

Not Used.

END OF SECTION

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SECTION 01200 - PROJECT MEETINGS

PART ONE - GENERAL

1.01 PRE-CONSTRUCTION CONFERENCE:

- A. A Pre-construction Conference will be held at the site at a time to be designated by Owner.
- B. Representatives of Contractor, including project superintendent, foreman (English speaking), and all subcontractors, shall meet with Owner or his appointed representative.

1.02 AGENDA:

- A. As a minimum, the following items will be on meeting agenda:
 - 1. Designation of all personnel.
 - 2. Communication.
 - 3. Construction Schedule.
 - 4. Critical work sequencing and deck repair procedures.
 - 5. Existing facilities and maintenance of operation.
 - 6. Submittals procedures.
 - 7. Project record documents procedures.
 - 8. Processing Field and Change Orders.

1.03 AGENDA FOR PRE-CONSTRUCTION MEETING

- A. Attendance:
 - 1. Owner (Representative, if desired by Owner).
 - 2. Consultant and On-site Inspector.
 - 3. Contractor (Manager, Superintendent, and Foreman).
 - 4. Subcontractors, include access erectors and deck placing company.
 - 5. Material Suppliers (if required).
- B. Sign-in list for all attending including names, title, phone number, and company.
- C. Contract Review:
 - 1. Execution.
 - 2. Insurance certificates.
 - 3. Bid review.
 - 4. Schedule of values and progress payment processing.
 - 5. Notice to proceed and start date.
 - 6. Bond, lien, and permit requirements.
 - 7. Project communications and problem resolution.
 - 8. Change order and additional work order processing.
- D. Job Site Conditions and Requirements:
 - 1. Services (temporary):
 - a) Water.
 - b) Power (110, 220).
 - c) Sanitary facilities.
 - d) Parking areas.

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- e) Telephone access.
- f) Review each of the above as to who shall furnish each, restrictions, and scheduling.
- 2. Site Access and Restrictions:
 - a) Set-up areas, material storage, and handling.
 - b) Protection of buildings, grounds, and building interior.
 - c) Protection of walkways and roof access structure securement.
- 3. Working Area and Preparation:
 - a) Review work flow and schedule.
 - b) Preparation work by other trades.
 - c) Protection of existing roof and deck.
- E. Technical Sections:
 - 1. Review submittals.
 - 2. Function of on-site inspector and other on site personnel.
 - 3. Material storage methods.
 - 4. Roof drainage conditions.
 - 5. Coordination of work with other trades; and Owner.
 - 6. Testing.
 - 7. System review.
 - 8. Manufacturer inspections:
 - a) Inspection scheduled.
 - b) Final inspection and issuance of warranty.
- F. Safety and Security - Review Contractor responsibilities, and establish Owner monitoring procedures.
- G. Summary and Questions
- H. Exchange phone numbers, business cards, and emergency and daily contacts.
- I. Issue record of meeting minutes to all attendees.

1.04 AGENDA FOR PROJECT MEETING

- A. Attendance:
 - 1. Owner (Representative, if desired by Owner).
 - 2. Consultant.
 - 3. Contractor (Manager, Superintendent, and Foreman).
 - 4. Subcontractors.
- B. Sign-in list for all attending, including names, titles, phone numbers, and company name.
- C. Project Review:
 - 1. Problem resolution.
 - 2. Project communication.
 - 3. Change order and/or additional work.
 - 4. Review projected work flow and schedule against work completed to date.
 - 5. Progress payment processing.
- D. Job Site Conditions:
 - 1. Review set-up area, material storage, and handling.
 - 2. Review work to date against schedule.

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3. Review work by other trades.
4. Review quality of work to-date with Contractor and Manufacturer.

PART TWO - PRODUCTS

Not Used.

PART THREE - EXECUTION

Not Used.

END OF SECTION

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SECTION 01010 - SUMMARY OF WORK

PART ONE - GENERAL

1.01 SECTION INCLUDES:

A. Roof replacement and roof related renovations of the existing facility known as the City Hall building located at 310 Technology Parkway in Peachtree Corners, Georgia. The project requirements include tear off and replacement of the appx 30,500 total square foot roof, work includes, but is not limited to, the following:

B. Base Bid

1. Demolition of the existing roof membrane, flashing, insulations, deteriorated underlayments, and sheet metal trim where specified to the structural metal deck.
2. Remove and replace existing deteriorated or broken roof drain collars, clamping rings and strainers. Replacement components to be manufactured of cast metals.
3. Installation of a layer of 2-inch thick polyisocyanurate insulation that mechanically fastened to the deck. Install 4-foot sumps on all sides of roof drains. Attachment of the system is to meet ASCE 7 requirements for buildings of this height, exposure and geographic location. Increase fastener density as required at corners and perimeters.
4. Installation of a layer of 2-inch thick polyisocyanurate insulation that adhered to the base layer of insulation. Install 4-foot sumps on all sides of roof drains. Attachment of the system is to meet ASCE 7 requirements for buildings of this height, exposure and geographic location. Decrease adhesive bead spacing as required at corners and perimeters.
5. Install positive slope crickets and saddles as required to facilitate drainage, set in approved adhesives.
6. Install a new cover board in an approved adhesive. The adhesive is to be as approved by roof system manufacturer and meet wind up-lift requirements.
7. Install a new 80 mil TPO roof membrane that is fully adhered to the insulation. A 30-year roof manufacture's guarantee that includes puncture warranty and a 3-year contractors' warranty is required.
8. Install manufacturer approved flashing materials as shown in bid documents.

C. Bid Alternate 1

1. Demolition of the existing roof membrane, flashing, insulations, deteriorated underlayments, and sheet metal trim to the structural metal deck.
2. Remove and replace existing deteriorated or broken roof drain collars, clamping rings and strainers. Replacement components to be manufactured of cast metals.
3. Installation two layers of 2-inch thick polyisocyanurate insulation that is set in adhesives. Install 4-foot sumps on all sides of roof drains.
4. Attachment of the system is to meet ASCE 7 requirements for buildings of this height, exposure and geographic location. Decrease adhesive bead spacing as required at corners and perimeters.
5. Install positive slope crickets and saddles as required to facilitate drainage, set in approved adhesives.

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6. Install a new 60 mil TPO roof membrane that is fully adhered to the insulation. A 20-year roof manufacture's guarantee and a 3-year contractors' warranty is required.
 7. Install manufacturer approved flashing materials as shown in bid documents.
- D. Bid Alternate 2
1. Demolition of the existing roof membrane, flashing, insulations, deteriorated underlayments, sheet metal trim where specified to the structural metal deck.
 2. Remove and replace existing deteriorated or broken roof drain collars, clamping rings and strainers. Replacement components to be manufactured of cast metals.
 3. Installation two layers of 2-inch thick polyisocyanurate insulation that is mechanically attached. Install 4-foot sumps on all sides of roof drains.
 4. Attachment of the system is to meet ASCE 7 requirements for buildings of this height, exposure and geographic location. Utilize half sheets at perimeters and corners as required by membrane manufacturer to meet ASCE 7 wind requirements.
 5. Install positive slope crickets and saddles as required to facilitate drainage.
 6. Install a new 60 mil PVC roof membrane that is mechanically attached to the steel deck. A 20-year roof manufacture's guarantee and a 3-year contractors' warranty is required.
 7. Install manufacturer approved flashing materials as shown in bid documents.

1.02 WEATHER PROTECTION:

- A. Upon beginning work on the existing roof, Contractor shall patch and protect existing roofing as required to prevent leaks.
- B. Contractor shall have at the work site, a sufficient amount of moisture proof coverings to provide quick temporary protection to exposed decking, unfinished roof, or open roof in the event of a rapid change in the weather.

1.03 LEAK RESPONSE:

- A. In the event of a leak the contractor shall make repairs and stop the leak within 4 hours. The contractor will provide a 24-hour leak report contact and a backup contact prior to mobilizing the project.

1.04 CONTRACTOR'S USE OF PREMISES:

- A. Confine operations at site to areas permitted by law, ordinances, permits and to limits of Contract as shown on Contract Documents.
- B. All work can be performed from Monday through Saturday from the hours of 7:30 AM to 7:00 PM.
- C. The Owner has allowed for the set-up area to be located in the parking spaces in the parking area next to the building.
- D. Do not unreasonably encumber site with materials or equipment.
- E. Do not load structure with weight that will endanger structure.
- F. Assume full responsibility for protection and safekeeping of products stored on premises.
- G. Move stored products which interfere with operations of Owner.
- H. Obtain and pay for use of additional storage or work areas needed for operations.

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- I. Contractor's employees will refrain from contact with students and facility personnel. Harassment, lewd behavior, inappropriate comments or conversation, or gestures, and use of vulgar language is grounds for immediate and permanent removal from the job-site. NO EXCEPTIONS.
- J. Any work performed or staged over pedestrian ways are to have overhead protection or other diversion of the traffic, the owner will accept or reject the plan.
- K. Coordinate use of premises under direction of Owner's Representative.
- L. Use of Site for Work and Storage:
 - 1. Restrict Work to areas indicated on Drawings.
 - 2. Store materials off site except for minor amounts of material which may be stored at designated staging area as approved by Owner.
 - 3. Access site in areas approved by Owner.
 - 4. Restrict parking to specific areas as approved by Owner.
 - 5. Restrict debris removal to Owner-approved area of building site.
 - 6. Restrict location of construction cranes/lifts to areas as approved by Owner.
 - 7. Do not allow construction traffic on existing roof membrane except as absolutely necessary to perform new work. Provide 3/4-inch plywood protection over existing roof membrane at traffic and work areas.
- M. Maintenance of Access and Operations:
 - 1. Do not perform operations that would interrupt or delay Owner's daily operations.
 - 2. Maintain access to existing building, facilities, parking, streets, and walkways; especially fire lanes.
 - 3. Schedule demolition and renovation operations with Owner in such a manner as to allow Owner operations to continue with minimum interruption.
 - 4. Coordinate work performed around air intake areas with facility personnel. This work includes application of adhesives or flame. Smoke and fume entry into the facility is unacceptable. Blocking off air intake without express written notification of owner or other designated contact is unacceptable.
 - 5. During period of construction, do not obstruct exit ways of Owner-occupied areas in any manner.
- N. Maintenance of Existing Services:
 - 1. Do not disrupt existing utility services to existing building.
 - 2. Maintain environmental control in existing building, especially temperature, humidity, and dust control.
 - 3. Provide temporary lines and connections as required to maintain existing mechanical and electrical services in building.
 - 4. Gas piping at rooftop units may be temporarily disconnected (maximum four hours) to raise piping and replace flashing. Maintain cooling operation of unit during this period.
 - 5. Notify Owner a minimum of **seven** days prior to each required interruption of mechanical or electrical services in building. These interruptions shall be only at such times and for lengths of time as approved by Owner. In no event shall interruption occur without prior approval of Owner.

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O. Building Access:

1. Access shall be by way of temporary exterior scaffold stairway erected at an owner approved location.
2. Contractor will not have access to unapproved areas of the building interior except as pre-arranged with Owner or in the event of an emergency.
3. Material access for removal and installation can be by way of cranes or other lift mechanisms at the discretion of the contractor. The contractor will be responsible for equipment tie-in and disconnection, permits and required lane closures and this work and fees are to be included in the contractor's bid.

1.04 OWNER OCCUPANCY:

- A. Owner will occupy premises during entire period of construction for the conduct of normal, daily operations. Cooperate with Owner's Representative in all construction operations to minimize conflict and to facilitate Owner usage.
- B. Contractor shall conduct his operations so as to ensure least inconvenience to Owner's operations.
- C. Contractor shall take precautions to avoid excessive noise or vibration that would disturb Owner's operations. When directed by Owner, Contractor shall perform certain operations at designated time of day or night in order to minimize disturbance to Owner's operations.
- D. Contractor shall take all necessary precautions to assure a watertight condition in all areas of the building during construction.
- E. Refer to Section 01120 for provisions on security, special sequence of Work, maintenance of access and operations, maintenance of existing utilities and services, and building access restrictions.

1.05 OVERTIME WORK:

- A. Contractor shall include necessary overtime work on weekends and other times **as** directed by Owner to complete the Work within the Contract Time.

PART TWO - PRODUCTS

Not Used.

PART THREE - EXECUTION

Not Used.

END OF SECTION

CITY HALL- ROOF REPLACEMENT

SECTION 01220 - FIRE PREVENTION PRECAUTIONS FOR HOT WORK

PART ONE - GENERAL

1.01 SECTION INCLUDES:

- A. Observe the following safeguards when performing hot work (i.e., welding, cutting, torches, soldering, brazing, and other operations where open flames, torch cutting, or implements utilizing heat are used).

1.02 RELATED SECTIONS:

- A. 02072 – Minor Demolition and Renovation Work.
- B. 07533 – Thermoplastic Membrane Roofing

1.03 SAFETY PRECAUTIONS:

- A. Ensure that operations involving the use of open-flame or electrical ARC equipment are not conducted until a Permit for Welding, Cutting, and Burning has been completed and signed by Owner’s Representative.
- B. Prior to operations, visit job site during non-working hours and establish suitable locations for the portable equipment during actual operations and storage. Responsible supervisor for Contractor and Owner’s Representative (as designated in the preceding paragraph) shall confer and decide upon such locations with Owner’s Representative’s decision being final in event of disagreement.

1.04 NOTIFICATION:

- A. Notify Owner and Consultant of the area of operations for each day and of all subsequent changes that occur. This is necessary to assure inspection of all areas by Owner’s Representative.
- B. Notify Owner and Consultant of all locations where hot work has been performed not less than thirty minutes nor more than ninety minutes after work is completed or stopped for the day.

PART TWO - PRODUCTS

Not Used.

PART THREE - EXECUTION

3.01 INSPECTION:

- A. Before operations commence, furnish personnel to serve as a fire watch (or watches) for location(s) where hot work is to be performed. (One fire watchman may observe several locations in a relatively small contiguous area if approved **by Owner**. Each fire watchman shall have a Contractor furnished, suitable type, fully charged, operable fire extinguisher. Contractor is responsible that the fire watchman knows how to operate the fire extinguisher and how to turn on a fire alarm and/or summon the fire department.

WORK AREA TYPE EXTINGUISHER NO. REQ.

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Equipment Spaces	CO ² (15 pound)	2
Other spaces	Water (22 gallons) (E-10)	1
	CO ² (15 pound)	1

1. Keep work area free of combustible material. Do not use welding equipment around flammable liquids or vapors.
 2. Use fire resistant tarpaulins around work areas, including floor.
 3. Keep welding and cutting equipment outdoors whenever possible.
 4. If acetylene and oxygen tanks are required indoors, locate tanks as far from actual work area as possible.
 5. Remove welding and cutting equipment, wherever practical, from building daily.
 6. Keep equipment such as cables, hoses, and regulators in good condition.
 7. Post a fire watch consisting of at least one man furnished by Contractor with a fire extinguisher in hand and with no other assigned duties to stand by and observe for potential hazards while welding or cutting is being done.
 8. Equip fire watch with suitable personal eye protection and fire extinguishers.
 9. At completion of work operations, firewatch is to remain on-site a min. of 1 hour after last torch is extinguished and inspect work and adjacent area for hazards. Inspect work for hazards at one-half hour and at one hour after completion of torching operations.
 10. Notify Owner daily upon completion of welding or cutting operations.
- B. Check the opposite side of walls, floors, ceilings, or roofs before starting operations and take suitable precautions to minimize the hazard of a fire starting or communicating to the opposite side from operations.

3.02 COMBUSTIBLE MATERIAL:

- A. Transport and use all flammable and combustible materials in UL listed containers.
- B. Do not perform hot work in or near rooms or in areas where flammable liquids or explosive vapors are present or thought to be present. In the latter case, perform a combustible gas indicator (explosimeter) test to assure that the area is safe. Contractor is responsible for arranging such test and he shall bear such charges as may be incurred.
- C. Insofar as possible, remove and keep the area free from all combustibles (i.e., rubbish, paper, waste, etc.) within a twenty-five-foot radius of operations.
- D. If combustible material cannot be removed, furnish fireproof blankets and cover such materials with them, ensuring that no openings exist into which sparks can penetrate.

3.03 SAFETY MEASURES:

- A. Remove containers of gasoline, fuel, solvents, and other volatile and flammable materials from building and/or roof area except when in actual use.
- B. Prevent the extension of sparks and particles of hot metal through open windows, doors, holes, and cracks in floors, walls, ceilings, roofs, and the like.
- C. Where cylinders of gas are used in hot work, place a safe distance from work. Check

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hose and equipment for deterioration, malfunction, and leaks prior to starting operations. Provide suitable supports to prevent accidental overturning of cylinders. Shut off all cylinder control valves while the equipment is unattended. Keep acetylene cylinders in an upright position while in use and set the gas pressure regulator at 15 psi or less.

- D. **When hot work operations are completed or ended for the day, inspect each location of the day's work not sooner than one hour after the last torch has been extinguished to detect hidden or smoldering fires and to ensure that proper housekeeping is maintained. With the ungloved hand inspect torching over areas of combustible materials to check for smoldering, ie. wood blocking or sheathing, curbs, membranes, etc.**
- E. Where sprinkler protection exists, maintain without interruption while operations are being performed. If operations are done quite close to automatic sprinkler heads, use gypsum board sheets or damp cloth guards to temporarily shield the individual heads.
- F. If any of the above safeguards are not employed or are violated, the **Owner** may, by written notice, stop the work until compliance is obtained. Such stoppage does not relieve Contractor from performing his work within the contract period for the contract price.

END OF SECTION

CITY HALL- ROOF REPLACEMENT

SECTION 01300 - SUBMITTALS

PART ONE - GENERAL

1.01 SECTION INCLUDES:

- A. Submittals required by Specification Sections and as listed in attached List of Submittals. Refer to Bid Form and Instruction to Bidders for items to be included as bid submittals. Failure to follow the Owner's requirements may result in a non-responsive bid.

1.02 SUBMITTAL DISTRIBUTION:

- A. Preconstruction submittals shall be made in editable pdf electronic format so that Consultant can approve and comment. The Contractor is to include all submittals in a single transmission unless otherwise approved by the Consultant.

1.03 REQUIRED SUBMITTALS:

- A. Applicator's License Certificate: Copy of the roofing material manufacturer's agreement/contract indicating date application was approved and expiration date.
- B. Copy of the Contractor's executed insurance certificate.
- C. Material manufacturer's written approval/acceptance of specified warranty for project, **fastener pattern layout, including perimeter and corner densities**, details, insulation, and all related materials based upon existing site conditions.
- D. Copy of the Contractor's executed payment and performance bonds, if required.
- E. Shop drawings of details, if proposed different from project drawings.
- F. Manufacturer's product data sheets and Material Safety Data Sheets (MSDS) on each material proposed for usage.
- G. Sample of warranty that is to be issued upon project completion.
- H. Submit list of all mechanical, electrical, rigging, sheet metal, and all other subcontractors with evidence of subcontractor's insurance coverage in compliance with contract requirements.
- I. Detailed project schedule showing work phasing and proposed daily progress schedule.
- J. Permits, notices, and approvals of governing bodies or agencies.

1.04 SHOP DRAWINGS:

- A. Original drawings, prepared by Contractor, subcontractor, supplier, or distributor, which illustrate some portion of the Work, showing fabrication, layout, setting, or erection details, prepared by a qualified detailer.
- B. Prepare shop drawings for those details that are proposed different than the project drawings. Indicate on a roof plan, the proposed location of detail presented on shop drawing.
- C. Indicate joints, types, and locations of fasteners, shapes, sizes, expansion joints, special conditions, and installation procedures for each flashing condition. Note critical dimensions, gauge, and finish of sheet metal for each flashing condition.

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Submit shop drawings showing layout, joining, profiles, and anchorages of fabricated work, including major counter flashings, trim, and fascia units, gutters, downspouts, scuppers, and expansion joint systems.

1.05 PRODUCT DATA:

- A. Submit manufacturer's catalog sheets, brochures, diagrams, schedules, performance charts, illustrations, and other standard descriptive data for each material proposed for use in construction of roof assembly and related flashings and components.
 - 1. Clearly mark each copy to identify pertinent materials, products, or models.
 - 2. Show dimensions and clearances required.
 - 3. Show performance characteristics and capacities.
 - 4. Indicate the Specification Section and sub-paragraph that applies to each submittal.

1.06 SAMPLES:

- A. Physical examples (if requested) to illustrate materials, equipment, and workmanship; and to establish standards by which completed Work is judged, if requested.

1.07 CONTRACTOR RESPONSIBILITIES:

- A. Review shop drawings, product data, and samples prior to submission. Initial, sign, or stamp, certifying the Contractor's review of the submittal.
- B. Verify:
 - 1. Field measurements.
 - 2. Field construction criteria.
 - 3. Catalog numbers and similar data.
- C. Coordinate each submittal with requirements of Work and of Contract Documents.
- D. Contractor's responsibility for errors and omissions in submittals is not relieved by Consultant review of submittals.
- E. Contractor's responsibility for deviations in submittals from requirements of Contract Documents is not relieved by the Consultant's review of submittals, unless Consultant gives written acceptance of specific deviations.
- F. Notify Consultant, in writing at time of submission, of deviations in submittals from requirements of Contract Documents.
- G. Begin no work which requires submittals until return of submittals with Consultant's stamp and initials or signature indicating review and indication to proceed as noted. Work performed prior to submission and approval of submittals may be subject for rejection.
- H. Distribute copies after Consultant's approval as appropriate.

1.08 SUBMISSION REQUIREMENTS:

- A. Schedule submissions to the Consultant immediately after Contract award. Allow 10 days, excluding delivery time, after submission for each package for review and approval.
- B. Accompany submittals with transmittal letter containing:
 - 1. Date.

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2. Project title and number.
 3. Contractor's name and address.
 4. The number of each submittal.
 5. Notification of deviations from Contract Documents.
 6. Provide space for the Consultant's stamp.
- C. Provide a Cover and Table of Contents.

1.09 RE-SUBMISSION REQUIREMENTS:

- A. Product Data and Samples: Submit new data and samples as required for initial submittal.
- B. Shop Drawings:
1. Revise initial drawings as required and re-submit as specified for initial submittal.
 2. Indicate on drawings any changes which have been made other than those requested by Owner.

1.10 DISTRIBUTION OF SUBMITTALS AFTER REVIEW:

- A. Contractor to issue approved submittals to Owner, subcontractors as needed, and other interested parties.

1.11 LIST OF SUBMITTALS:

- A. **Section 01120 - Alterations Project Procedures**
- Ground layout and pedestrian protection plan.
- B. **Section 01300 - Submittals**
- Electronic pdf in editable format.
- C. **Section 01600 - Material and Equipment**
- Electronic pdf in editable format.
- D. **Section 01700 - Contract Closeout**
- Original and two copies
 - Warranties and Bonds.
 - Evidence of Payment and Release of Liens.
- E. **Section 02072 - Minor Demolition and Renovation Work**
- Product Data.
 - Roof plan identifying all existing lightning protection layout and component locations.
- F. **Section 07220 - Roof and Deck Insulation**
- Product Data.
 - Shop Drawings, where applicable.
 - Samples, if requested.

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- Manufacturer's Installation Instructions.
- Fastener and Adhesive patterns for specified wind requirement

G. Section 07533 – Thermoplastic Membrane Roofing- Fully Adhered

- Product Data.
- Shop Drawings, where applicable.
- Samples, if requested.
- Manufacturer's Installation Instructions

H. Section 07620 - Sheet Metal Flashing and Trim

- Product Data.
- Shop Drawings, where applicable.
- Samples, if requested.
- Color Chart.

PART TWO - PRODUCTS

Not Used.

PART THREE - EXECUTION

Not Used.

END OF SECTION

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SECTION 01400 - QUALITY CONTROL

PART ONE - GENERAL

1.01 SECTION INCLUDES:

- A. General Quality Control.
- B. Manufacturers' Field Services.

1.02 QUALITY CONTROL, GENERAL:

- A. Maintain quality control over suppliers, manufacturers, products, services, site conditions, and workmanship to produce work of specified quality.
- B. Contractor shall be approved by manufacturer to perform the work for the specified guarantee period. Contractor shall have completed previous projects utilizing same materials and provide same warranty as specified herein.
- C. Examine each phase of Work and have defective conditions corrected before starting subsequent operations that would cover, or are dependent upon, work in question.
- D. Where visual examination is not sufficient, such as in verifying slope of roof deck for proper drainage, use instruments with qualified operators to examine work.
- E. Utilize Owner's testing laboratory when services are necessary to assist Contractor in evaluating quality.
- F. Perform roof removal and new roof material installation using full-time employees of the Contractor. Installers shall have a minimum of 10-years experience installing the specified system.
- G. **Contractor shall have on-site at all phases of work English speaking foreman for communication purposes.**

1.03 WORKMANSHIP:

- A. Comply with industry standards, except when more restrictive tolerances or specified requirements indicate more rigid standards or more precise workmanship.
- B. Utilize qualified personnel who have experience with the specified materials to produce workmanship of specified quality.
- C. Secure products in place with positive anchorage devices designed and sized to withstand stresses, vibration, and racking.
- D. Provide finishes to match accepted samples.

1.04 MANUFACTURER'S FIELD SERVICES:

- A. When specified in respective Specification Section, require manufacturer to provide qualified personnel to observe field conditions, conditions of surfaces and installation, quality of workmanship, and to make appropriate recommendations.
- B. A representative of the roof system manufacturer shall visit the project in progress every two weeks and submit to the owner and consultant a written report of findings.
- C. Notify manufacturer's representative a minimum of two weeks prior to date of final inspection. Manufacturer's representative shall conduct an inspection of the completed roof before the final inspection, or shall attend the final inspection.

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PART TWO - PRODUCTS

Not Used.

PART THREE - EXECUTION

Not Used.

END OF SECTION

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SECTION 01500 - TEMPORARY FACILITIES AND CONTROLS

PART ONE - GENERAL

1.01 SANITARY FACILITIES:

- A. Provide adequate temporary chemical toilets at time Work is commenced.
- B. Maintain facilities in compliance with applicable health laws and regulations. Keep clean and unobtrusive.
- C. Upon completion of Work, remove these facilities and all traces thereof.

1.02 STORAGE OF MATERIALS:

- A. Provide suitable non-combustible, watertight coverings for storage of materials subject to damage by weather. Covering shall be of sufficient size to hold materials required on site at one time. Pallets shall be raised at least 6-inches (150mm) above ground, on heavy joists or sleepers.
- B. If temporary storage sheds are used, locate storage areas where directed, maintain in good condition, and remove storage sheds when so directed. Locate storage areas of combustible construction a minimum of 30 feet (10m) from existing building.
- C. Store materials on site unless otherwise approved by Owner.
- D. Cover and protect materials subject to damage by weather, including during transit.
- E. Do not use building as storage facility.
- F. Provide additional storage at no cost to Owner in the event additional storage area is required beyond that provided at project site.
- G. Stored materials shall be available for inspection by Owner at all times.
- H. Store flammable and volatile liquids in sealed containers located a minimum of 20 feet from existing buildings.
- I. Transport flammable or volatile liquids in, and use from, U.L. listed safety cans.
- J. Deliver material and equipment in manufacturer's original packaging with all tags and labels intact and legible. Handle and store material and equipment in such a manner as to avoid damage. Liquid products shall be delivered sealed, in original containers. Store roll goods in an upright position.
- K. Proper storage of materials is the sole responsibility of Contractor. Protect all materials susceptible to moisture including, but not limited to, all roll goods, insulation, cant strip, wood, and plywood in dry, above ground, watertight storage. Keep all labels intact and legible, clearly showing the product, manufacturer, and other pertinent information.
- L. Reject any materials becoming wet or damaged and remove from the jobsite immediately. Any insulation found to be improperly stored at the jobsite shall be considered wet at the discretion of Owner's Representative and removed from the jobsite.
- M. Maintain products liable to degrade as a result of being frozen above 40 degrees Fahrenheit (4 degrees Celsius) in heated storage.
- N. Random samples of all materials susceptible to moisture will be taken at various stages of the installation to ensure no significant variations in moisture.
- O. Distribute material, debris, and equipment over the roof deck to avoid damage to the

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structural deck. Not more than two weeks supply of material shall be stored on a roof at any given time. Place materials and equipment to be stored on the roof as nearly direct over structural members as can be determined. Secure equipment, material, and debris on the roof to prevent movement by wind or other elements. Contractor assumes full responsibility for loading on the structural deck or roofing materials during roof replacement operations. Owner's Representative reserves the right to reject any loadings deemed unacceptable.

1.03 TEMPORARY WATER:

- A. Make arrangements with Owner for water required for construction. Owner will pay for costs of water.
- B. Provide hoses for conveyance.

1.04 TEMPORARY ELECTRICAL ENERGY:

- A. Make arrangements with Owner for temporary electrical service for completion of the Work. Owner will pay energy charges for temporary power and lighting.
- B. Provide all necessary temporary wiring (in conduit if requested by Owner), extensions, and temporary lighting devices.
- C. All electrical installations are to be performed by a qualified licensed electrical contractor.

1.05 TEMPORARY LADDERS, SCAFFOLDS, HOISTS:

- A. Furnish and maintain temporary ramps, scaffolds, hoists, or chutes as required for proper execution of Work.
- B. Such apparatus, equipment, and construction shall meet requirements of applicable federal, state, and local safety and labor laws.

1.06 GUARDRAILS, BARRICADES, AND TEMPORARY COVERINGS:

- A. Provide barricades as required to protect natural resources, site improvements, existing property, adjacent property, and passers-by.
- B. Where pedestrian traffic is through or adjacent to work areas, provide necessary guardrails and barricades to protect pedestrians and to prevent pedestrian access to Work areas. Where pedestrian traffic is required, provide overhead protection.
- C. Remove guardrails and barricades at completion of construction.
- D. Provide suitable temporary watertight coverings over windows and roof openings as required to protect interior equipment from inclement weather.
- E. Provide suitable protection for stairs, elevator, and/or walls and floors in areas used for contractor roof access.
- F. Provide temporary 6-foot (2m) chain-link fence around setup areas.

1.07 PROTECTION:

- A. Maintain bench marks, monuments, and other reference points. If disturbed or destroyed, replace as directed.
- B. Protect existing adjacent streets, sidewalks, curbs, buildings, and property including trees, lawns, and plants.

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- C. Refer to Section 01120 for protection requirements of existing building.

1.08 TEMPORARY FIRE PROTECTION:

- A. During construction, Contractor and his subcontractors and sub-subcontractors and their agents and employees shall comply with fire safety practices as outlined in NFPA Pamphlet 241 and local fire protection codes, and in addition shall:
 - 1. Provide following stored pressure extinguishers during entire construction period:
 - a. One U.L. rating 4A-60B:C dry chemical fire extinguisher.
 - b. One U.L. rating 2A 2-1/2 gallon water fire extinguisher.
 - c. One U.L. rating 10B:C carbon dioxide fire extinguisher with horn and hose assembly.
 - 2. Provide fire extinguishers together in each of following areas:
 - a. Each 3000 square feet of work area or fraction thereof.
 - b. Each temporary structure including construction office and storage and tool and workshop sheds.
 - 3. Contractor's superintendent or other assistant superintendents shall be appointed as project fire warden for entire construction period.
 - 4. Train workmen in proper use of each type fire extinguisher.
 - 5. Post telephone number of fire department, specific information regarding location of on-site firefighting equipment, and procedures to be followed in event of fire.
 - 6. Maintain free access at all times to fire extinguisher equipment, street fire hydrants, and outside connections for standpipe hose systems.
 - 7. Maintain all exit facilities and access thereto, free of material and other obstructions.

1.09 EMPLOYEE CONTROL:

- A. Do not allow construction employees to enter Owner-occupied areas. Maintain construction traffic in designated access routes.

1.10 PARKING FACILITIES:

- A. Parking area for a designated number of construction personnel vehicles will be made available at the site by Owner.

1.11 CLEANING DURING CONSTRUCTION:

- A. Oversee cleaning and ensure that building and grounds are maintained free from accumulations of waste materials and rubbish.
- B. Sprinkle dusty debris with very fine water mist to control accumulation of dust. Do not use water in quantity so as to puddle.
- C. At not less than every day during progress of work, cleanup work areas and access areas and dispose of waste materials, rubbish, and debris.
- D. At Contractor's option, on-site dump containers may be used for collection of waste materials, rubbish, and debris. Locate containers a minimum of 30 feet (10m) away from building entrances at a location acceptable to Owner. If used, remove

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containers when filled.

- E. Do not allow waste materials, rubbish, and debris to accumulate and become an unsightly or dangerous condition.
- F. Remove waste materials, rubbish, and debris from site and legally dispose of at public or private dumping areas off Owner's property.
- G. Keep streets and access to site free of rubbish and debris.
- H. Lower waste materials in a controlled manner with as few handlings as possible. Do not drop or throw materials from heights.

1.12 LEAK (WATER) DAMAGE CONTROL:

- A. In the event of rain during roof replacement construction operations, immediately inspect interior of building for leaks.
- B. Coordinate with Owner for access to building.
- C. Continue to inspect building on a regular basis until rain ceases.
- D. If leaks are discovered during rains, immediately cover and protect equipment with fire retardant sheeting in the area of the leak. Immediately notify Owner of leak condition.
- E. Perform emergency repairs on roofing to stop leaks.
- F. Take all necessary precautions to protect the roof mat and deck from damage. Repair all new areas of damage caused by the negligence of Contractor, at Contractor's expense. Owner's On-site Representative shall determine damage caused by Contractor negligence.
- G. Contractor is to be aware of the potential for roof leaks on the existing roof as a result of ruptured blisters and/or roof mat damage as a result of the vacuum process, foot traffic, or material and equipment storage. As a result, Contractor is to take all necessary precautions to prevent damage to the existing roof. All damage to the existing roof that could result in roof leaks is to be repaired on a daily basis by Contractor.

1.13 PERMITS:

- A. Obtain and pay for all required local and state permits, licenses, and registrations. Work may be subject to ordinances, laws, codes, and regulations.
- B. Prior to bidding, notify Owner and Consultant of any violation, omission, or questions of compliance. Required corrections to Specifications will be made via Addenda prior to receipt of Bids.
- C. Be responsible for full compliance and bear cost of additional work not specified that may be required by authorities having jurisdiction.

1.14 REGULATORY REQUIREMENTS:

- A. **International Building Code**, current code as amended by the State of Georgia.
- B. Occupation Safety and Health Administration (OSHA) requirements, as applicable.
- C. United States Environmental Protection Agency (EPA) requirements, as applicable.
- D. Adhere to all limitations, cautions, and regulatory standards referenced by the manufacturer of each material provided.

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PART TWO - PRODUCTS

Not Used.

PART THREE - EXECUTION

Not Used.

END OF SECTION

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WELDING OR CUTTING PERMIT

Contractor: _____ Valid from _____ to _____

Work Location: _____

CONDITIONS TO BE FOLLOWED:

1. Keep work area free of all combustible material.
2. Fire-retardant tarpaulins are acceptable and shall be used.
3. Keep all welding and cutting equipment outdoors whenever possible.
4. Keep all equipment such as cables, hoses, regulators, etc., in good condition.
5. Post a fire watch furnished by Contractor, consisting of at least one man with no other assigned duties, at all times to stand by and observe area for any potential hazards while welding, cutting, or torching is being done.
6. Equip fire watch with suitable personal eye protection and fire extinguishers as follows:

WORK AREA	TYPE EXTINGUISHERS	NO. REQUIRED
Equipment spaces	CO ² (15 pound)	2
Other spaces	Water (22 gallon)	1
	CO ² (15 pound)	1

7. All extinguishers are to be furnished by Contractor.
8. Make two inspections of the work area upon completion of the welding/cutting or torching operation. The first shall be made one-half hour after completion of work followed by another inspection one-half hour later. All torch applications over combustible materials are to be checked with ungloved hand.

I hereby agree to perform the necessary welding or cutting operations as outlined in this permit.

Contractor's Signature

Date

The work area involved has been inspected by an Owner's Representative, and all requirements outlined have been explained.

APPROVED BY:

Owner's Representative

Date

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SECTION 01600 - MATERIAL AND EQUIPMENT

PART ONE - GENERAL

1.01 SECTION INCLUDES:

- A. Material and Equipment Incorporated into Work:
 - 1. Conform to applicable specifications and standards.
 - 2. Comply with size, make, type, and quality specified, or as specifically approved in writing by Owner.
 - 3. Manufactured and Fabricated Products:
 - a. Design, fabricate and assemble in accordance with recognized industry standards.
 - b. Manufacture like parts of duplicate units to standard sizes and gauges, to be interchangeable.
 - c. Two or more items of same kind shall be identical, by same manufacturer.
 - d. Products suitable for service conditions.
 - e. Adhere to equipment capacities, sizes, and dimensions shown or specified unless variations are specifically approved in writing.
- B. Do not use material or equipment for purposes other than that for which it is designed or is specified.

1.02 REUSE OF EXISTING MATERIAL:

- A. Except as specifically indicated or specified, materials and equipment removed from existing structure shall not be used in completed Work.
- B. For material and equipment specifically indicated or specified to be reused in Work:
 - 1. Use special care in removal, handling, storage, and reinstallation to assure proper function in completed Work.
 - 2. Arrange for transportation, storage, and handling of products which require off-site storage, restoration, or renovation. Pay costs for such work.

1.03 MANUFACTURER'S INSTRUCTIONS:

- A. When Contract Documents require that installation of work shall comply with manufacturer's printed instructions, obtain and distribute copies of such instructions to parties involved in installation, including two copies to Consultant.
 - 1. Maintain one set of complete instructions at jobsite during installation and until completion.
 - 2. Submit two copies to Consultant with appropriate Product Data submittal.
 - 3. Consultant will forward one copy to Owner.
- B. Handle, install, connect, clean, condition, and adjust products in strict accordance with such instructions and in conformity with specified requirements.
 - 1. Should job conditions or specified requirements conflict with manufacturer's instructions, consult with Consultant for further instructions.
 - 2. Do not proceed with work without clear instructions.
- C. Perform Work in accordance with manufacturer's instructions. Do not omit

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preparatory steps or installation procedures unless specifically modified or exempted by Contract Documents.

1.04 TRANSPORTATION AND HANDLING:

- A. Arrange deliveries of products in accordance with construction schedules. Coordinate to avoid conflict with work and conditions at site.
 - 1. Deliver products in undamaged condition, in manufacturer's original containers or packaging, with identifying labels intact and legible.
 - 2. Immediately on delivery, inspect shipments to assure compliance with requirements of Contract Documents and approved submittals, and that products are properly protected and undamaged.
- B. Provide equipment and personnel to handle products by methods to prevent soiling or damage to products or packaging.

1.05 SUBSTITUTIONS AND PRODUCT OPTIONS:

- A. Contractor's Options:
 - 1. For products specified only by reference standard, select any product meeting that standard, by any manufacturer.
 - 2. For products specified by naming several products or manufacturers, select any product and manufacturer named.
- B. Products specified by naming only one product and manufacturer are to establish a quality standard. For products other than the named product, submit request for substitution as specified below.
- C. Substitutions:
 - 1. During Bidding, Consultant will consider written requests from Bidders and manufacturers for substitutions of products in place of those specified. Such requests must be received at least **six days** prior to Bid Date. Requests received after that time will not be considered. Approval of proposed substitutions will be set forth in an Addendum or letter of approval. Requests for substitutions shall include data listed below.
 - 2. Submit electronic copies of request for each substitution to the Consultant, supported with complete data, drawings, and appropriate samples substantiating compliance of proposed substitution with Contract Documents, including:
 - a. Product description, performance and test data, and applicable reference standards.
 - b. Name and address of similar projects on which product was used and date of installation.
 - c. Itemized comparison of qualities of proposed substitution with that specified.
 - d. Changes required in other elements of Work because of substitution.
 - e. Affect on construction schedule.
 - f. Availability of maintenance service and source of replacement materials.
- D. Contractor's Representation: Request for substitution constitutes a representation

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that Contractor:

1. Has investigated proposed product and determined that it is equal to or superior in all respects to that specified.
 2. Will provide same warranties for substitution as for product specified.
 3. Will coordinate installation of accepted substitution into Work and make such other changes as may be required for Work to be complete in all respects.
 4. Waives all claims for additional costs, under his responsibility, related to substitution which subsequently becomes apparent.
- E. Substitutions will be not be considered if:
1. They are indicated or implied on Shop Drawings or Product Data submittals without formal request submitted in accordance with this Section.
 2. They are submitted after time limit specified above.
 3. Acceptance will require substantial revision of Contract Documents.
- F. If substitution is not approved or accepted, Contractor shall furnish specified product.

PART TWO - PRODUCTS

Not Used.

PART THREE - EXECUTION

Not Used.

END OF SECTION

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SUBSTITUTION REQUEST FORM

TO: PROJECT NO.:
FROM (CONTRACTOR/BIDDER):
Owner Attn:

CONTRACTOR (BIDDER) HEREBY REQUESTS ACCEPTANCE OF THE FOLLOWING PRODUCT OR SYSTEM AS A SUBSTITUTION IN ACCORDANCE WITH PROVISIONS OF DIVISION ONE OF THE SPECIFICATIONS:

1. SPECIFIED PRODUCT OR SYSTEM:

Substitution request for (Generic Description):

Specification Section No. _____ Article(s) _____ Para.(s) _____

2. SUPPORTING DATA:

Product data for proposed substitution is attached (description of product, reference standards, performance and test data).

Sample is attached Sample will be sent if requested

3. QUALITY COMPARISON:

SPECIFIED PRODUCT

SUBSTITUTION

Name, Brand: _____

Catalog No.: _____

Manufacturer: _____

Vendor: _____

Significant

Variations: _____

Maintenance Service Available: Yes No

Spare Parts Source:

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4. PREVIOUS INSTALLATIONS:

Identification of similar projects on which proposed substitution was used:

Project: _____ Architect: _____
Address: _____ Owner: _____
_____ Date Installed: _____

5. REASON FOR NOT GIVING PRIORITY TO SPECIFIED ITEMS:

6. EFFECT OF SUBSTITUTION:

Proposed substitution affects other parts of Work: No Yes
(If yes, explain)

Substitution changes contract time: No Yes
Add/Deduct _____ days

Substitution requires dimensional revision or redesign of structure or M & E Work:
 No Yes (If yes, attach complete data.)

Saving or credit to Owner, if any, for accepting substitution: \$_____
Extra cost to Owner, if any, for accepting substitution: \$_____.

7. CONTRACTOR'S (BIDDER'S) STATEMENT OF CONFORMANCE OF PROPOSED SUBSTITUTION TO CONTRACT REQUIREMENTS:

I/we have investigated the proposed substitution. I/we:

- believe that it is equal or superior in all respects to specified product, except as stated above;
- will provide the same warranty as specified for specified product;
- will pay redesign and special inspection costs caused by the use of this product;
- will pay additional costs to other contractors caused by the substitution;
- will coordinate the incorporation of the proposed substitution in the Work;
- will modify other parts of the Work, as may be needed, to make all parts of the Work complete and functioning;
- waive future claims for added cost to Contract caused by the substitution.

Contractor (Bidder): _____ Date: _____
By: _____

Answer all questions and complete all blanks - use "NA" if not applicable.

CONSULTANT'S REVIEW AND ACTION

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- Resubmit Substitution Request Form:
Provide more information in the following categories: _____
- Sign Contractor's (Bidder's) Statement of Conformance.
- Substitution is accepted.
- Substitution is accepted with the following comments:
- Substitution is not accepted.
- Substitution Request Form received too late.

Designer Firm NOVA Engineering and Environmental
Consultant:

Title: Project Manager

Date

Signature:

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SECTION 01700 - CONTRACT CLOSEOUT

PART ONE - GENERAL

1.01 GENERAL:

- A. Comply with requirements stated in Conditions of the Contract and in Specifications for administrative procedures in closing out the Work.

1.02 SUBSTANTIAL COMPLETION:

- A. Contractor: Shall notify Consultant that Project is substantially complete and schedule time for inspection.
- B. Consultant will make an inspection within 10 days of receipt of certification and issue a Certificate of Substantial Completion. The certificate is to contain the following:
 - 1. Date of Substantial Completion.
 - 2. Allotted time for the contractor to complete items not in compliance.
 - 3. The date and time the owner will assume possession of the work.
 - 4. Signatures of the Owner, Consultant, and the Contractor.
- C. Should Consultant consider Work not complete:
 - 1. He will immediately notify Contractor, in writing, stating reasons.
 - 2. Contractor shall complete Work and send second written notice to Consultant certifying Project is substantially complete.
 - 3. Consultant will re-inspect Work within 10 days.

1.03 FINAL INSPECTION:

- A. Contractor shall submit written certification that:
 - 1. Contract Documents have been reviewed.
 - 2. Work has been inspected for compliance with Contract Documents.
 - 3. Work has been completed in accordance with Contract Documents.
 - 4. Equipment and systems have been tested in presence of Owner's Representative and are operational. These systems include the drainage leaders.
 - 5. Project is complete and ready for final inspection.
- B. Consultant will make final inspection after notification from Contractor. The inspection will include observation of walls and interior areas accessed to perform the work for cleanliness and damage. Damaged areas include the set-up areas as well as walls in the vicinity of chutes or cranes. Project site will be returned to its pre-project condition.
- C. Should Consultant consider Work complete in accordance with requirements of Contract Documents, he will request Contractor to make Project Closeout submittals.
- D. Should Consultant consider Work not complete:
 - 1. He will notify Contractor in writing, issuing inspection list to Contractor with noted items requiring further consideration.
 - 2. Contractor shall take immediate steps to remedy the stated deficiencies and submit initialed inspection list to Consultant certifying Work is complete.
 - 3. Consultant will re-inspect Work.

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1.04 REINSPECTING COSTS:

- A. Should Consultant be required to perform subsequent inspections of the Work due to the failure of the Contractor to correct deficient work, Owner will compensate Consultant for additional services and deduct amount paid to Consultant from the final payment to Contractor.

1.05 CLOSE-OUT SUBMITTALS:

- A. Evidence of compliance with requirements of governing authorities.
- B. Warranties and Bonds: Refer to requirements of this Section.
- C. Evidence of Payment and Release of Liens: Refer to requirements of General and Supplementary Conditions.

1.06 WARRANTY/GUARANTEE:

- A. Submit original and duplicate copies of both Contractor's Warranty and Manufacturer's Guarantee to Consultant for review. After review, Consultant will forward Warranty and Guarantee to Owner. Consultant shall approve final pay application (retainage) upon receipt of both Contractor's Warranty and Manufacturer's Guarantee.

1.07 EVIDENCE OF PAYMENTS AND RELEASE OF LIENS:

- A. Final Release and Waiver of Liens:
 - 1. Contractor's Waiver of Liens.
 - 2. Separate waivers of liens for subcontractors, suppliers, and others with lien rights against property of Owner, together with complete list of those parties.
- B. All submittals shall be notarized and sealed before delivery to Consultant.

1.08 FINAL ADJUSTMENT OF ACCOUNTS:

- A. Submit final statement of accounting to Consultant.
- B. Statement shall reflect all adjustments.
 - 1. Original Contract Sum.
 - 2. Additions and Deductions resulting from:
 - a. Previous Change Orders.
 - b. Deductions for uncorrected Work.
 - c. Deductions for Reinspection Payments.
 - 3. Total Contract Sum, as adjusted.
 - 4. Previous payments.
 - 5. Sum remaining due.
- C. Consultant will prepare final Change Order, reflecting approved adjustments to Contract Sum not previously made by Change Orders.

1.09 FINAL APPLICATION FOR PAYMENT:

- A. Submit final application in accordance with requirements of General Conditions.
- B. Owner and Consultant shall review all data supplied for conformance with Contract Documents. When approved, Owner will accept the Work, release Contractor (except as to conditions of the Performance Bond, any legal rights of Owner, required guarantees, and correction of Faulty Work after final Payment), and make final

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- payment to Contractor.
- C. Final payment will not be approved or released until receipt of proper close-out documents.

PART TWO - PRODUCTS

Not Used.

PART THREE - EXECUTION

Not Used.

END OF SECTION

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SECTION 01710 - CLEANING

PART ONE - GENERAL

1.01 GENERAL:

- A. Maintain premises free from accumulations of waste, debris, and rubbish caused by construction operations.
- B. At completion of Work, remove waste materials, rubbish, tools, equipment, machinery, and surplus materials. Clean all sight-exposed surfaces. Leave project clean and ready for occupancy.
- C. Aggressive methods of cleaning may be required to return the structure and grounds to its original state. Use of pressure spraying, cleaning solutions, and scrubbing may be required. In some heavily soiled conditions light sand blasting may be necessary. All types of cleaning necessary will be performed at no additional cost to the Owner.

1.02 REQUIREMENTS OF REGULATORY AGENCIES:

- A. Codes and Standards: Applicable federal, state, and local codes and regulations relative to environmental safety regulations.
- B. Hazards Controls: Store volatile waste in covered metal containers and remove from premises daily. Prevent accumulation of wastes which create hazardous conditions.
- C. Pollution Control: Conduct clean-up and disposal operations to comply with local ordinances and anti-pollution laws.
 - 1. Burning or burying of rubbish and waste materials on the project site is prohibited.
 - 2. Disposal of volatile fluid wastes (such as mineral spirits, oil, or paint thinner) in storm or sanitary sewer systems or into streams or waterways is prohibited.

PART TWO - PRODUCTS

2.01 CLEANING MATERIALS:

- A. Use only cleaning materials recommended by manufacturer of surface to be cleaned.
- B. Use cleaning materials only on surfaces recommended by cleaning material manufacturer.

PART THREE - EXECUTION

3.01 DURING CONSTRUCTION:

- A. Keep work area and all occupied property in neat and orderly condition at all times. Oversee cleaning and ensure that building and grounds are maintained free from accumulations of waste materials and rubbish. Sprinkle dusty debris with very fine water mist to control accumulation of dust. Do not use water in quantity so as to puddle. Do not allow waste and other materials such as rubbish, debris, wrappers, etc., to accumulate and become unsightly or hazardous. Promptly remove equipment and excess materials as they become no longer needed for the progress of the work. At not less than every day during progress of work, clean up work and access areas

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and dispose of waste materials, rubbish, and debris. Legally dispose of waste materials, rubbish, and debris at public or private dumping areas off Owner's property.

At the completion of work, restore work area to its original condition. Lower waste materials in a controlled manner with as few handlings as possible; do not drop or throw materials from heights. Keep street and access to site free of rubbish and debris.

- B. Contractor shall be responsible for damage to or destruction of property of any sort resulting from the work or caused by defective work, or the use of unsatisfactory materials or workmanship.
- C. Contractor shall be responsible for the preservation of all private property, trees, fences, etc., along the adjacent street, right-of-way, etc., and shall use every precaution necessary to prevent damage or injury thereto. Use suitable precautions to prevent damage to pipes, conduits, and other structures.
- D. Provide protective tarps over walls in the vicinity of access and dump chute locations.
- E. If damage to any structures, utilities, or other improvement occurs by reason of Contractor's operations even though special precautions have been employed, Contractor shall be entirely responsible for such damage and shall make all repairs as required to the satisfaction of Owner.
- F. Do not injure, destroy, or trim landscaping without authorization by Owner. Landscaping damage will be replaced by Contractor with new stock or with other stock satisfactory to Owner at the expense of Contractor.

3.02 FINAL CLEANING:

- A. Employ skilled workmen for final cleaning.
- B. Remove grease, mastics, adhesives, dust, dirt, stains, labels, fingerprints, and other foreign materials from sight-exposed interior and exterior surfaces.
- C. Repair, patch, and touch-up marred surfaces to match adjacent finishes.
- D. Broom clean paved surfaces; rake clean other surfaces of grounds.
- E. Clean stairwell, freight elevator, and loading dock area.
- F. Route and clear all drain lines.
- G. Prior to final completion or Owner occupancy, conduct an inspection of sight-exposed interior and exterior surfaces and all work areas to verify that entire Work area is clean.

END OF SECTION

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SECTION 02072 - DEMOLITION AND RENOVATION WORK

PART ONE - GENERAL

1.01 SECTION INCLUDES:

- A. Removal of existing roofing, insulation, flashing, and sheet metal to the structural deck.
- B. Required minor deck repair or replacement for roof repair work.
- C. Modification of existing roof penetrations, equipment supports or curbs, pitch pans, reglets, piping, and electrical service to provide proper flashing height and flashing detail.
- D. Routing existing roof drain lines.
- E. Install new nailers and curbs at designated locations.
- F. All other miscellaneous and incidental work required to install complete roofing system as specified and to obtain specified manufacturer's warranty.

1.02 RELATED SECTIONS:

- A. 07220 - Roof and Deck Insulation.
- B. 07533 - Thermoplastic Membrane Roofing (Bid Alternate 1).
- C. 07620 - Sheet Metal Flashing and Trim.

1.03 REFERENCES:

- A. American Society for Testing and Materials (ASTM).
- B. Corps of Engineers (CRD).

1.04 PROJECT CONDITIONS:

- A. Environmental Requirements:
 - 1. Do not remove existing roofing and flashing in inclement weather or when rain is predicted with 30 percent possibility.
 - 2. When ambient temperature is below 60 degrees Fahrenheit (15 degrees Celsius), expose only enough cement and adhesive required within four-hour period.
 - 3. Do not expose membrane and accessories to constant temperature in excess of 180 degrees Fahrenheit (82 degrees Celsius).
- B. Emergency Equipment: Maintain on-site materials necessary to apply emergency temporary seal in event of sudden storms or inclement weather.
- C. Smoking is prohibited on areas, in existing building, and all of Owner's property.

1.05 SEQUENCING AND SCHEDULING:

- A. Sequence minor demolition and renovation with sequence of new work to maintain facility in dry, watertight condition.
- B. Coordinate roof work so that no more existing items are removed in one day than can be replaced with new secondary roofing membrane and flashing work in same day.
- C. Coordinate work with Owner's operational requirements.
- D. Coordinate demolition work and removal with roofing work to maintain facility in dry,

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watertight condition.

1.06 WARRANTY:

- A. Provide Contractor's warranty covering defects in installed materials and workmanship for period of three years from date of final acceptance.

PART TWO - PRODUCTS

2.01 MATERIALS:

- A. Wood Members, Nailers, and Blocking: Pressure preservative treated in accordance with AWWA C2, C9 standards, Ground Contact using Chromated Copper Arsenate (CCA) at 0.40 pounds (0.1kg) per cubic foot (0.03cm) wood. Preservatives shall be compatible with roof membrane. Size shall be appropriate for application, minimum 2-inch (50mm) (nominal) thickness.
- B. Lumber:
 1. Noncombustible Standard Grade Fir or No. 2 Southern Yellow Pine bearing UL label.
 2. Complying with American Lumber Standards of manufacturer's association under whose rules lumber is produced.
 3. Marked with mill identification.
 4. Moisture Content: 19 percent maximum at time of installation.
- C. Plywood: Minimum 1/2-inch APA rated sheathing, EXP 1 or "CDX", fire retardant treated, bearing APA trademark.
- D. Fasteners:
 1. Wood Substrate:
 - a. Securement of metal flanged items shall be nails, No. 10 gauge, galvanized steel wire with 13/32-inch (10mm) diameter head and ring shank such as No. 3255 by Dickson Weatherproof Nail Co. (800/572-9351).
 - b. Securement of wood to wood shall be nails, No. 9 gauge, galvanized steel wire nail with ring shank and 5/16-inch (8mm) diameter head such as No. 3055 by Dickson Weatherproof Nail Co. (800/572-9351); length required to provide 1-inch (25mm) penetration minimum into substrate.
 - c. Securement of exposed items to wood substrate shall be nails, No. 10 gauge, galvanized steel wire nail with 3/8-inch (9mm) diameter head, ring shank, and EPDM rubber washer such as No. 955 by Dickson Weatherproof Nail Co. (800/572-9351); length required to provide 1-inch (25mm) penetration minimum into substrate.
 - d. Fasteners for securing roofing materials to wood substrate shall be a hardened steel nail with a 1-inch (25mm) diameter round head and ring shank; length to provide 1-inch (25mm) penetration into substrate, as manufactured by Simplex Nail Co.
 - e. Fasteners for securing steel to wood substrate shall be steel wood screw with steel washer and integral rubber seal.

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2. Masonry Substrate:
 - a. Fasteners for securing wood to solid masonry shall be galvanized steel expansion anchor, 3/8-inch (9mm) diameter (minimum), with 3/4-inch diameter steel washer such as "Countersunk Kwik Bolt II" by Hilti.
 - a. Fasteners for securing wood to hollow base masonry shall be 3/8-inch (9mm) diameter (minimum), threaded rod, with 3/4-inch diameter washer, nut, and screen tube such as "HIT C-20 Adhesive Anchor" by Hilti.
3. Steel Substrate:
 - a. Fasteners for securing wood to steel substrate shall be self-drilling coated heavy-duty screw, 1/4-inch (6mm) diameter (minimum), with 5/8-inch (16mm) diameter washer such as "#14 Heavy Duty Screw" by Olympic.
 - b. Fasteners for securing steel to steel substrate shall be self-tapping steel screw with steel washer and integral rubber seal.
- E. Rust Inhibitive Primer: 100 percent acrylic resin primer such as "Metalclad Interior-Exterior Acrylic Latex Flat Primer & Finish #41702", Devoe & Reynolds Co.
- F. Asphalt Primer: Quick-drying type, ASTM D 41.
- G. Piping/Conduit Supports and Wood Sleepers: 4-inch by 4-inch treated wood blocking fully wrapped with PVC membrane, length necessary for application. Provide metal clamp for securing piping/conduit to block providing minimum 1/2-inch (13mm) clearance between pipe and clamp.
- H. Non-shrink Grout: Nonshrink, noncorrosive, grouting compound; CRD-C-621, Type D, such as "SonogROUT 10K", Sonneborn Building Products, or approved equal.
- I. Splash Blocks: Pre-cast concrete; minimum size of 2-inches (50mm) thick by 18-inches (450mm) by 30-inches (750mm).
- J. Deck Repair Materials:
 1. Metal Decking: Use same gauge, flute dimension, and spacing as existing.
- K. Rust Inhibitive Primer: 100 percent acrylic resin primer such as "Metalclad Interior-Exterior Acrylic Latex Flat Primer & Finish #41702", Devoe & Reynolds Co.
- L. Roof Drains: Replacement roof drain strainers, vane collar and clamping ring, use Josam cast iron components to match existing model and type.

PART THREE - EXECUTION

3.01 EXAMINATION:

- A. Examine existing building and existing roofing to determine existing physical conditions that affect removal of existing roofing and installation of new roofing.
- B. Verify that required barricades and other protective measures are in place.

3.02 PREPARATION:

- A. Take measures to maintain watertight conditions during term of Contract.
- B. Install interior protection and dust partitions where deck penetrations shall be removed or replaced.
- C. Protect adjacent surfaces.

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- D. Roof Drains:
 - 1. Examine existing drain lines for debris or blockage.
 - 2. Clean drains and drain lines, removing debris, excessive bitumen, or aggregate. Flush with water to ensure that drains flow freely.
 - 3. Cap drains with drain plugs during daily operations.
 - 4. Remove plugs after daily clean-up and prior to onset of rainfall.

3.03 MINOR DEMOLITION OPERATIONS:

- A. Execute demolition in careful and orderly manner with least possible disturbance or damage to adjoining surfaces and structure.
- B. Avoid excessive vibrations in demolition procedures that would be transmitted through existing structure and finish materials.
- C. Roof Removal:
 - 1. Remove existing roofing, insulation, and flashings; abandoned and obsolete equipment; pitch pans, vents, curbs, and other such items; and sheet metal down to roof deck.
 - 2. Trim existing counterflashing as required for installation of new materials.
 - 3. Do not stockpile debris on roof surface. Promptly dispose of obsolete equipment and debris at authorized disposal site each day. Use chutes to transfer debris from roof surface to dumpsters.
 - 4. Provide protective method, such as plywood set on minimum 1-inch (25mm) EPS insulation, when hauling debris over existing roof membrane.

3.04 MINOR RENOVATION WORK:

- A. Prepare substrates in accordance with roofing manufacturer's recommendations.
- B. Decking:
- C. Install new decking of like type, weight, gauge, and dimensions to provide suitable substrate in areas of deteriorated deck or where penetrations through deck are removed
- D. Metal Deck:
 - 1. Cover holes or openings 12-inches in diameter or smaller with a plate of 18 gauge sheet metal. Extend plate minimum 4-inches beyond edge of hole and onto adjacent unaffected rib. Mechanically fasten new decking or plate with screws spaced 6-inches on-center.
 - 2. Repair holes or openings greater than 12-inches in diameter with new deck material. Extend new decking 18-inches minimum past nearest bar joist or support member. Mechanically fasten new decking or plate with screws spaced 6-inches on-center.
 - 3. Remove loose rust, bitumen, or other foreign material from existing deck that would prohibit proper installation of new materials.
 - 4. Remove rust by wire brushing or other appropriate method. Apply rust inhibitor over prepared areas of metal deck.

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- E. Nailers:
1. Replace damaged or deteriorated wood nailers and curbs with new nailers and curbs as required.
 2. Install additional nailers as required as part of Base Bid price.
 3. Clean and prepare existing surfaces to receive wood nailers and curbs.
 4. Install wood nailers and curbs continuously with 1/4-inch (6mm) gap between each section. Set level and true. Pre-drill nailers prior to attachment.
 5. Securely fasten to structure with appropriate fasteners to resist minimum 175 pounds per linear foot force in any direction. Use of powder-actuated fasteners is prohibited. Place a fastener within 3-inches of each end of each section of wood blocking.
 6. Secure nailers to concrete deck with appropriate fasteners spaced 24-inches on-center.
 7. Secure nailers to metal deck with screws spaced 12-inches on-center, 6-inches on-center, 10 foot from each corner.
 8. If attaching wood nailer to vertical masonry wall, utilize appropriate anchors spaced 12-inches on-center.
 9. Reduce fastener spacing 50 percent at a distance of 10 feet from each corner.
- F. Plywood:
1. Install new plywood substrate at rise walls and perimeters. Install new plywood over metal studs.
 2. Secure plywood to substrate with flat head fasteners (type appropriate for substrate) spaced 12-inches on-center.
 3. Secure plywood to wood substrate with nails spaced 6-inches on-center.
- G. Equipment and Curb Renovation:
1. Remove, retain, and reinstall existing equipment as required to facilitate new flashing.
 2. Securely fasten equipment on curbs after new flashing is installed.
 3. Curb and hatch flashing height shall be 8-inches minimum above newly finished roof surface.
 4. Include raising of curb flashing to provide minimum 8-inch height in base bid cost.
 5. Grind off screws protruding into roof hatch opening.
- H. Rooftop Equipment:
1. Move and elevate air conditioning units and other rooftop equipment as required to install roofing materials complete and in accordance with plans and specifications.
 2. When units or equipment are to be moved, disconnect and move to protected area to prevent damage to parts or components. Reset and reconnect at Contractor's expense.

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3. Disconnection and reconnection shall be performed by mechanical and/or electrical company licensed to perform such work and approved by Owner's Representative.
- I. Curbs and Ducts: Secure and modify curbs, ducts, and other work which pass through roof as required to receive new roofing system.
- J. Piping and Conduit Modifications:
 1. Schedule piping and unit downtime for equipment modifications to coordinate with Owner's operations. Switchover time shall be limited to meet Owner's requirements.
 2. Replace existing supports for units and associated piping with new supports.
 3. Provide temporary supports to maintain unit and piping in operational condition except during switchover.
 4. Furnish new fittings, piping, and accessories to match existing to replace deteriorated, damaged, or non-functional components or to accommodate new unit elevation, where necessary.
 5. Provide auxiliary make-up air units to supply HVAC needs during equipment downtime, when required.
 6. Upon completion of roof installation, paint piping with aluminized paint and replace or clean jacketing.
- K. Piping Supports:
 1. Furnish and install new supports for piping (conduit, gas, water, condensate, etc.).
 2. Install supports at maximum spacing of 10 feet (3m) on-center and within 2 feet (600mm) of changes in plane or direction. Space supports for piping 10-inches (250mm) in diameter or larger and multiple pipes 8 feet (2.4m) on-center.
 3. Install over 18-inch by 18-inch layer of walkpad fully adhered to roof surface.
- L. Roof Drains and Sleeves to Remain:
 1. Remove and dispose of existing drain strainer and clamping ring.
 2. Clean and route existing roof drain lines to remove debris and stoppage.
 3. Secure and modify drains and sleeves to receive new roofing system.
 4. Verify drain bowls and pipes are properly secured and sealed.
 5. Remove, replace, lower, or raise drain bowl as required to accommodate new roofing system, including insulation and deck conditions.
 6. Replace damaged, missing, or otherwise non-salvageable drain components with new components. Replace plastic strainers with cast iron units.
 7. Install new clamp ring with stationary vanes.
 8. Paint new strainers and install new components prior to installing.
- M. Plumbing Vents:
 1. Extend plumbing vents or modify as necessary to accommodate new roof

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- installation.
 - 2. Provide pipe extensions and couplings where necessary to achieve minimum 8-inch (200mm) height above top of newly finished roof surface.
 - 3. Utilize same material type and size as existing for new extension.
- N. Ventilators: Raise ventilators as required for 8-inch (200mm) minimum flashing height.
- O. Sheet Metal Fabrications:
- 1. Remove and replace ferrous rooftop sheet metal fabrications to match existing.
 - 2. Modify existing sleeves and umbrellas on existing equipment as scheduled.
 - 3. Repair and renovate non-ferrous rooftop and drainage system sheet metal fabrications as required for permanent watertight installation.
 - 4. Paint sheet metal with metal primer.
- 3.05 CLEANING:**
- A. Materials, equipment, and debris resulting from demolition operations shall become property of Contractor. Remove and dispose of demolition debris in accordance with applicable city, state, and federal laws at authorized disposal site.
 - B. Leave substrate clean and dry, ready to receive roofing system.

END OF SECTION

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SECTION 07220 - ROOF AND DECK INSULATION

PART ONE - GENERAL

1.01 SECTION INCLUDES:

- A. Installation of insulation system.
- B. Installation of flat board insulation on penthouse.
- C. Installation of tapered crickets and saddles.
- D. Installation of cover board.

1.02 RELATED SECTIONS:

- A. 07533 - Thermoplastic Membrane- Bid Alternate 1.
- B. 07620 - Sheetmetal Flashing and Trim

1.03 REFERENCES:

- A. American Society for Testing and Materials (ASTM).
- B. Standards:
 - 1. Factory Mutual Approval Guide.
 - 2. Underwriters Laboratories: Building Materials Directory.
 - 3. National Roofing Contractors Association (NRCA): The NRCA Roofing and Waterproofing Manual, Fifth Edition, 1997.

1.04 QUALITY ASSURANCE:

- A. Regulatory Requirements:
 - 1. Classified by Underwriters Laboratories Inc. as Class A rated material.
 - 2. Follow local, state, and federal regulations, safety standards, and codes. When conflict exists, the more restrictive document shall govern.
 - 3. Fastener type and patterns to meet ASCE-7 design requirements for building height, size, and location.
- B. Installation:
 - 1. Install in accordance with manufacturer's current published application procedures and general requirements of NRCA.
 - 2. Consider roof system manufacturer's technical specifications part of this Specification and use as reference for specific application procedures.

1.05 DELIVERY, STORAGE, AND HANDLING:

- A. Store materials in accordance with manufacturer's recommendations.
- B. Outdoor Storage:
 - 1. Tarp and shield insulation from moisture and ultraviolet rays.
 - 2. Elevate insulation above substrate 4-inches minimum.
 - 3. Secure insulation to resist high winds.
 - 4. Do not use insulation which has been determined "wet" or which has been wet and has dried.
 - 5. Distribute insulation stored on roof deck to prevent concentrated loads that would impose excessive stress or strain on deck or structural members.

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6. Remove manufacturer plastic shrink wrapping from materials.

1.06 SEQUENCING AND SCHEDULING:

- A. Plan roof layout with respect to roof deck slope to prevent rainwater drainage into completed roofing.
- B. Do not install more insulation than can be made watertight in same day.

1.07 PROJECT CONDITIONS:

- A. Environmental Recommendations:
 1. Apply roofing and insulation in dry weather.
 2. Do not proceed with roof construction during inclement weather or when precipitation is predicted with 30 percent or more possibility.
 3. Do not apply insulation over wet or moist deck or in foggy conditions.
 4. Consider days when wind speeds are 30 mph or greater as "bad weather" days.
- B. Maintain on site equipment and material necessary to apply emergency temporary seals in event of sudden precipitation. Costs for emergency roofing shall be paid by Contractor.

PART TWO - PRODUCTS

2.01 ROOF INSULATION COVER BOARD:

- A. Base Layer Insulation:
 1. Polyisocyanurate Insulation Board: Rigid, closed cell polyisocyanurate foam core bonded to glass fiber facers.
 - a. Thickness: 2.0-inches
 - b. Aged R-value, ASTM C 518: 6.0 minimum per inch.
 - c. Maximum Board Size: 4 feet by 4 feet
 - d. Acceptable Products:
 - 1) "ENRGY 3", Johns Manville
 - 2) "Sarnatherm", Sika Sarnafil.
 - 3) "Insulbase", Carlisle Syntec.
 - 4) Or approved equal.

2.02 ROOF INSULATION TAPERED

- A. Tapered Insulation: (crickets and saddles)
 1. Rigid, closed cell polyisocyanurate foam core bonded to glass fiber facers.
 - a. Thickness: 1/2-inch per foot slope minimum for crickets.
 - b. Aged R-value, ASTM C 518: 6.0 minimum.
 - c. Acceptable Products:
 - 1) "ENRGY 3 Tapered", Johns Manville
 - 2) "Sarnatherm Tapered" by Sika Sarnafil.
 - 3) "Insulbase Tapered" by Carlisle Syntec.
 - 4) or approved equal

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2.03 BATT INSULATION:

- A. Glass Fiber Batt Insulation: Unfaced, formaldehyde-free, fiberglass batting, minimum R-19 or better. As manufactured by Owens Corning or approved equal

2.04 RELATED MATERIALS:

- A. Insulation Adhesive: Semi-liquid 2 component low rise urethane foam, as approved by roof membrane manufacturer.
- B. Insulation Fasteners:
 - 1. Steel Deck: CR-10 fluorocarbon coated, self-tapping screws of sufficient length to penetrate the steel deck a minimum of 1-inch (25mm), minimum 3-inch (75mm) diameter steel plates with recessed screw head for use with insulation, such as "#14 Heavy Duty Roofing Fastener" as manufactured by Olympic Fasteners, "UltraFast Fasteners" by Johns Manville, or approved equal.
- C. Gypsum Board: 1/4-inch non-structural glass mat faced, silicone-treated gypsum core panel such as "Dens-Deck" by Georgia Pacific.

PART THREE - EXECUTION

3.01 EXAMINATION:

- A. Roof system manufacturer's representative shall inspect roof deck and associated substrates and provide written acceptance of conditions.
- B. Manufacturer's approved roofing contractor shall inspect and approve deck and substrates.
- C. Roofing contractor shall examine roof deck, secondary roof membrane, and related substrates and verify that there are no conditions that would prevent roof system manufacturer's approved application of roof system. These conditions include, but are not limited to, the following:
 - 1. Inadequate anchorage of decking or substrates to structure.
 - 2. Accumulations of moisture.
 - 3. Tears, holes, cracks, or punctures.
 - 4. Ridges, uneven conditions, or gaps.
 - 5. Presence of foreign materials.
 - 6. Open laps in secondary.
- D. Start of work constitutes acceptance of substrate and site conditions.

3.02 PROTECTION:

- A. Provide special protection from traffic on yet to be removed roofing and newly installed secondary roof.

3.03 PREPARATION:

- A. Do not install insulation until defects in roof deck and substrates are corrected in order to meet roof system manufacturer's requirements and to ensure that deck conditions will not restrict roof drainage.
- B. Broom sweep and clean areas to receive new insulation.

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3.04 APPLICATION:

- A. Mechanically Attached Base Insulation Layer:
 - 1. Mechanically attach base insulation layer to deck.
 - 2. Install insulation so that base insulation board ends and sides bear completely on ribs of the steel deck a minimum of 1/2-inch.
 - 3. Install insulation with longitudinal joints continuous and end joints staggered.
 - 4. Mechanically fasten base insulation layer to roof deck in strict accordance with manufacturer's and ASCE 7 criteria; or as a minimum one fastener per 2 square feet. Increase the number of fasteners per board at the perimeters and corners.
 - 5. Fully engage and seat fasteners. Do not overtighten or strip threads. Bent, deformed, or unseated fasteners or plates are unacceptable.
 - 6. Fasteners must penetrate deck 1/2-inch, minimum, through the top flange (rib) of the deck. Do not overdrive fasteners. Remove and replace overdriven, stripped, or non-engaged fasteners.
 - 7. Properly seat mechanical fasteners and keep heads flush with plates. Cupped plates or unseated screw heads are not acceptable.
 - 8. Do not rupture or deform surface of the insulation by mechanical fastening.
- B. Adhered Insulation (Spray-applied Foam Adhesive):
 - 1. Over install torch applied roof membrane, dispense one lineal foot of 3/4-inch to 1-inch diameter continuous ribbon of adhesive for each square foot of insulation board. Bead spacing to meet or exceed ASCE-7 wind uplift requirements for building of similar height and geographic location. Include decreased bead spacing at perimeters and corners.
 - 2. Place the ribbon 3-inches inside each edge of the insulation board. Apply intermediate ribbons centered between the edge ribbons.
 - 3. Firmly set insulation boards in ribbons of sprayed-on polyurethane foam adhesive.
 - 4. Insulation boards shall be set immediately following application of the adhesive and walk-in to spread the adhesive ribbon, ensuring maximum contact. Walk on boards every five to seven minutes or set weighted objects on boards until insulation is firmly attached.
 - 5. Successive board shall be set in place with the end joints staggered a minimum of 1/3 of the overall length. Long joints shall be continuous.
 - 6. Butt joints tightly, allowing no more than 1/4-inch wide gaps between boards. Joint 1/4-inch or greater in width are to be filled with insulation or low-rise foam.
 - 7. Do not use warped or bent insulation boards.
 - 8. Field cut and fit boards at penetrations
- C. Adhered Cover Board:
 - 1. Install over adhered polyisocyanurate insulation, dispense one lineal foot of 3/4-inch to 1-inch diameter. Utilize continuous ribbons of adhesive for each square foot of cover board, or as required to meet wind uplift requirements. Bead spacing is to meet or exceed ASCE-7 and Florida Building Code wind

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uplift requirements for buildings of similar height and geographic location. Include decreased bead spacing at perimeters and corners.

2. Place the ribbon 3-inches inside each edge of the cover board. Apply intermediate ribbons centered between the edge ribbons.
 3. Firmly set cover boards in ribbons of dispensed polyurethane foam adhesive.
 4. Cover boards shall be set immediately following application of the adhesive and walked-on to spread the adhesive ribbon, ensuring maximum contact. Walk on boards every five to seven minutes or set weighted objects on boards until the system is firmly attached.
- D. Heat Exhaust Vents:
1. Install heat resistant insulation around existing vent pipe through roof.
 2. Install new sheet metal base around insulation and strip flange into new roof.
- E. Insulation Filler: Install compressible fiberglass insulation at openings in deck at penetrations, perimeters, and/or curbs.

3.05 CLEANING:

- A. Remove debris and material wrappers from roof to dumpster daily. Leave insulation clean, dry, and ready to receive new roofing.

3.06 ADJUSTING:

- A. Remove damaged insulation and install acceptable new units before installation of roof system.

3.07 PROTECTION:

- A. Provide special protection from traffic on completed work.

END OF SECTION

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SECTION 07533 - THERMOPLASTIC MEMBRANE

PART ONE - GENERAL

1.01 SECTION INCLUDES:

- A. New elastomeric sheet roofing system on flat roof areas.
- B. Related membrane flashings and other accessories.

1.02 RELATED SECTIONS:

- A. 02072 - Minor Demolition and Renovation Work.
- B. 07220 - Roof and Deck Insulation
- C. 07620 - Sheet Metal Flashing.

1.03 REFERENCES:

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

1.04 QUALITY ASSURANCE:

- A. Applicator:
 - 1. Approved by manufacturer of accepted roofing system.
 - 2. A single applicator with a minimum of five years previous successful experience in installations of similar systems.
 - 3. Minimum five years experience in single-ply roofing with two years experience seaming system same as one currently being bid.
 - 4. Be present at job site at all times when work is being performed. Supervise workers as required to ascertain workmanship, progress, and adherence to details.
 - 5. Report to Owner's Representative daily.
 - 6. Be responsible for schedule and coordination.
 - 7. Have authority to make binding commitments upon Contractor in the field.
- B. Regulatory Requirements: Classified by Underwriters' Laboratories, Inc. as a UL 790 Class A roof covering.
- C. Notify Owner's Representative a minimum of forty-eight hours in advance of start of field work. In event that Owner provides a full-time Owner's Representative, do not perform work until Owner's Representative is present except as authorized in writing by Owner.
- D. Schedule manufacturer's technical representative to be on site during first two days of membrane installation and two times per month during project duration. Manufacturers shall provide written report within five days of each inspection outlining any deficiencies in the completed installation and recommendations for corrective procedures.

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- E. Attach ALL roofing system materials (including roof insulation, roofing membrane, flashing, and other materials) as required to resist all wind uplift, wind lateral loading, and other wind force conditions which can be reasonably expected within the next twenty years. At a minimum, comply with the more stringent of the following standards and requirements:
 - 1. All applicable codes, ordinances, and regulations.
 - 2. ASCE 7 Wind Uplift Resistance Classification.
 - 3. The best standards of good practice.
- F. Submit proposed fastening details and product data for all conditions. Submit a Certificate stating that all roofing system construction complies with all applicable standards and requirements as required herein.

1.06 DELIVERY, STORAGE, AND HANDLING:

- A. Deliver materials in manufacturer's original, unopened containers or packages with labels intact and legible.
- B. Store materials in accordance with manufacturer's recommendations. Store rolled goods on clean raised platforms. Store other materials in dry area, protected from water and direct sunlight, and maintain at a temperature of 50 to 90 degrees Fahrenheit (10 to 32 degrees Celsius).
- C. Deliver materials in sufficient quantities to allow continuity of work without delay.
- D. Store materials in weather protected environment, clear of ground, and free from moisture. Protect materials against damage. Keep all materials used in construction of the roofing free from moisture prior to and during application. Do not store in plastic bags which may create condensation within bags.
- E. Store roof insulation and separation membrane flat on pallets or dunnage at least 4-inches (100mm) above the ground, roof, or deck and protect as necessary to keep dry.
- F. Handle all materials so as to prevent damage to roofing system components and completed roof system.
- G. Proper storage of materials is the sole responsibility of Contractor. Protect all materials susceptible to moisture including, but not limited to, all roll goods, insulation, cant strip, wood, and plywood in dry, above ground, watertight storage. Keep labels intact and legible, clearly showing the product, manufacturer, and other pertinent information.
- H. Any materials becoming wet or damaged will be rejected and shall be removed from job site immediately. Any insulation found to be improperly stored at jobsite shall be considered wet at the discretion of Owner's Representative and removed from jobsite.
- I. Maintain products liable to degrade as a result of being frozen above 40 degrees Fahrenheit (4 degrees Celsius) in heated storage.

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1.07 PROJECT CONDITIONS:

- A. Existing Conditions: Examine existing building and existing roofing to determine existing physical conditions that affect removal of existing roofing and installation of new roofing.
- B. Environmental Requirements:
 - 1. Apply roofing in dry weather.
 - 2. Do not remove existing roofing and flashing in inclement weather or when rain is predicted (30 percent or more possibility).
 - 3. When ambient temperature is below 60 degrees Fahrenheit (16 degrees Celsius), expose only enough sensitive cements, sealants, and adhesives as required within a four hour period.
 - 4. Do not expose membrane and accessories to a constant temperature in excess of 180 degrees Fahrenheit.
- C. Protection:
 - 1. Provide special protection and avoid traffic on completed areas of membrane installation.
 - 2. Restore to original condition or replace work or materials damaged during handling of roof materials.
 - 3. Take precautions as required to protect adjacent work and structures.
- D. Emergency Equipment: Maintain on site equipment necessary to apply emergency temporary edge seal in event of sudden storms or inclement weather.
- E. Restrictions:
 - 1. Comply with requirements of Section 01010 - Summary of Work on use of site.
 - 2. Smoking is prohibited on roof areas or in existing buildings.
 - 3. Maintain facility and all utility services in a functional condition for Owner's utilization.

1.08 SEQUENCING/SCHEDULING:

- A. Do not remove more existing roofing in one day than can be replaced in same day.
- B. Install new roof membrane system immediately after completion of insulation/coverboard layer installation.
- C. Schedule work as required to prevent traffic and material handling over completed work.
- D. Do not expose existing roof deck or new material to water or sun damage in quantities greater than can be weatherproofed during same day. See additional roof protection provisions herein.
- E. Notify Owner's Representative at least two hours prior to installing temporary

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water cut off edge seal at end of day's work.

1.09 WARRANTY:

- A. Contractor: Provide Owner a written warranty for a period of three years after Owner's final acceptance covering all repairs required to correct all defects due to faulty materials or workmanship and to otherwise maintain the roof in a watertight condition and to correct all other defects without regard to watertightness. Make repairs promptly on notification and at no expense to Owner.
- B. Roof System Manufacturer: Manufacturer of the single-ply membrane roof system shall furnish a written warranty and NDL guarantee that warrants and guarantees Owner with a watertight condition of roof system and all components thereof for a period of thirty years from date of Owner's final acceptance, include puncture warranty. Warranty and guarantee shall cover all labor and materials required to maintain a watertight condition and a roof system free of defects.
 - 1. Bid Alternates 1 and 2- Provide a manufacturer's 20-Year NDL Guarantee.

PART TWO - PRODUCTS

2.00 GENERAL:

- A. Install all materials in accordance with manufacturer's current written specifications and details. Make no deviations without prior written approval from manufacturer. Should any specifications or details conflict with the Contract Documents, submit to Owner for approval, the recommended alternative which provides the best long term moisture protection and complies with manufacturer's warranty requirements.

2.01 MANUFACTURERS:

- A. Acceptable Manufacturers:
 - 1. Sarnafil, Inc.
 - 2. Johns Manville.
 - 3. Carlisle Syntec
 - 4. Johns Manville
- B. Products furnished for roofing system shall be products of a single manufacturer.

2.02 MEMBRANE ROOFING SYSTEM:

- A. Polyester reinforced TPO elastomeric sheet compounded with polymer, minimum 80 mil, white or light grey in color.

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- B. Bid Alternates 1 and 2- Polyester reinforced TPO elastomeric sheet compounded with polymer, minimum 60 mil, white or light grey in color

2.03 RELATED MATERIAL:

- A. Flashing: Reinforced or unreinforced flashing membrane as furnished by membrane manufacturer to comply with warranty requirements, white in color.
- B. Bonding Adhesive: Furnished by membrane manufacturer for substrate.
- C. Caulks: Membrane manufacturer's approved sealant to seal penetrations through the membrane system or miscellaneous caulking applications that come in contact with roof system components.
- D. Lap/Seam Sealant: As furnished by membrane manufacturer for this system.
- E. Water Cut-off Mastic: As furnished by membrane manufacturer for this system.
- F. Inside Corners and Outside Corners and Molded Pipe Flashings: White molded pipe flashings as furnished by membrane manufacturer for this system.
- G. Walkway Pads: PVC based, reinforced walkpads, as approved by membrane manufacturer.
- H. Separation Sheet: Minimum 1/4-inch microfoam or minimum 20 mil PyroMat, nonwoven, unsaturated fiberglass.
- I. Other miscellaneous materials shall be of the best grade available and approved in writing by roof system manufacturer for the specific application.
- J. Seam Fasteners: Bid Alternate 3: #15 coated self-drilling steel fastener with 2-3/8-inch diameter galvalume coated 20-gauge disc.

PART THREE - EXECUTION

3.00 GENERAL:

- A. Perform entire work of this Section in accordance with the best standards of practice relating to trades involved.
- B. Follow local, state, and federal regulations, safety standards, and codes. When conflict exists, the more restrictive document shall govern.
- C. Follow insurance underwriter's requirements acceptable for use with specified products or systems.
- D. Consider roof system manufacturer's current technical specifications a part of this Specification and use as a reference for specific application procedures and recommendations.
- E. Mechanically fasten both the reinforced membrane and insulation/separation underlayment to roof deck.
- F. Refer to manufacturer's technical specifications for proper fastener selection

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and spacing in accordance with specific deck types and appropriate roll width for field of roof and perimeters.

3.01 EXAMINATION OF SURFACES:

- A. Verify that all components of the existing roofing system have been removed and other preparatory work has been completed.
- B. Examine roof areas for conditions that would prevent proper application of new roofing.
- C. Verify that all demolition, renovation, and substrate replacement work has been completed and cured.
- D. Verify that new wood nailers are properly installed to receive roofing system.
- E. Examine substrate, roof deck, and related surfaces, and verify that there are no conditions such as inadequate anchorage, foreign materials, moisture, ridges, or other conditions which would prevent the satisfactory installation of the roofing system.
- F. Correct or complete any conditions requiring correction or completion prior to installation of roofing system. Notify Owner's Representative in writing of unacceptable conditions.
- G. Verify location of all interior ducts, electrical lines, piping, conduit, and/or similar obstructions. Perform all work in such a manner as to avoid contact with the above-mentioned items.
- H. Verify that separation membrane has been properly installed in the areas in accordance with requirements of membrane manufacturer for conformance with ASCE-7 wind zone requirements for building of similar height, construction, geographic location and warranty requirements.
- I. Start of work under this Section constitutes acceptance of substrate and site conditions.
- J. Verify:
 - 1. Deck and substrates are clean, smooth, and free from depressions, waves, projections, defects, and damage.
 - 2. Surfaces in contact with any single-ply material are free from bitumen, grease, oil, or other foreign material.
 - 3. Surfaces in contact with roofing membrane or separator sheet are free from sharp edges, fins, or projections.
 - 4. All materials are completely dry and free from ice and snow, including substrate, deck, insulation, and roofing membrane as applicable. Confirm dryness by moisture meter and demonstrate to Owner's Representative.
 - 5. All roof equipment, openings, curbs, pipes, sleeves, ducts, vents, cant strips, and blocking members are solidly and properly set.
 - 6. All mechanical/electrical work to be covered has been installed,

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tested, and approved.

7. Work has been completed where possible for all other trades that require work or traffic on the roofing area.

3.02 PREPARATION:

- A. Verify that debris has been completely removed.
- B. Broom clean roof deck immediately prior to roofing application. Debris under roof membrane is unacceptable.

3.03 APPLICATION:

- A. Roofing Membrane:
 1. Install roof membrane in accordance with roofing manufacturer's specification and installation instructions. Cut sheets to maximum size possible in order to minimize seams.
 2. Position membrane over substrate without stretching membrane. Allow membrane to relax for one-half hour before bonding, fastening, welding, and flashing.
 3. Begin installation of new roofing system at the lowest point of the project area and work to the highest point to prevent backwater laps. This will include completion of all flashings, terminations, and seals on a daily basis.
 4. Execute work so membrane can be temporarily sealed on a down slope surface at the end of each day with nite-seal in accordance with the detail drawings.
 5. Position the roof membrane perimeter sheet along the perimeter of the roof over the acceptable substrate. Perimeter membrane width and securement shall be in accordance with manufacturer's recommended procedures for building height and location. Sheet placement shall permit edge, overlaps, and fastening as required by manufacturer.
 6. Fold membrane in half along the sheets length. On the backside of the membrane apply adhesive fully over surface and the surface of the underlying substrate. Allow bonding adhesive to dry to finger touch until it does not string or stick to a dry finger.
 7. Fold sheet over onto deck, broom or roll adhered surfaces to facilitate full adhesion, remove any wrinkles.
 8. Fold the other side of the membrane in half again and repeat application process.
 9. Secure the edge of the sheet with specified fasteners and plates spaced in accordance with manufacturer's recommended fastening pattern for the specific substrate, building height, and location. Fastener pattern shall not exceed 12-inches on center. Do not

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overdrive the seam fasteners. Overdriving, which causes wrinkling of the membrane, is unacceptable and shall be corrected prior to acceptance.

10. Work shall progress across the roof deck with manufacturer's recommended minimum overlap provided at the previously secured sheet edge.

B. Bid Alternate 3- Mechanically Attached Membrane:

1. Install roof membrane in accordance with roofing manufacturer's specification and installation instructions. Cut sheets to maximum size possible in order to minimize seams.
2. Position membrane over substrate without stretching membrane. Allow membrane to relax for one-half hour before bonding, fastening, welding, and flashing.
3. Begin installation of new roofing system at the lowest point of the project area and work to the highest point to prevent backwater laps. This will include completion of all flashings, terminations, and seals on a daily basis.
4. Execute work so membrane can be temporarily sealed on a down slope surface at the end of each day with nite-seal in accordance with the detail drawings.
5. Install mechanically fastened roofing system over the field of the roof with the length of the sheets parallel to the long dimension of the roof.
6. Position the roof membrane perimeter sheet along the perimeter of the roof over the acceptable substrate. Perimeter membrane width and securement shall be in accordance with manufacturer's recommended procedures for building height and location. Sheet placement shall permit edge, overlaps, and fastening as required by manufacturer.
7. Secure the edge of the sheet with specified fasteners and plates spaced in accordance with manufacturer's recommended fastening pattern for the specific substrate, building height, and location. Fastener pattern shall not exceed 12-inches (300mm) on center. Do not overdrive the seam fasteners. Overdriving, which causes wrinkling of the membrane, is unacceptable and shall be corrected prior to acceptance.
8. Work shall progress across the roof deck with manufacturer's recommended minimum overlap provided at the previously secured sheet edge. Secure opposite length of the sheet with fasteners and plates and overlap accordingly.

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- C. Membrane Splicing:
1. Membrane lap splices for membrane overlaps along the length of the membrane shall be as necessary to achieve proper weld. Minimum distance between the edge of the fastening plate and edge of the membrane shall be 1/2-inches, minimum. Splices at end roll overlaps (width of the membrane) shall be 6-inches wide, minimum. Plan sheet layout so that end roll overlaps can be stripped in with a continuous membrane head lap (minimum 18-inches wide).
 2. Surfaces to be welded must be cleaned, primed and dirt-free. Remove excessive dirt by washing with a detergent. Rinse thoroughly, allow to dry, and then wipe surface with manufacturer's solvent/cleaner.
 3. Use automatic hot air welding equipment approved by roof system manufacturer for all field seams. Perform small work and repairs using hand welders. Roof system manufacturer's representative shall be on site at start of project to supervise welding operations and to inspect and approve welded seams.
 4. Probe all laps each day to verify that welder set-up is effective. Allow membrane to cool. In addition, perform random lap test sample checks (including checks at start of each day) to verify peel strength. Caulk cut edges by applying manufacturer's seam caulk.
- D. Flashing:
1. Install flashing at all roof penetrations, interruptions, and any roof intersection including roof edges with vertical or sloped surfaces in accordance with manufacturer's recommended procedures and the detail drawings.
 2. Raise/modify all curbs, projections, and risewall conditions as required to accommodate new roofing.
 3. Remove all existing flashing. Remove existing flashing at any compression type membrane termination to provide for termination directly to the substrate.
 4. Apply manufacturer's bonding adhesive to both underside of flashing and surface to which it is to be bonded, at a rate of approximately one gallon per 50 square feet of surface coverage.
 5. Do not apply bonding adhesive to that portion of flashing that overlaps onto itself. Use hot-air welding throughout the system where membrane overlaps itself.
 6. Allow bonding adhesive to dry to finger touch until it does not string or stick to a dry finger. Roll the flashing into dry adhesive. Take care to assure that flashing does not bridge where there is any change of direction.
 7. Mechanically top fasten all flashing under or through appropriate

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- counterflashing with approved fasteners as shown in detail drawings.
8. Install flashings for vents, pipe, soil vents, and other round projections in accordance with manufacturer's recommendations and the detail drawings.
 9. Install preformed flashing membrane as required to form a continuous membrane seal in each corner or change in plane.
- E. Flashing - Other Penetrations:
1. General:
 - a. Flash all penetrations passing through the membrane in accordance with the manufacturer's recommended procedure.
 - b. Flashing seal must be made directly to the penetration passing through the membrane system.
 - c. All existing flashing must be approved.
 2. Pipes, Round Supports, Etc.:
 - a. Flash pipes with molded pipe flashings where their installation is possible.
 - b. Where molded pipe flashings cannot be installed, use field fabricated pipe seals.
 - c. After pipe flashing is installed, secure with steel draw band and seal top edge with sealant.
- F. Daily Seal:
1. Ensure that water does not flow beneath any completed sections of membrane system. This will include completion of all flashings, terminations, and daily seals. When possible, install starting at the highest point of the project area, working to the lowest point.
 2. Temporarily seal any loose membrane edge with manufacturer's water cut-off sealant. Exercise caution to ensure that membrane is not temporarily sealed in such a manner as to promote water migration below the membrane or impede drainage.
 3. Install daily night seals by extending the roof membrane beyond the insulation and sealing to existing roof surface.
 4. When work is resumed, remove and dispose of membrane where asphalt or other sealants were previously applied before resuming installation.

3.04 CLEANING:

- A. Exterior: Remove debris, adhesives, and sealant from surfaces.
- B. Interior: Remove all work related dirt, debris, bitumen, drippage, spills, etc.

END OF SECTION

CITY HALL- PEACHTREE CORNERS ROOF REPLACEMENT

SECTION 07620 - SHEET METAL FLASHING AND TRIM

PART ONE - GENERAL

1.01 SECTION INCLUDES:

- A. Shop or field-formed sheet metal work for moisture protection.
- B. Types of work specified in this Section include:
 - 1. Roof penetration sleeves and hood and umbrella counterflashing.
 - 2. Coping Cap
 - 3. Metal counterflashing.
 - 4. Sanitary vent pipes.
 - 5. Curb cap flashing.
 - 6. Miscellaneous sheet metal accessories.

1.02 RELATED SECTIONS:

- A. 02072 - Demolition and Renovation Work.
- B. 07534 - Thermoplastic Membrane- Hybrid.

1.03 REFERENCES:

- A. American Society for Testing and Materials (ASTM).
- B. Federal Specifications (FS).
- C. National Roofing Contractor's Association (NRCA): NRCA Roofing and Waterproofing Manual, Fifth Edition, 1997.
- D. Sheet Metal and Air Conditioning Contractor's National Association, Inc. (SMACNA): Architectural Sheet Metal Manual, Fourth Edition, 1987.

1.04 WARRANTY:

- A. Contractor's Warranty: Provide Owner a written warranty which shall warrant sheet metal work to be free of leaks and defects in materials and workmanship for three years after date of final acceptance by Owner.
- B. For pre-finished metal, provide manufacturer's twenty-year guarantee covering deterioration or failure of the fluoropolymer finish.

PART TWO - PRODUCTS

2.01 MANUFACTURERS:

- A. Acceptable Sheet Metal Manufacturers:
 - 1. Berridge Manufacturing Company.
 - 2. Peterson Aluminum Corporation.
 - 3. Architectural Building Components.
 - 4. MBCI.
 - 5. Or approved equal.

2.02 SHEET METAL MATERIAL:

- A. Pre-finished Metal:

CITY HALL- PEACHTREE CORNERS ROOF REPLACEMENT

1. "Kynar 500" or "Hylar 5000" fluoropolymer pre-finished G90 galvanized steel, minimum 24 gauge. "Kynar 500" or "Hylar 5000" finish shall consist of a two coat Polyvinyladine flouride, minimum 70 percent by weight in coatings, dry film thickness 1 mil, factory applied by metal manufacturer or supplier.
2. Color: As selected by Owner from manufacturer's standard color chart.
- B. Zinc-coated (Galvanized) Steel Sheet: Commercial quality with 0.20 percent copper, in accordance with ASTM A 526 except ASTM A 527 for lock forming; coating designation G90 hot-dip galvanized, and mill phosphatized for painting in accordance with ASTM A 525 (paint-grip type), 24 gauge, minimum.
- C. Metal Flashing: 24 gauge PVC coated galvanized metal where tying into roof membrane is required.

2.03 FASTENERS:

- A. Fasteners shall be same metal as flashing and sheet metal or noncorrosive metal.
- B. Exposed fasteners shall be self-sealing or gasketed for watertight installation.
- C. Heads of fasteners, including but not limited to, rivets, screws, and bolts, that are exposed or visible shall have same manufactured finishes as item being secured; color to match when applicable.
- D. Mechanical Fasteners:
 1. Washers: Steel washers with bonded rubber sealing gasket.
 2. Screws: Self-tapping sheet metal type compatible with material fastened.
 3. Rivets: Stainless steel or copper material for the head and stem, closed end, type and size as recommended by sheet metal manufacturer. Use rivet made of metal compatible with materials to be joined.

2.04 RELATED MATERIALS:

- A. Solder:
 1. ASTM B 32, alloy grade 58, 50 percent tin, 50 percent lead.
 2. For Use with Steel or Copper: 50-50 tin/lead solder, ASTM B 32.Flux:
 1. Phosphoric acid type, manufacturer's standard.
 2. For Use with Steel or Copper: Rosin flux.
 3. For Use with Stainless Steel: Acid-chloride type flux, except use rosin flux over tinned surfaces.
- B. Underlayment: EPDM, PVC, or neoprene sheeting; minimum 20 mil such as manufactured by Nervastral or "Lexsoco Water Barrier" by GAF.
- C. Adhesives: Type recommended by flashing sheet manufacturer for waterproof and weather resistant seaming and adhesive application of flashing sheet.
- D. Metal Accessories: Sheet metal clips, straps, anchoring devices, and similar accessory units as required for installation of work, matching or compatible with material being installed, noncorrosive, size and gauge required for performance.
- E. Sealant:
 1. Type A: One component polyurethane sealant such as "Dynatrol I" by Pecora Corp., color to match finish of metal.
 2. Type B: Low modulus silicone sealant for sealing metal-to-metal surface (i.e. metal edge, cover plates) such as "895 Silicone Building Sealant" by Pecora

CITY HALL- PEACHTREE CORNERS ROOF REPLACEMENT

- Corp., color to match finish of metal
- F. Grout - Pitch Pans:
 - 1. Quick-setting formula meeting Corps of Engineers specification CRD-C-621, Type D.
 - 2. Acceptable Product: "SonoGrout 10K", Sonneborn Building Products, or approved equal.
 - G. Pourable Sealer:
 - 1. Pourable polyurethane sealer, approved by roofing system manufacturer.
 - 2. Acceptable Products:
 - a. "Quick Pitch Sealer" by U.S. Intec.
 - b. "Pourable Sealer S-10" by Firestone.
 - H. Termination Bar: 1/8-inch (3mm) thick, 1-inch (25mm) wide extruded aluminum bar or copper (for galvanic control) with flat profile, factory punched oval holes (1/4-inch by 3/8-inch [6mm by 9mm]) spaced 6-inches (150mm) on-center, such as "TB 125" by The TruFast Corp.
 - I. Stainless Steel Clamp: Stainless steel banding with worm-drive tightening, sized for application such as "Make-A-Clamp Kit" by Dynamic Fastener, 800/821-5448.

2.05 FABRICATION - GENERAL:

- A. Fabricate work in accordance with SMACNA Architectural Sheet Metal Manual and other recognized industry practices and reviewed shop drawings.
- B. Comply with material manufacturer's instructions and recommendations for forming material.
- C. Shop fabricate work to greatest extent possible. Fabricate inside and outside corners for metal edges, counterflashing, and coping caps.
- D. Fabricate for waterproof and weather resistant performance with expansion provisions for running work sufficient to permanently prevent leakage, damage, or deterioration of work. Form work to fit substrates.
- E. Make angle bends and folds for interlocking metal with full regard for expansion and contraction to avoid buckling or fullness in metal after installation.
- F. Form materials with straight lines, sharp angles, smooth curves, and true levels. Avoid tool marks, buckling, and oil canning.
- G. Fold back edges on concealed side of exposed edge to form hem.
- H. Lap joints 1-inch (25mm) minimum. Rivet and solder joints on parts that are to be permanently and rigidly assembled.
- I. Seams:
 - 1. Fabricate non-moving seams in sheet metal with flat-lock seams.
 - 2. Pre-finished Galvanized Steel: Seal pre-finished metal seams with rivets and silicone sealant.
 - 3. Metal Other than Aluminum: Tin edges to be seamed, form seams, and solder.
- J. Expansion Provisions: Where lapped or bayonet type expansion provisions in work cannot be used or would not be sufficiently waterproof or weatherproof, form expansion joints of intermeshing hooked flanges, not less than 1-inch deep, filled with mastic sealant concealed within joints.

CITY HALL- PEACHTREE CORNERS ROOF REPLACEMENT

- K. Sealant Joints: Where movable, non-expansion type joints are indicated or required for proper performance of work, form metal to provide for proper installation of elastomeric sealant in compliance with SMACNA standards.

2.06 FABRICATED ITEMS:

- A. Counterflashings: Minimum 24-gauge prefinished galvanized steel (ref. details) formed in maximum 10- foot (3m) lengths. Utilize two piece configuration at masonry walls.
- B. Coping Cap: Minimum 24-gauge prefinished galvanized steel (ref. details) formed in maximum 10- foot (3m) lengths with 1-inch high standing seams.
- C. Roof Penetration and Umbrella Counterflashing: Minimum 24-gauge prefinished galvanized steel, two-piece construction, fabricated in accordance with project drawings.
- D. Continuous Cleats: Continuous strips, same base material, and fascia profile, and next heavier gauge available as adjacent metal item.
- E. Vent Hoods, Sleeves, Penetration Flashings, and Accessories: Minimum 24-gauge PVC coated steel where bonding to roof membrane is required steel with 4-inch (100mm) flanges with rounded corners.
- F. Vent Pipe: Install pre-molded PVC boots that are welded to roof membrane.
- G. Penetration Flashing Pans: PVC coated steel. Fabricate with 1/4-inch (6mm) hem at top edge and with 4-inch (100mm) flanges with rounded corners. Fabricate to provide installed minimum clear inside perimeter dimension of 2-inches (50mm) on each side of penetrating element and 6-inch height.
- H. Pipe Box (Base, Hood, and Face Plate): 24-gauge PVC coated galvanized base and a 24 gauge, prefinished galvanized hood. Base shall be 8-inches in height, 4-inch wide flanges with rounded corners and sized to provide minimum 2-inch clearance between pipes and box.

PART THREE - EXECUTION

3.01 EXAMINATION:

- A. Verify that substrates are smooth and clean to extent needed for sheet metal work.
- B. Verify that reglets, nails, cants, and blocking to receive sheet metal are installed and free of concrete and soil.
- C. Do not start sheet metal work until conditions are satisfactory.

3.02 INSTALLATION:

- A. Install sheet metal with lines, arises, and angles sharp and true, and plane surfaces free from objectionable wave, warp, or buckle. Exposed edges of sheet metal shall be folded back to form 1/4-inch (6mm) hem on concealed side from view. Finished work shall be free from water retention and leakage under all weather conditions. Prefabricated corners or transitions are required at changes in direction, elevation or plane, and at intersections. Locate field joints not less than 12-inches (300mm), nor more than 3 feet (1m) from actual corner. Laps shall be 1-inch (25mm), riveted and soldered at following locations: prefabricated corners; transitions; changes in

CITY HALL- PEACHTREE CORNERS ROOF REPLACEMENT

- direction, elevation, and plane; and at intersections.
- B. Anchor units of work securely in place to prevent damage or distortion from wind or buckling. Provide for thermal expansion of metal units; conceal fasteners where possible; and set units true to line and level as indicated. Install work with laps, joints, and seams permanently watertight and weatherproof.
 - C. Install fabricated sheet metal items in accordance with manufacturer's installation instructions and recommendations and with SMACNA Architectural Sheet Metal Manual.
 - D. Separations: Provide for separation of metal from non-compatible metal or corrosive substrates by coating concealed surfaces with zinc chromate, bituminous coating, or other permanent separation at locations of contact as recommended by manufacturer or fabricator. Do not use materials incompatible with roofing system.
 - E. Continuous Cleat: At exposed edges of gravel guards, fascias, cap flashings, and where required, attach continuous cleat at 6-inches (150mm) on-center with appropriate fasteners positioned on the vertical face. At a distance of 10 feet (3m) from each direction of corner, install fasteners 3-inches (75mm) on-center.
 - F. Coping:
 - 1. Install new wood nailers and/or plywood to provide substrate to have a resulting positive slope (minimum 1/4-inch per foot) toward roof.
 - 2. Install and adhere underlayment over the wood substrate extending a minimum of 1-inch below top of wall system. Lap ends minimum of 6-inches (150mm) and secure membrane in place. Seal laps with appropriate adhesive.
 - 3. Lock coping onto cleat and install appropriate fasteners through the interior fascia spaced 24-inches on-center in enlarged holes.
 - 4. Between segments fold 1-inch high seams and crimp folded seam ends at 45 degree angle.
 - 5. Install appropriate fastener through neoprene washer and cover plate between coping segments.
 - 6. Accommodate building wall expansion joints by terminating coping joints and cleats either side of expansion joint. Do not run coping or cleats continuous across joints. Install coping cover plate to span across joint and lap coping on each side of joint a minimum of 4-inches (100mm). Fasten cover plate on one side of joint only
 - G. Counterflashings:
 - 1. Install new counterflashings under equipment housing flanges and existing receivers along rise or parapet walls.
 - 2. Secure counterflashing at 6-inches (150mm) on-center with self-tapping screws.
 - 3. Saw cut new joint in existing masonry where required and install new receiver. Secure new receiver in place with appropriate fasteners spaced 12-inches (300mm) on-center.
 - 4. Lap adjacent sections of receivers and counterflashings a minimum of
-

CITY HALL- PEACHTREE CORNERS ROOF REPLACEMENT

4-inches (100mm). Apply a continuous bead of sealant, Type **A**, in lap.

5. Secure new flashing to existing receiver utilizing pop rivets or self-tapping screws spaced 6-inches (150mm) on-center.

H. Penetration Pans:

1. Fully solder joints and connections.
2. Prime top and bottom of flanges.
3. Install with flanges set in uniform troweling of bed of water cut-off mastic on roof membrane, secure and strip-in flanges.
4. Fill penetration pan to within 1-inch (25mm) of top of pan with non-shrink grout. Fill remainder of pan with pourable sealer.
5. Install umbrella counterflashing or hood.

3.03 CLEANING:

- A. Remove flux and residual acid immediately by neutralizing with baking soda and washing with clean water. Leave work clean and free of stains, scrap, and debris.
- B. Clean exposed metal surfaces, removing substances which might cause corrosion of metal or deterioration/damage of finishes. Paint (color to match) areas of prefinished metal where finish is damaged. Replace sheet metal items when damaged finish can not be repaired to an acceptable condition.
- C. Prime soldered area of phosphatized metal after cleaning to prevent rusting.
- D. Paint with aluminized paint, metal flashings that have been soiled with bitumen. Use medium nap roller to apply paint to surfaces to achieve monolithic finished color.

END OF SECTION

Peachtree Corners City Hall Roof Replacement

310 Technology Boulevard- Peachtree Corners, Georgia



3900 Kennesaw 75 Parkway
Suite 100
Kennesaw, GA 30144
office: 770.425.0777
fax: 770.425.1113

www.usanova.com

CLIENT:

City of Peachtree Corners C/O
Comprehensive Program Services
3368 Hardee Avenue
Atlanta, Georgia 30341

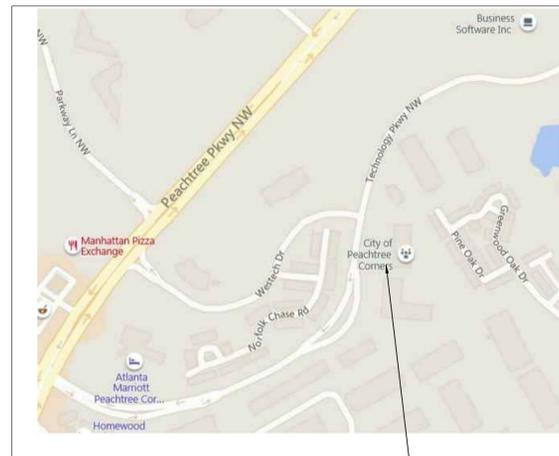
DESIGN:

NOVA Engineering & Environmental
3900 Kennesaw 75 Parkway
Suite 100
Kennesaw, GA 30314

DRAWING INDEX:

- 0.0 PROJECT INFORMATION
- 1.0 ROOF PLAN
- 2.0 ROOF DETAILS
- 2.1 ROOF DETAILS

SITE LOCATION:



Project Site Address
2925 Shawnee Industrial Way
Suwanee, Ga 30024

SCOPE OF WORK:

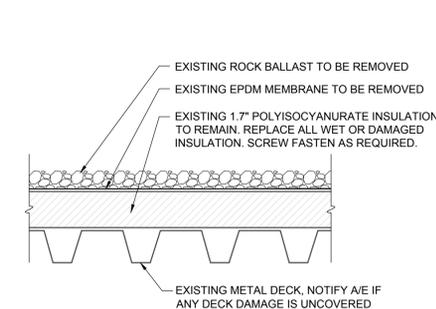
ROOF MEMBRANE REPLACEMENT AND ROOF RELATED RENOVATIONS OF THE EXISTING FACILITY LOCATED AT 2925 SHAWNEE INDUSTRIAL WAY IN SUWANEE, GA FOR JOHN HANCOCK REAL ESTATE. WORK INCLUDES, BUT IS NOT LIMITED TO, THE FOLLOWING:

1. BASE BID:
 - a. REMOVE AND PROPERLY DISPOSE OF EXISTING STONE BALLAST. LEAVE SUFFICIENT BALLAST IN PLACE TO PREVENT WIND DAMAGE DURING THE ROOF REPLACEMENT OPERATIONS.
 - b. REMOVE EXISTING MEMBRANES, METAL/MEMBRANE FLASHINGS, AND INSULATION TO THE METAL DECK. WIRE BRUSH AND PRIME AREAS OF SURFACE RUST.
 - c. INSTALL NEW 2-INCH POLYISOCYANURATE INSULATION MECHANICALLY ATTACH USING PATTERNS AND FASTENERS THAT MEET OR EXCEED ASCE-7 WIND REQUIREMENTS FOR PROJECTS GEOGRAPHIC LOCATION.
 - d. INSTALL NEW SECOND LAYER OF 2-INCH POLYISOCYANURATE INSULATION ADHERED USING PATTERNS AND ADHESIVES THAT MEET OR EXCEED ASCE-7 WIND REQUIREMENTS FOR PROJECTS GEOGRAPHIC LOCATION.
 - e. INSTALL NEW ADHERED TAPERED INSULATION CRICKETS WHERE SHOWN IN THE DRAWINGS.
 - f. INSTALL NEW 1/4-INCH DENS-DECK COVER BOARD USING PATTERNS AND ADHESIVES THAT MEET OR EXCEED ASCE-7 WIND REQUIREMENTS FOR PROJECTS GEOGRAPHIC LOCATION.
 - g. INSTALL FULLY ADHERED 60 MIL PVC ROOF MEMBRANE. ATTACHMENT OF THE MEMBRANE IS TO MEET OR EXCEED ASCE 7 WIND REQUIREMENTS FOR BUILDINGS HEIGHT AND GEOGRAPHIC LOCATION. INCLUDE ENHANCED FASTENING REQUIREMENTS AT BUILDING PERIMETERS.
 - h. RAISE EQUIPMENT CURB HEIGHTS TO MEET ROOF MANUFACTURERS FLASHING HEIGHT REQUIREMENT FOR REQUIRED GUARANTEE. INCLUDE EXTENSION OF UTILITIES, IF NEEDED, IN THE BASE BID.
 - i. INSTALL NEW SHEET METAL AND MEMBRANE FLASHINGS.
 - j. INSTALL NEW 24 GAUGE PREFINISHED COPING CAP ALONG THE TOPS OF ALL PARAPETS.
 - k. INSTALL WALKPAD AROUND ROOF ACCESS POINTS AND AROUND SERVICEABLE EQUIPMENT.
 - l. PROVIDE A CONTRACTOR'S 3-YEAR WATERTIGHT WARRANTY AND A MANUFACTURER'S 30-YEAR GUARANTEE THAT INCLUDES A PUNCTURE WARRANTY.
2. BID ALTERNATE 1:
 - a. REMOVE AND PROPERLY DISPOSE OF EXISTING STONE BALLAST. LEAVE SUFFICIENT BALLAST IN PLACE TO PREVENT WIND DAMAGE DURING THE ROOF REPLACEMENT OPERATIONS.
 - b. REMOVE EXISTING MEMBRANES, METAL/MEMBRANE FLASHINGS, AND INSULATION TO THE METAL DECK. WIRE BRUSH AND PRIME AREAS OF SURFACE RUST.
 - c. INSTALL NEW 2-INCH POLYISOCYANURATE INSULATION MECHANICALLY ATTACH USING PATTERNS AND FASTENERS THAT MEET OR EXCEED ASCE-7 WIND REQUIREMENTS FOR PROJECTS GEOGRAPHIC LOCATION.
 - d. INSTALL NEW SECOND LAYER OF 2-INCH POLYISOCYANURATE INSULATION ADHERED USING PATTERNS AND ADHESIVES THAT MEET OR EXCEED ASCE-7 WIND REQUIREMENTS FOR PROJECTS GEOGRAPHIC LOCATION.
 - e. INSTALL NEW ADHERED TAPERED INSULATION CRICKETS WHERE SHOWN IN THE DRAWINGS.
 - f. INSTALL FULLY ADHERED 60 MIL PVC ROOF MEMBRANE. ATTACHMENT OF THE MEMBRANE IS TO MEET OR EXCEED ASCE 7 WIND REQUIREMENTS FOR BUILDINGS HEIGHT AND GEOGRAPHIC LOCATION. INCLUDE ENHANCED FASTENING REQUIREMENTS AT BUILDING PERIMETERS.
 - g. RAISE EQUIPMENT CURB HEIGHTS TO MEET ROOF MANUFACTURERS FLASHING HEIGHT REQUIREMENT FOR REQUIRED GUARANTEE. INCLUDE EXTENSION OF UTILITIES, IF NEEDED, IN THE BASE BID.
 - h. INSTALL NEW SHEET METAL AND MEMBRANE FLASHINGS.
 - i. INSTALL NEW 24 GAUGE PREFINISHED COPING CAP ALONG THE TOPS OF ALL PARAPETS.
 - j. INSTALL WALKPAD AROUND ROOF ACCESS POINTS AND AROUND SERVICEABLE EQUIPMENT.
 - k. PROVIDE A CONTRACTOR'S 3-YEAR WATERTIGHT WARRANTY AND A MANUFACTURER'S 20-YEAR GUARANTEE.
3. BID ALTERNATE 2:
 - a. REMOVE AND PROPERLY DISPOSE OF EXISTING STONE BALLAST. LEAVE SUFFICIENT BALLAST IN PLACE TO PREVENT WIND DAMAGE DURING THE ROOF REPLACEMENT OPERATIONS.
 - b. REMOVE EXISTING MEMBRANES, METAL/MEMBRANE FLASHINGS, AND INSULATION TO THE METAL DECK. WIRE BRUSH AND PRIME AREAS OF SURFACE RUST.
 - c. INSTALL NEW 2 LAYERS OF 2-INCH POLYISOCYANURATE INSULATION MECHANICALLY ATTACH USING PATTERNS AND FASTENERS THAT MEET OR EXCEED ASCE-7 WIND REQUIREMENTS FOR PROJECTS GEOGRAPHIC LOCATION.
 - d. INSTALL NEW ADHERED TAPERED INSULATION CRICKETS WHERE SHOWN IN THE DRAWINGS.
 - e. INSTALL MECHANICALLY ATTACHED 60 MIL PVC ROOF MEMBRANE. ATTACHMENT OF THE MEMBRANE IS TO MEET OR EXCEED ASCE 7 WIND REQUIREMENTS FOR BUILDINGS HEIGHT AND GEOGRAPHIC LOCATION. INCLUDE ENHANCED FASTENING REQUIREMENTS AT BUILDING PERIMETERS.
 - f. RAISE EQUIPMENT CURB HEIGHTS TO MEET ROOF MANUFACTURERS FLASHING HEIGHT REQUIREMENT FOR REQUIRED GUARANTEE. INCLUDE EXTENSION OF UTILITIES, IF NEEDED, IN THE BASE BID.
 - g. INSTALL NEW SHEET METAL AND MEMBRANE FLASHINGS.
 - h. INSTALL NEW 24 GAUGE PREFINISHED COPING CAP ALONG THE TOPS OF ALL PARAPETS.
 - i. INSTALL WALKPAD AROUND ROOF ACCESS POINTS AND AROUND SERVICEABLE EQUIPMENT.
 - j. PROVIDE A CONTRACTOR'S 3-YEAR WATERTIGHT WARRANTY AND A MANUFACTURER'S 20-YEAR GUARANTEE.

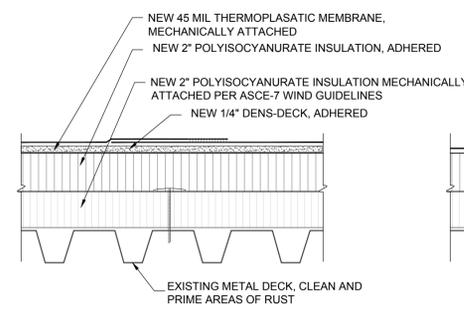
GENERAL NOTES:

1. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS IN FIELD. DO NOT SCALE DRAWINGS. DIMENSIONS SHOWN ON THE DRAWINGS ARE TAKEN FROM VARIOUS SOURCES AND ARE PROVIDED FOR INFORMATION ONLY.
2. THE CONTRACTOR SHALL VERIFY ALL QUANTITIES. QUANTITIES SHOWN ARE FOR ESTIMATING PURPOSES ONLY.
3. THE CONTRACTOR SHALL COORDINATE REQUIREMENTS AND PROVIDE PROOF OF INSURANCE PRIOR TO THE START OF WORK.
4. THERE SHALL BE COMPLETE COOPERATION BETWEEN THE GENERAL CONTRACTOR AND ALL SUB-CONTRACTORS TO ENSURE SATISFACTORY PROGRESS AND PERFORMANCE OF THE WORK.
5. THE CONTRACTOR SHALL VERIFY EXISTING PLUMBING AND ELECTRICAL LINES AND EQUIPMENT THAT WILL BE ACCESSED AS PART OF WORK PERFORMED.
6. THE CONTRACTOR SHALL SECURE AND PAY FOR ALL PERMITS, LICENSES, AND GOVERNMENT FEES AS REQUIRED. THE CONTRACTOR SHALL COMPLY WITH CODES, ORDINANCES, RULES, REGULATIONS, ORDERS, AND OTHER LEGAL REQUIREMENTS OF PUBLIC AUTHORITY WHICH GOVERN THE PERFORMANCE OF THE WORK.
7. THE CONTRACTOR SHALL PROMPTLY SUBMIT VERBAL AND WRITTEN NOTICE TO THE ARCHITECT/ENGINEER OF OBSERVED VARIANCE OF THE CONTRACT DOCUMENT FROM ACTUAL ON-SITE CONDITIONS.
8. THE CONTRACTOR SHALL SUPPLY THE OWNER WITH MATERIAL SAFETY DATA SHEETS (MSDS) FOR EACH CHEMICAL THAT WILL BE BROUGHT ONTO THE JOB SITE AND SHALL COMPLY WITH THE REQUIREMENTS OF THE OSHA HAZARD COMMUNICATION STANDARD.
9. THE CONTRACTOR MUST SUBMIT DEMOLITION AND CONSTRUCTION SCHEDULES TO THE OWNER AND ARCHITECT/ENGINEER FOR APPROVAL PRIOR TO BEGINNING DEMOLITION.
10. THE PRODUCTS SPECIFIED ARE BELIEVED TO HAVE PROPERTIES ADEQUATE FOR SUCCESSFUL COMPLETION OF THE WORK. IF THE CONTRACTOR HAS FOUND THESE PRODUCT TO BE UNACCEPTABLE OR HAS HAD DIFFICULTY USING THESE MATERIAL, THE CONTRACTOR SHALL IMMEDIATELY INFORM THE ARCHITECT/ENGINEER.
11. THE CONTRACTOR IS RESPONSIBLE FOR ALL MEANS AND METHODS OF THE REPAIR WORK.
12. NOVA ENGINEERING & ENVIRONMENTAL SHALL NOT HAVE CONTROL OVER OR CHARGE OF AND SHALL NOT BE RESPONSIBLE FOR CONSTRUCTION MEAN, METHODS, TECHNIQUES, SEQUENCING, OR PROCEDURES OR FOR SAFETY PRECAUTIONS AND SAFETY PROGRAMS IN CONNECTION WITH THE PROJECT. SINCE THESE ARE THE RESPONSIBILITY OF OTHERS, NOVA ENGINEERING & ENVIRONMENTAL SHALL NOT BE RESPONSIBLE FOR THE CONTRACTOR'S SCHEDULES OR FAILURE TO CARRY OUT THE PROJECT IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. NOVA ENGINEERING AND ENVIRONMENTAL SHALL NOT HAVE CONTROL OVER OR CHARGE OF ACTS OR OMISSIONS OF THE CONTRACTOR, SUB-CONTRACTORS, OR THEIR AGENTS OR EMPLOYEES, OR OF ANY OTHER NON-NOVA ENGINEERING & ENVIRONMENTAL PERSONS PERFORMING PORTIONS OF THE PROJECT.
13. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR ALL JOB SAFETY DURING THE REPAIR WORK.
14. THE CONTRACTOR WILL LIMIT ON-SITE STORAGE OF MATERIAL TO THOSE AREAS IDENTIFIED BY THE OWNER. THE CONTRACTOR SHALL NOT UNREASONABLY ENCUMBER SITE WITH MATERIALS OR EQUIPMENT. THE MATERIAL AND EQUIPMENT SHALL BE CONFINED TO THE AREAS INDICATED IN THE CONTRACT DOCUMENTS OR BY THE DIRECTION OF THE OWNER OR ARCHITECT/ENGINEER. DO NOT LOAD STRUCTURE WITH WEIGHT THAT WILL ENDANGER STRUCTURE. THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR THE PROTECTION AND SAFEKEEPING OF PRODUCTS ON THE PREMISES. THE CONTRACTOR SHALL MOVE ANY STORED MATERIAL OR PRODUCTS WHICH INTERFERE WITH OPERATIONS OF THE OWNER.
15. WATER AND ELECTRICITY MAY BE TAKEN FROM BUILDING FOR CONSTRUCTION PURPOSES ONLY AT AREAS IDENTIFIED ACCEPTABLE BY THE OWNER. TOILET FACILITIES IN BUILDING SHALL NOT BE USED BY THE CONTRACTOR.
16. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN REQUIRED DUST BARRIERS, CANOPIES, BARRICADES, PROTECTION, AND WARNING LIGHTS IN GOOD CONDITION UNTIL THE COMPLETION OF THE WORK REQUIRING SUCH PROTECTIONS AND THEN REMOVE THE SAME. ALL CANOPIES AND BARRICADES SHALL COMPLY WITH FEDERAL, STATE, AND LOCAL LAWS AND REGULATIONS.
17. THE CONTRACTOR SHALL MAINTAIN PREMISES FREE FROM ACCUMULATIONS OF WASTE MATERIAL AND RUBBISH.
18. THE CONTRACTOR SHALL PROTECT THE GROUNDS AND LANDSCAPING WHEN PERFORMING WORK. THE CONTRACTOR WILL BE RESPONSIBLE FOR DAMAGE TO GROUNDS AND LANDSCAPING AND WILL BE REQUIRED TO REPAIR OR REPLACE AS NECESSARY.
19. THE CONTRACTOR SHALL COMPLY WITH ALL SECURITY MEASURES AND PROCEDURES.
20. COSTS CAUSED BY ILL-TIMED WORK, DEFECTIVE WORK, OR WORK NOT CONFORMING TO THE CONTRACT DOCUMENTS ARE THE RESPONSIBILITY OF THE CONTRACTOR.
21. THE CONTRACTOR SHALL PROVIDE SHORING, BRACING, AND SUPPORT AS REQUIRED TO MAINTAIN THE STRUCTURAL INTEGRITY OF THE NEW OR EXISTING CONSTRUCTION DURING THE WORK. CONSTRUCTION DEBRIS SHALL BE REMOVED IN A MANNER THAT AVOIDS OVERLOADING ADJACENT STRUCTURAL MEMBERS.
22. DO NOT STOCKPILE CONSTRUCTION MATERIAL IN A MANNER THAT WILL OVERLOAD OR EXCEED THE CAPACITY OF THE STRUCTURAL MEMBERS.
23. WHERE A DETAIL IS SHOWN FOR ONE CONDITION, IT SHALL APPLY FOR ALL LIKE OR SIMILAR CONDITIONS, EVEN THOUGH NOT SPECIFICALLY MARKED ON THE DRAWINGS.
24. ALL CONSTRUCTION SHALL BE SUBJECT TO REVIEW BY THE ARCHITECT/ENGINEER BEFORE IT IS CONCEALED FROM VIEW. COORDINATE EXPECTED REVIEW ITEMS WITH THE ARCHITECT/ENGINEER PRIOR TO THE START OF CONSTRUCTION AND PROVIDE REASONABLE NOTIFICATION TO THE ARCHITECT/ENGINEER TO ALLOW FOR SUCH REVIEWS AS THE WORK PROCEEDS.
25. REMOVE AND DISPOSE OF IN A PROPER MANNER (OFF-SITE) ALL EXISTING MATERIAL REMOVED FROM THE BUILDING DURING THE COURSE OF THE WORK ON A DAILY BASIS. REMOVAL AND DISPOSAL SHALL BE SATISFACTORY TO THE ARCHITECT/ENGINEER AND OWNER.
26. THE CONTRACTOR SHALL COORDINATE USE OF PREMISES UNDER THE DIRECTION OF THE OWNER. TEMPORARY DISRUPTIONS TO THE USE OF THE BUILDING BY EMPLOYEES AND PUBLIC, INCLUDING NOISE, DUST, AND DISRUPTION OF UTILITIES SHALL BE COORDINATED A MINIMUM OF 48 HOURS IN ADVANCE AND APPROVED BY THE OWNER. CONTRACTOR WORK NOT COORDINATED IN ADVANCE WHICH CAUSES DISRUPTIONS TO THE USE OF THE BUILDING BY EMPLOYEES AND PUBLIC MAY BE STOPPED BY THE OWNER AND SHALL NOT BE COMMENCED AGAIN UNTIL PROPER COORDINATION IS ACHIEVED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS RESULTING FROM WORK STOPPAGES OR DELAYS CAUSED BY THE CONTRACTORS LACK OF COORDINATION WITH THE OWNER.
27. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE WATER TIGHTNESS OF THE AREAS OF THE STRUCTURE BEING WORKED ON DURING THE COURSE OF THE WORK. PROVIDE TEMPORARY PROTECTION OF THE EXISTING CONSTRUCTION FROM THE WEATHER UNTIL REMOVED PORTIONS ARE COMPLETELY REPLACED WITH NEW CONSTRUCTION. THE COST OF DAMAGE AND REPAIRS SHALL BE MADE AT NO COST TO THE OWNER.
28. IN THE EVENT OF CONFLICT BETWEEN THE DRAWINGS AND THE SPECIFICATIONS, THE MORE STRINGENT REQUIREMENT AND BETTER QUALITY SHALL GOVERN UNLESS WRITTEN NOTIFICATION IS PROVIDED BY THE ARCHITECT/ENGINEER.
29. THE EXISTING BUILDING MUST REMAIN IN OPERATION 100 PERCENT OF THE TIME. DEMOLITION REQUIRED SHALL PROCEED ONLY AT THE DIRECTION OF THE OWNER ACCORDING TO SCHEDULES AS MUTUALLY AGREED UPON. THE CONTRACTOR SHALL PROVIDE ALL TEMPORARY CONTROLS AS NECESSARY TO ALLOW FOR THE BUILDING OPERATIONS.

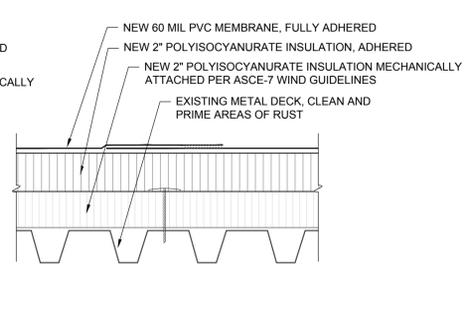
TYPICAL ASSEMBLY DETAILS:



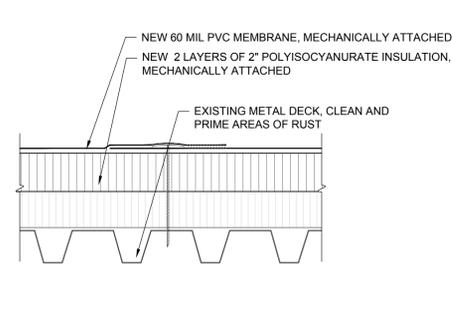
1 EXISTING ASSEMBLY
SCALE: 3" = 1'-0"



2 BASE BID ASSEMBLY
SCALE: 3" = 1'-0"



3 ALTERNATE 1 BID ASSEMBLY
SCALE: 3" = 1'-0"



4 ALTERNATE 2 BID ASSEMBLY
SCALE: 3" = 1'-0"

City Hall
Roof Replacement

Project:
310 Technology Boulevard
Peachtree Corners, Georgia

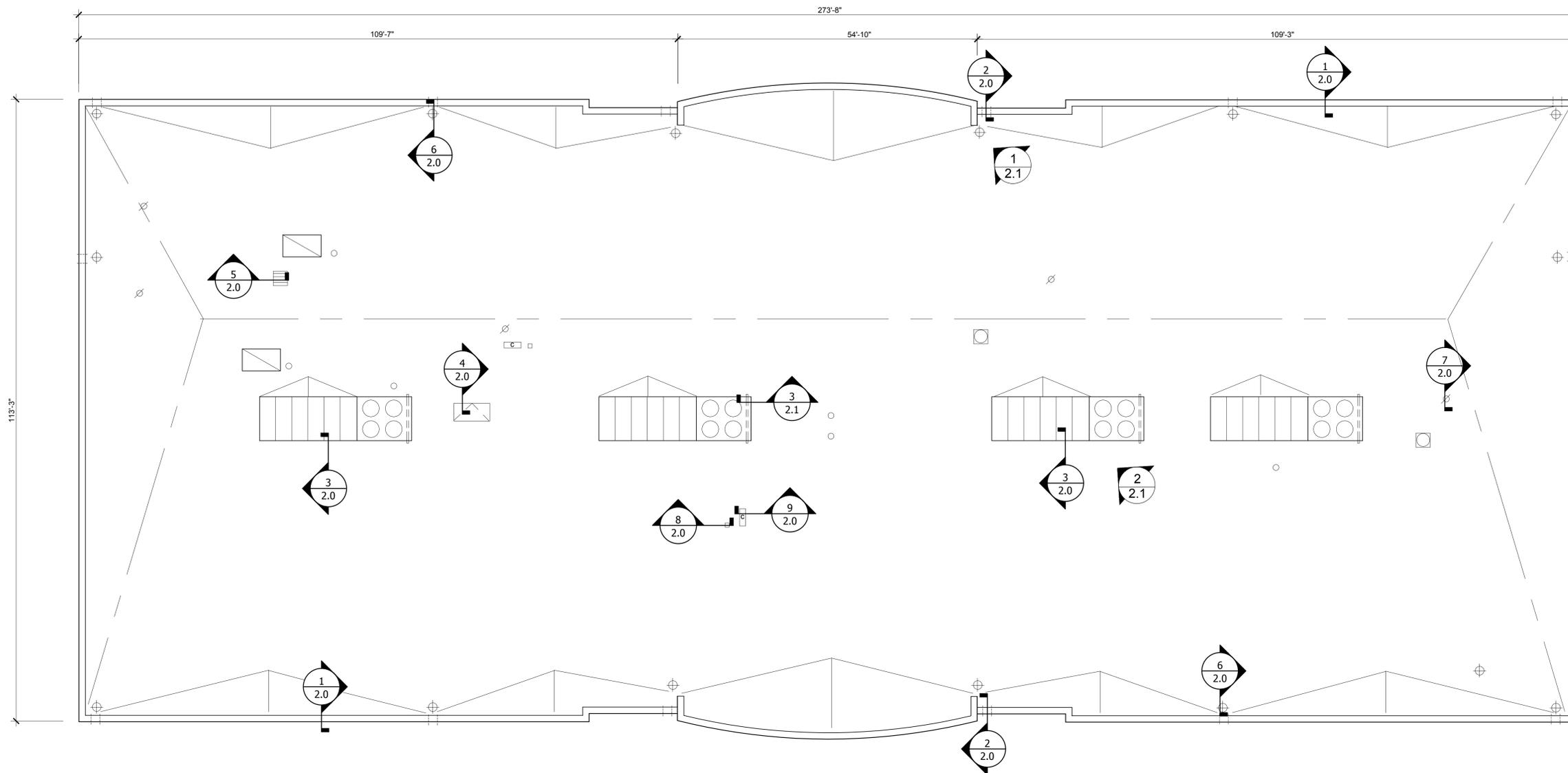
Client:
City of Peachtree Corners
C/O CPS
3368 Hardee Ave.
Atlanta Georgia 30341

DATE	REVISION
Project No.	-
Checked:	-
Drawn:	-MG
Date:	03/01/2019
Sheet Title:	

Project Information

Sheet No. 0.0

City Hall Roof Replacement



LEGEND

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- ⊙
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1 ROOF PLAN
SCALE: 3/32" = 1'-0"



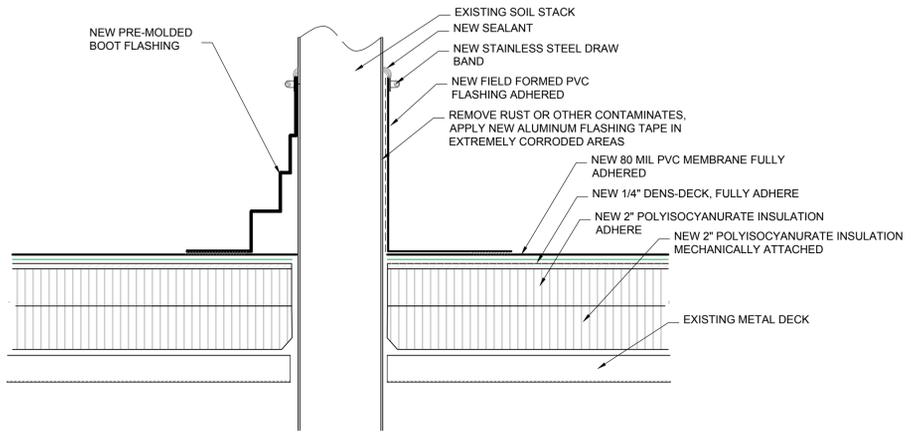
Project:
310 Technology Boulevard
Peachtree Corners, Georgia

Client:
Comprehensive Program
Services
3368 Hardee Avenue
Atlanta, GA 30341

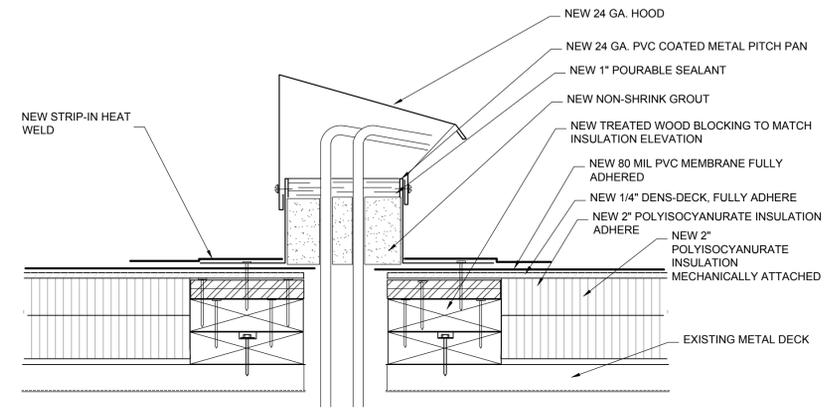
DATE	REVISION
03/01/2019	90% D.D SET

Project No. 10102-0519012
Checked: MW
Drawn: MG
Date: 02/22/2019
Sheet Title:

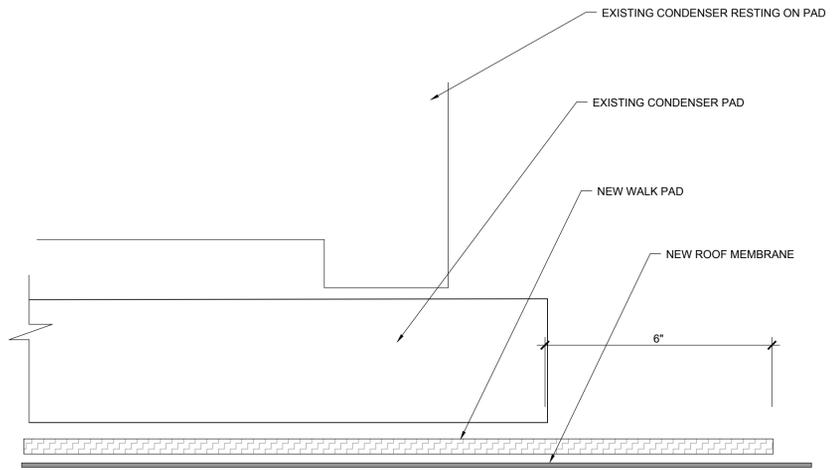
Roof Plan



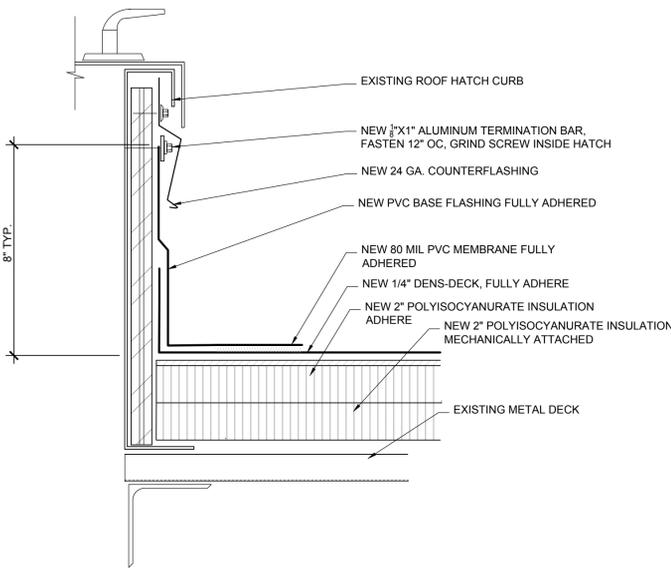
7 PIPE PENETRATION
SCALE: 3" = 1'-0"



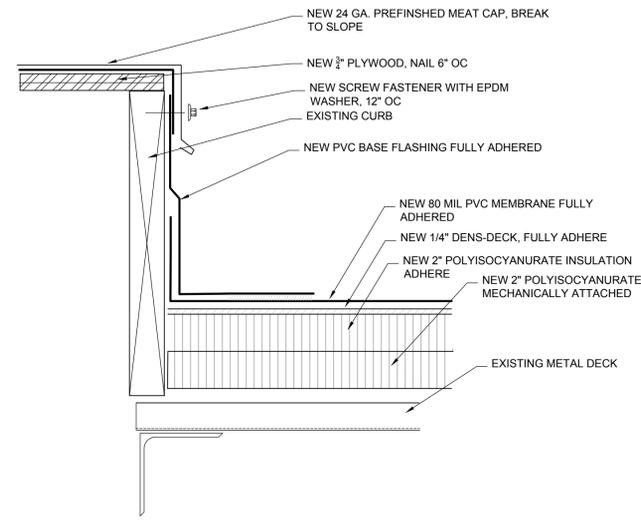
8 PIPE PORTAL
SCALE: 3" = 1'-0"



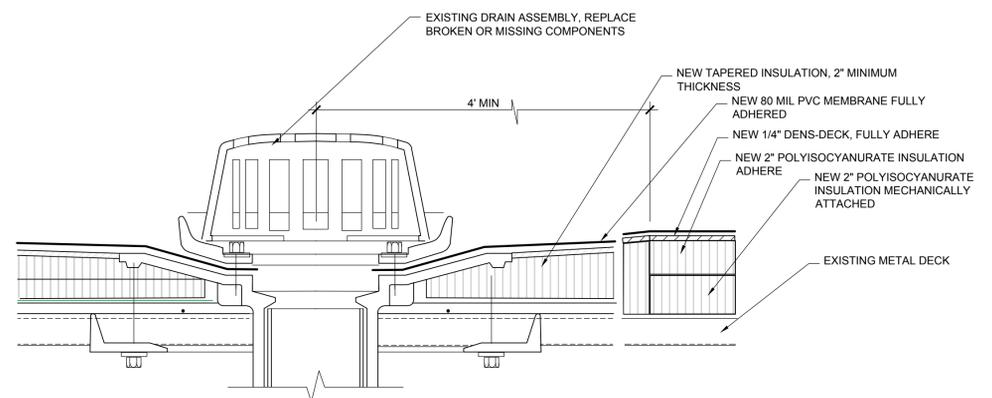
9 ROOF TOP CONDENSER
SCALE: 3" = 1'-0"



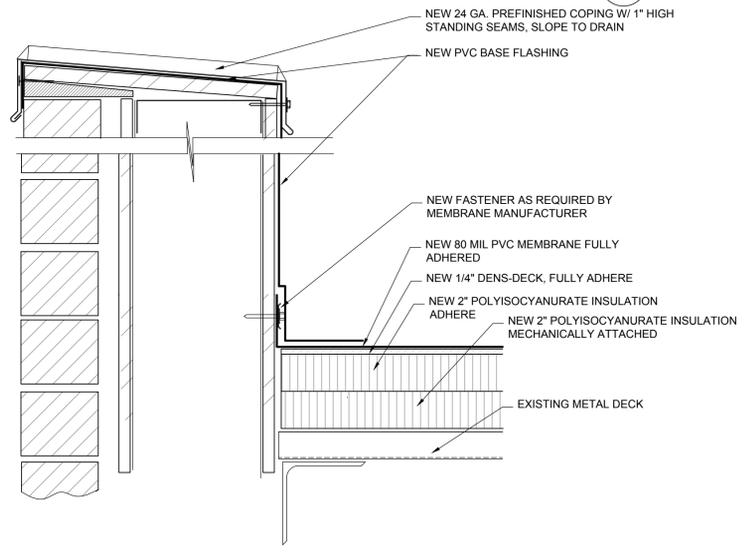
4 ROOF HATCH CURB
SCALE: 3" = 1'-0"



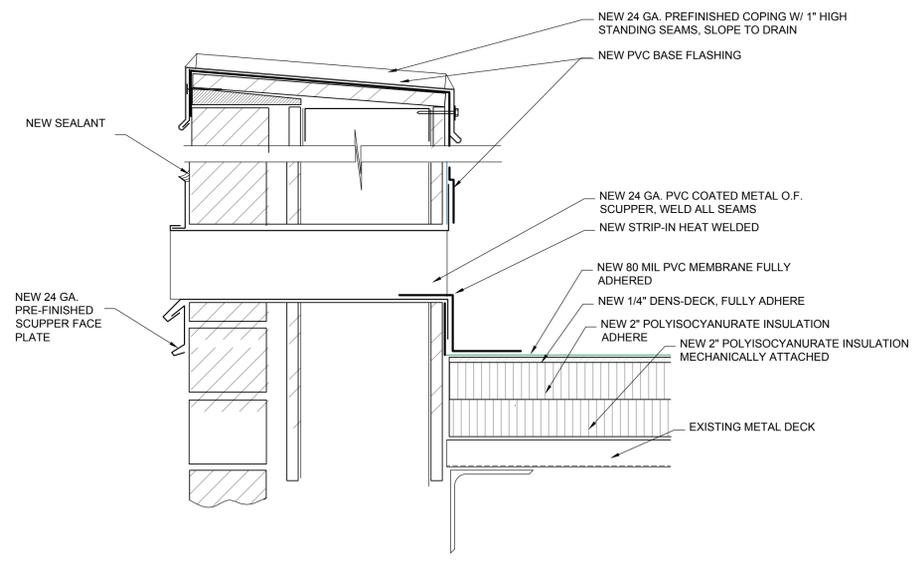
5 CAPPED OPENING
SCALE: 3" = 1'-0"



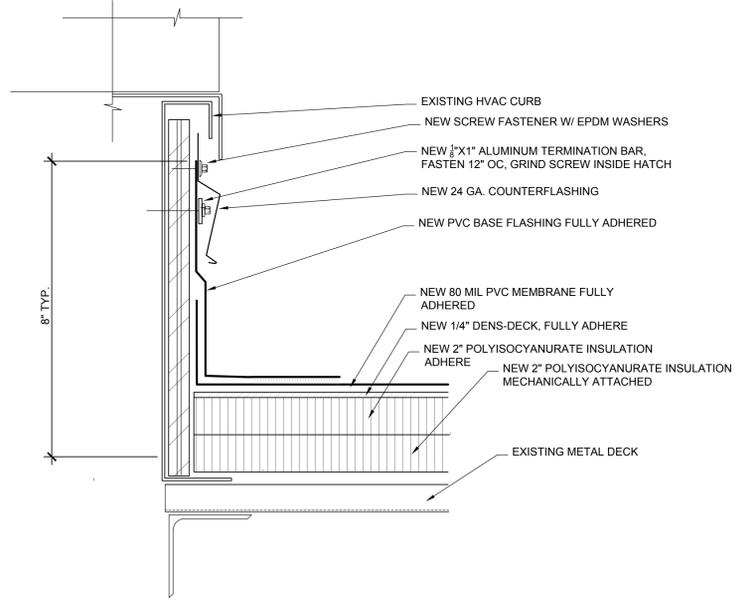
6 ROOF DRAIN
SCALE: 3" = 1'-0"



1 TYPICAL PARAPET WALL
SCALE: 3" = 1'-0"



2 OVERFLOW SCUPPER
SCALE: 3" = 1'-0"



3 TYPICAL MECHANICAL CURB
SCALE: 3" = 1'-0"

Project:
310 Technology Boulevard
Peachtree Corners, Georgia

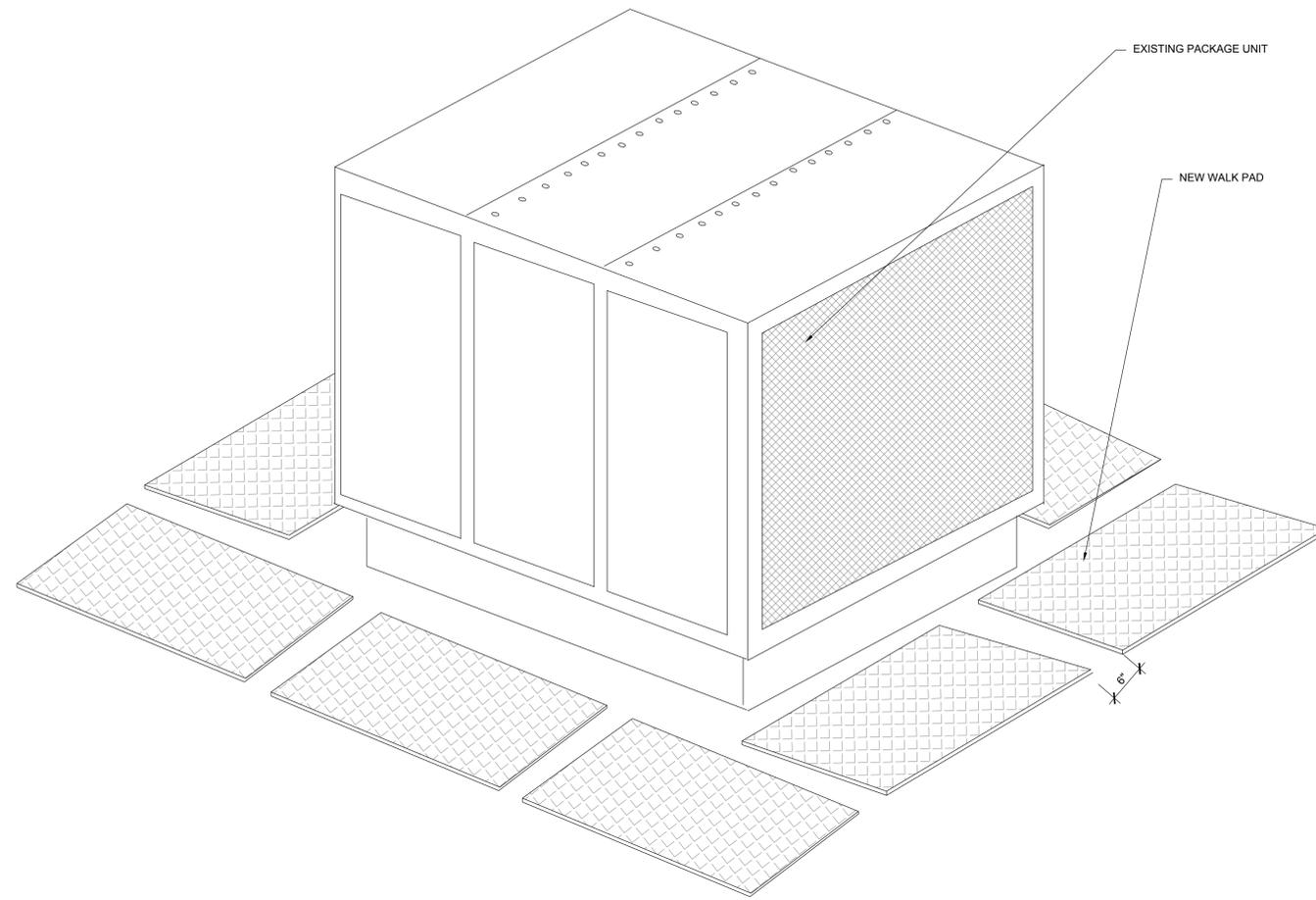
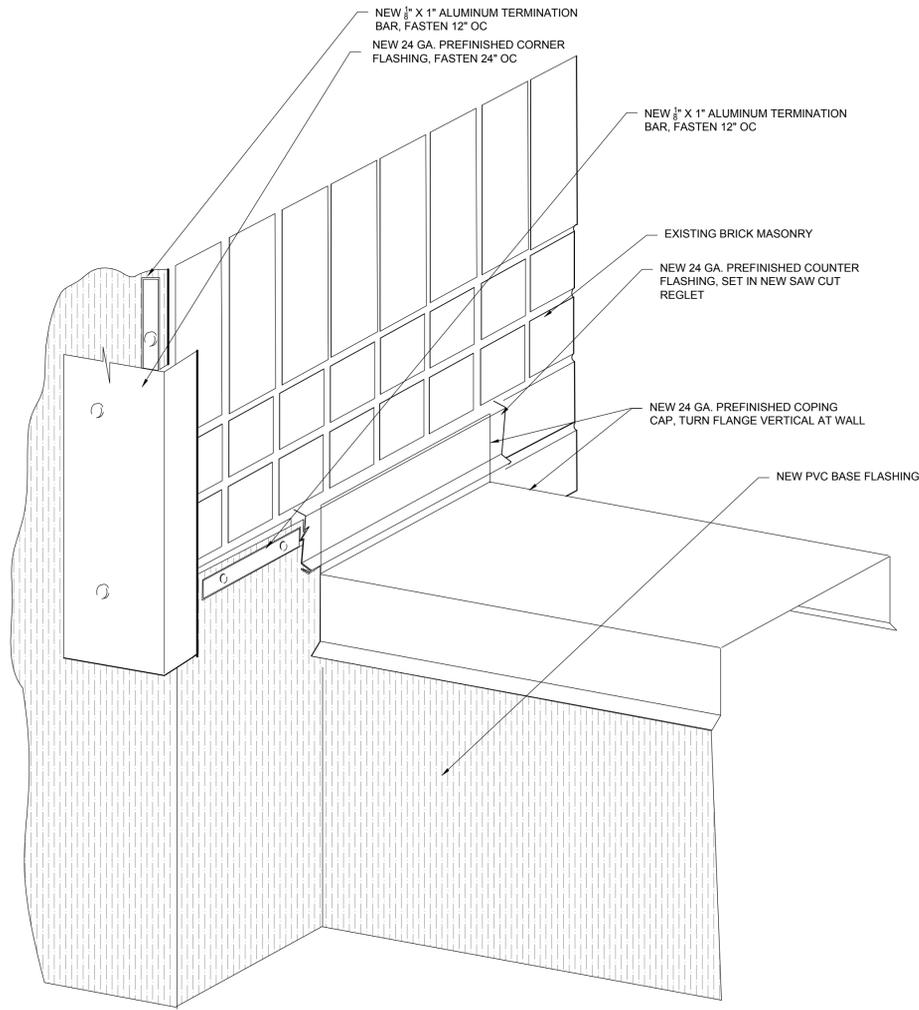
Client:
City Of Peachtree Corners
C/O CPA
3368 Hardee Ave
Atlanta, GA 30341

DATE	REVISION
3/01/2019	90% D.D SET

Project No. 0519012
Checked: MW
Drawn: MG
Date: 03/01/2019
Sheet Title:

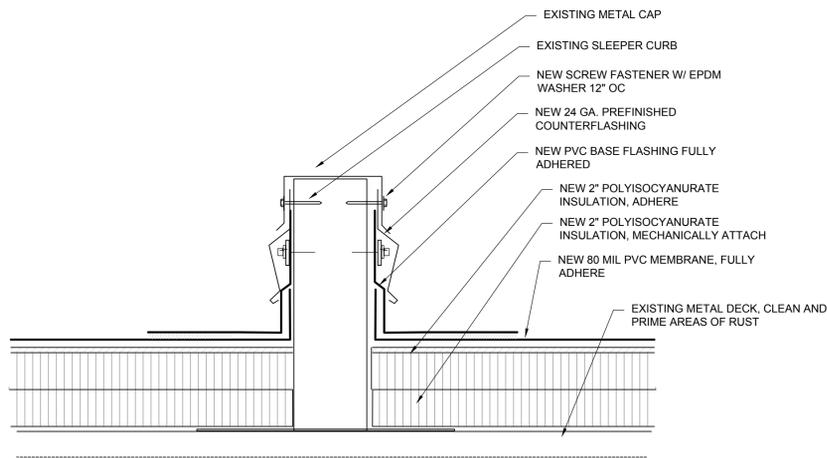
Roof Details

City Hall Roof Replacement



1 PARAPET WALL TRANSITION
SCALE: 3" = 1'-0"

2 TYPICAL PROTECTION @ HVAC
SCALE: 3" = 1'-0"



3 SLEEPER @ HVAC
SCALE: 3" = 1'-0"

Project:
310 Technology Boulevard
Peachtree Corners, Georgia

Client:
City of Peachtree Corners
C/O CPS
3368 Hardee Ave.
Atlanta, GA 30341

DATE	REVISION
03/01/2019	90% D.D SET

Project No. 0519012
Checked: MW
Drawn: MG
Date: 03/01/2019
Sheet Title:

Roof Details

CITY HALL- ROOF REPLACEMENT

SECTION 000300 – BID FORM

DUE DATE: April 5, 2019

BID TO: City of Peachtree Corners
310 Technology Parkway
Peachtree Corners, GA 30092

BID FROM: _____

ATTN: Brandon Branham

The undersigned Bidder declares that he has familiarized himself with the site, dimensions, and conditions affecting the work. After examining the Instructions to Bidders, Conditions of Contract, Supplementary Conditions, Specifications, Drawings, and Bidding Documents, Bidder accepts them as sufficient for the purpose and agrees that he will contract with City of Peachtree Corners to furnish labor, materials, and incidentals necessary to do the Work specified within these documents and indicated on the Drawings for the lump sum of:

BASE BID: Perform the repair/replacement work as specified herein, including a 30-year Manufacturer’s NDL Guarantee with puncture warranty and a Contractor’s Watertight 3-Year Warranty for the lump sum price of:

_____ (\$_____)

Applicable tax included in above Base Bid: \$ _____.

Performance and Payment Bond: Bidder DO NOT add this cost into your Bid costs.

Add the sum of _____ Dollars (\$_____)
for a Performance and Payment Bond of the total work for Base Bid, if required by Owner.

The undersigned Bidder has based this Base Bid proposal on the following:

Roofing Manufacturer(s): _____

Bid Alternate 1-Roof covering that includes 60 mil fully adhered TPO roof system in lieu of 0.25-inch coverboard and 80 mil roof membrane. Manufacturer’s coverage is reduced to 20- Year NDL Guarantee. (Ref. 01010, 1.01, Section C of specification)

_____ (\$_____)

Add the sum of _____ Dollars (\$_____)
for a Performance and Payment Bond of the total work for Bid Alternate 1, if required by Owner.

CITY HALL- ROOF REPLACEMENT

Bid Alternate 2-Roof covering that includes 60 mil mechanically attached TPO roof system in lieu of fully adhered roof membrane. Manufacturer's coverage is 20- Year NDL Guarantee. (Ref. 01010, 1.01, Section D of specification)

_____ (\$_____)

Add the sum of _____ Dollars (\$_____)
for a Performance and Payment Bond of the total work for Bid Alternate 2, if required by Owner.

CITY HALL- ROOF REPLACEMENT

Subcontractors: The undersigned Bidder has predicated his Bid costs on and plans to use the following subcontractors:

- Carpenter Work: _____
- Sheet Metal Work: _____
- Mechanical Work: _____
- Electrical Work: _____
- Other (Specify): _____

CITY HALL- ROOF REPLACEMENT

Unit Price Proposal: Unit prices for calculation of work, complete in place, to be added or deleted from the project:

1) Wood Nailers:

2" x 4" wood nailer:	\$_____ per linear foot
2" x 6" wood nailer:	\$_____ per linear foot
2" x 8" wood nailer:	\$_____ per linear foot
2" x 12" wood nailer:	\$_____ per linear foot
1" x 4" wood nailer:	\$_____ per linear foot
1" x 6" wood nailer:	\$_____ per linear foot

2) Roof Deck: Remove, replace, and/or repair damaged/deteriorated decking, matching existing type, weight, gauge, and dimension:

a) Metal Decking Rust Repair: (Wire brush and prime) Include 10 locations in Base Bid	\$_____ per square foot
b) Metal Decking Repair: (Less than 144 Sq. In. 16 Ga. metal plate)	\$_____ per square foot
c) Metal Deck Replacement	\$_____ per square foot

Project Completion: Project Completion: The above specified project shall be completed within _____ (Base Bid), _____ (Alternate Bid No.1), _____ (Bid Alternate 2), consecutive calendar days from date of Notice to Proceed, including overtime on weekends as allowed by the Owner, The undersigned Bidder agrees to pay liquidated expenses to Owner for each calendar day of delay until work is substantially complete.

Insurance and Bonds: If the undersigned Bidder is notified within three weeks after Bid opening of the acceptance of this Bid and a contract to be awarded, he agrees to provide the required insurance coverage within the following two weeks. In addition, he agrees to execute the contract for the above-mentioned compensations on the standard forms referenced in the Bidding Documents and, if required, further agrees to execute a surety bond for the above work.

Acknowledgment of Addenda: Acknowledgment is hereby made of receipt of the following addenda:

Addendum No. 1 - Date Received: _____	Initial: _____
Addendum No. 2 - Date Received: _____	Initial: _____
Addendum No. 3 - Date Received: _____	Initial: _____
Addendum No. 4 - Date Received: _____	Initial: _____

Taxes: The Bid amounts as stated above include all sales taxes and any other taxes for all labor, materials, and appliances to and upon which the taxes are levied.

CITY HALL- ROOF REPLACEMENT

Yours truly,

Firm Name

Signature of Officer-Title

Street Address

City State Zip

(____)____-_____

(Area Code) Telephone Number

* Seal
(If Bidder is a Corporation)