



---

# Low Slope Roof Replacement at Metro South Transfer Station

**RFB 13-2285**

**Metro Parks and Environmental Services Department**

600 NE Grand Ave.  
Portland, OR 97232  
503-797-1700

**Project Manager**

Pete Hillmann  
Pete.hillmann@oregonmetro.gov  
503-797-1696

**Department Procurement Staff**

Kim Bardes  
Kim.bades@oregonmetro.gov  
503-797-1783

Notice is hereby given that bids for RFB 13-2285 for Low Slope Roof Replacement at Metro South Transfer Station shall be received by Metro, 600 NE Grand Avenue, Portland OR 97232 until 2:00 p.m. on January 17, 2013. It is the sole responsibility of the bidder to ensure that Metro receives the Bid by the specified date and time. Bids may be mailed, hand delivered, faxed or emailed. All late Bids shall be rejected. Bidders shall review all instructions and contract terms and condition.





600 NE Grand Ave.  
Portland, OR 97232-2736  
503-797-1700

# Public Improvement Project

## Request for Bid - Informal (RFB 13-2285)

---

Metro Parks and Environmental Services Department hereby requests bids for Low Slope Roof Replacement at Metro South Transfer Station. Bids are due no later than the date and time indicated on the RFB cover page, at Metro, 600 NE Grand Avenue, Portland, OR 97232.

Bidding documents, (including plans and specifications depicting the work) may be viewed at the Metro website, [www.oregonmetro.gov](http://www.oregonmetro.gov) under "Doing Business".

All bids must conform to the RFB format and be complete including the use of any required forms. Metro may accept or reject any or all bids, in whole or in part, or waive irregularities not affecting substantial rights if such action is deemed in the public interest.

Metro and its contractors will not discriminate against any person(s), employee or applicant for employment based on race, creed, color, national origin, sex, sexual orientation, age, religion, physical handicap, political affiliation or marital status. Metro fully complies with Title VI of the Civil Rights Act of 1964 and related statutes and regulations in all programs and activities. For more information, or to obtain a Title VI Complaint Form, see [www.oregonmetro.gov](http://www.oregonmetro.gov).

Metro extends equal opportunity to all persons and specifically encourages minority, women-owned, and emerging small businesses to access and participate in this and all Metro projects, programs and services.

A Mandatory Pre-Bid Conference is scheduled for all potential prime contractors on January 3, 2013, at 9:30 a.m. in the Control Room at Metro South Transfer Station, located at 2001 Washington St in Oregon City, OR. Interested sub-contractors are also invited.

This project will be subject to prevailing wage requirements as established by the Oregon Bureau of Labor and Industries (BOLI). By submitting a bid, all bidders certify that they will pay and comply with minimum prevailing wage requirements of ORS 279C.800-279C.870.

For all construction projects over \$25,000, all bidders must be appropriately licensed with the Construction Contractors Board or the State Landscape Contractors Board. (ORS 279C.365 (1)(k)).





600 NE Grand Ave.  
Portland, OR 97232-2736  
503-797-1700

# Public Improvement Project

## Request for Bid - Informal (RFB 13-2285)

---

### INVITATION TO BID

Metro is requesting bids for Low Slope Roof Replacement at Metro South Transfer Station. Bids must be mailed, delivered, faxed or emailed to, Metro, 600 NE Grand, Portland, Oregon 97232-2736, Attention: Pete Hillmann.

#### **Description of Work**

1. Metro desires to replace two areas of aging built up (BUR) roofing on the Main Operations Building at Metro South Transfer Station with a fully adhered reinforced TPO (thermoplastic polyolefin) roofing system. The two areas which must be replaced are as follows:
  - a. Control Room/Pit Roof- Approximately 2640 square feet.
  - b. Main Entrance Roof- Approximately 1600 square feet.
2. In addition, this project requires two new skylights in the Control Room/Pit Roof, including support steel framing below the deck.
3. Additional details can be found in DETAILED SCOPE OF WORK AND SUPPLEMENTAL INFORMATION (found on page 8), and in the specifications and plans incorporated in this Request for Bid.

#### **Qualifications**

Contractor must have five or more years of successful experience in the installation of single ply TPO roof systems. Qualifications and references shall be supplied with bid. Metro reserves the right to evaluate, approve or reject firms on the basis of their review.

The roofer must be trained and authorized by the manufacturer of the approved roofing system, to install that system.



600 NE Grand Ave.  
Portland, OR 97232-2736  
503-797-1700

# Public Improvement Project

## Request for Bid - Informal (RFB 13-2285)

---

### INSTRUCTIONS TO BIDDERS

#### **BID**

Metro is soliciting Bids for Low Slope Roof Replacement at Metro South Transfer Station. Bids must be mailed, delivered, faxed or emailed to, Metro Parks and Environmental Services Department, Attention: Pete Hillmann, RFB 13-2285, 600 NE Grand, Portland, Oregon 97232-2736, 503-797-1795 fax or [pete.hillmann@oregonmetro.gov](mailto:pete.hillmann@oregonmetro.gov) .

All bids must be received no later than the date and time indicated on the RFB cover page .If mailed or delivered, the outside of the envelope shall plainly identify the subject of the Bid, the opening date, and the Bid number.

All bids must be clearly and distinctly typed or written with ink or indelible pencil. All blank spaces must be completed. No erasures are permitted. Mistakes must be crossed out and corrections typewritten or written in ink adjacent thereto, and initialed in ink by the party signing the Bid, or their authorized representative.

Written amounts shall be shown in both words and figures. Words shall govern in cases of discrepancy between the amounts stated in words and the amounts stated in figures.

All bids must be on the form furnished by Metro or they may be rejected by Metro. Where plans and specifications are attached to the bid, the Bidder must return them with the bid response.

#### **COST OF BID**

This Request for Bid does not commit Metro to pay any costs incurred by any Bidder in the submission of a bid, or in making necessary studies or designs for the preparation thereof, or for procuring or contracting for the items to be furnished under the invitation to bid.

#### **ERRORS/OMISSIONS**

Any Bid may be deemed non-responsive by the Procurement Officer if it is: Not on the Bid forms provided; contains errors or omissions, erasures, alterations, or additions of any kind; proposes prices which are unsolicited or obviously unbalanced; or not in complete conformance with any and all conditions of the bidding documents.

#### **ADDENDA TO PLANS OR SPECIFICATIONS**

Requests for additional information or interpretation of the contract documents shall be delivered to the Pete Hillmann, [pete.hillmann@oregonmetro.gov](mailto:pete.hillmann@oregonmetro.gov), in writing at least five (5) business days prior to the Bid opening date and time. If, in the opinion of Metro, additional information or interpretation is needed by the Bidders, an addendum will be issued to all known specification holders. The provisions of any written addenda issued by the Procurement Officer at least seventy two (72) hours prior to the Bid opening date and time shall be binding upon the Bidders, and failure of a Bidder to obtain such addenda shall not excuse compliance therewith by the successful bidder.

#### **MODIFICATION OF BID**

An offer to modify the bid that is received from the successful Bidder after award of contract that makes the terms of the Bid more favorable or advantageous to Metro will be considered, and may thereafter be accepted. To be effective, every modification must be made in writing over the signature of the Bidder.

#### **WITHDRAWAL OF BIDS**

A Bidder may withdraw its bid in person, or by written or telegraphic request, which are received prior to the scheduled closing time for filing Bids. A bid may not be withdrawn by facsimile (FAX). Negligence on the part of the Bidder in preparing his bid confers no right to withdraw the bid after the scheduled closing time for filing Bids.

#### **LATE BID**

Bids received after the scheduled closing time for filing Bids will be returned to the Bidder unopened, unless such closing time is extended by Metro in writing.

# Public Improvement Project

## Request for Bid - Informal (RFB 13-2285)

---

### EXECUTION

Each Bid shall give the Bidder's full business address and bear its legal signature.

Bids by partnerships must list the full name of all partners and be signed by a partner or agent authorized to execute the contract on behalf of the partnership and identified by printed name and title.

Bids by corporations must bear the legal name of the corporation, the name of the state of incorporation, and the signature of the officer or agent authorized to legally bind the corporation.

Upon request by Metro, satisfactory evidence of the authority of the partner or officer shall be furnished.

If an agent who is not an officer of the corporation or a member of the partnership signs the Bid, a notarized Power of Attorney must be on file with Metro prior to the opening of Bids or be submitted with the Bid. Without such notice of authority, the Bid shall be considered improperly executed, defective and therefore non-responsive.

A Bid submitted by a joint venture must include a certified copy of the terms and conditions of the agreement creating the joint venture.

### EXAMINATION OF PLANS, SPECIFICATIONS, AND SITE OF WORK

It is understood that the Bidder, before submitting a Bid, has made a careful examination of the plans, specifications, and contract; that it has fully informed itself as to the quality and quantity of materials and the character of the work required; and that it has made a careful examination of the location and condition of the work and the sources of supply for materials.

### COMPLIANCE

Each Bidder shall inform itself of, and the Bidder awarded a contract shall comply with, federal, state, and local laws, statutes, and ordinances relative to the execution of the work. This requirement includes, but is not limited to, nondiscrimination in the employment of labor, protection of public and employee safety and health, environmental protection, waste reduction and recycling, the protection of natural resources, fire protection, burning and non-burning requirements, permits, fees and similar subjects.

### ELIGIBILITY

Prior to submitting a Bid, all Bidders (and subcontractors of bidders) on public works/construction projects are required to be appropriately registered with the State of Oregon Construction Contractors Board pursuant to ORS 701.035.

### EQUAL EMPLOYMENT AND NONDISCRIMINATION

Metro and its contractors will not discriminate against any person(s), employee or applicant for employment based on race, color, religion, sex, national origin, age, marital status, familial status, gender identity, sexual orientation, disability for which a reasonable accommodation can be made, or any other status protected by law. Metro fully complies with Title VI of the Civil Rights Act of 1964 and related statutes and regulations in all programs and activities. For more information, or to obtain a Title VI Complaint Form, see [www.oregonmetro.gov](http://www.oregonmetro.gov).

### PERMITS AND LICENSES

Each Bidder shall obtain and include in their Bid the cost for all trade permits and licenses, which may be required to perform the contract. Metro will secure and pay for the building permit. The Contractor will receive a Notice to Proceed once all Owner secured permits have been issued by the relevant regulatory agencies.

### CONFLICT OF INTEREST

A Bidder filing a bid thereby certifies that no officer, agent, or employee of Metro or Metro has a pecuniary interest in this Bid or has participated in contract negotiations on behalf of Metro; that the bid is made in good faith without fraud, collusion, or connection of any kind with any other Bidder for the same call for Bids; the Bidder is competing solely in its own behalf without connection with, or obligation to, any undisclosed person or firm.

# Public Improvement Project

## Request for Bid - Informal (RFB 13-2285)

---

### **IMMATERIAL VARIANCES**

Metro reserves the right to determine whether equipment or materials that comply substantially in quality and performance with the specifications are acceptable to Metro, and whether any variance listed by the Bidder in a bid is material or immaterial.

### **LATEST MODEL**

Parts and materials must be new, of latest model, of current date, and meet specifications. This provision excludes all surplus, remanufactured, and used products, unless such material is proposed in lieu of items specified.

### **"OR APPROVED EQUAL" CLAUSE**

In order to establish a basis of quality, certain processes, types of machinery and equipment, or kinds of materials may be specified, either by description of process or by designating a manufacturer by name and referring to his brand or product designation, or by specifying a kind of material. It is not the intent of these specifications to exclude other processes, equipment, or materials of equal value, utility or merit.

Whenever a process is designated or a manufacturer's name, brand, or product is described, it shall be understood that the words, "or approved equal" follow such name, designation, or description, whether in fact they do so or not.

If a Bidder proposes to furnish an item, process or material which it claims to be of equal utility to the one designated, then:

1. Bidder shall submit as part of their Bid, a written statement describing it together with supporting data and details sufficient to permit Metro to evaluate the same. If the product contains chemical properties, the relevant Material Safety Data Sheets (MSDS) shall be included to document all health and physical hazards, chemical ingredients, exposure limits, personal protective equipment for handling and use, and emergency procedures in response to unanticipated spills or environmental release.
2. Metro may require demonstration, additional tests, and additional data, all to be supplied at the expense of the Bidder.
3. Metro shall in its sole discretion determine if an item submitted as an alternate or approved equal is "equal" or "equivalent".

### **RECYCLABLE PRODUCTS**

Vendors shall use recyclable products to the maximum extent economically feasible in the performance of the work set forth in this contract document.

### **RECYCLED PRODUCTS AS BID ITEMS**

Oregon Law (ORS 279A.125) requires Metro and all public agencies to give preference to materials and supplies manufactured from recycled materials.

All Bidders are therefore required to specify the exact or minimum percentage of recycled paper and fiber type in all paper products or recycled content in all other products offered, plus both the post-consumer and secondary waste content of the products offered.

Only Bids submitted with such information shall receive preference consideration and post Bid declaration or discovery shall not be allowed.

### **TERMS**

A Bid may be rejected if it requires payment in less than thirty (30) calendar days after an approved invoice date or if it requires payment, in whole or in part, less than fifteen (15) days after invoice approval prior to delivery.

### **PRICES**

All prices submitted shall be firm during the contract period. If unit prices are requested, they should be provided for each unit on which there is a Bid. In case of mistake in extension of price, unit prices shall govern. All prices shall be Freight on Board (F.O.B.) the destination designated by Metro.



600 NE Grand Ave.  
Portland, OR 97232-2736  
503-797-1700

# Public Improvement Project

## Request for Bid - Informal (RFB 13-2285)

---

### **WARRANTY/GUARANTY**

Each Bid for the furnishing of materials and equipment shall provide an explanation of both the Bidder's and manufacturer's warranties on materials and workmanship.

Every Bid shall indicate any warranty costs to Metro, including but not limited to, all parts, labor, and shipping costs required for compliance with any specific requirement(s) contained in the special conditions.

Each Bidder on a public works/construction project shall provide at minimum a one-year guaranty on all materials and workmanship.

### **SERVICE**

Each Bidder shall furnish detailed information on any service facilities, locations, and procedures as well as information on any maintenance agreements or contracts available to Metro.

### **RESIDENT/NON-RESIDENT BIDDER**

Oregon law requires Metro, in determining the lowest responsive Bidder, to add a percent increase on the Bid of a non-resident Bidder equal to the percent, if any, of the preference given to that Bidder in the state in which that Bidder resides. Therefore, each Bidder must indicate whether it is a resident or non-resident Bidder. A resident Bidder is a Bidder that has paid unemployment taxes or income taxes in the state of Oregon during the last twelve (12) months immediately preceding submission of this Bid, has a business address in Oregon, and has stated in its Bid that it is a "resident Bidder."

### **EXPERIENCE AND ABILITY TO PERFORM THE WORK**

Upon request, Bidders must present all necessary information indicating that the Bidder has met the standards of responsibility set forth in ORS 279B.110. Metro will make the final determination as to whether or not the Bidder is qualified to perform the work.

The Contractor and/or First Tier sub-contractor shall provide a list of three (3) different project references with their Bid submission. These references will be contacted regarding the quality of workmanship and service that the Bidder or sub-contractors have provided on projects of comparable size and scope. The Bidder shall submit this information using the Contractor Qualification Statement.

### **BASIS OF AWARD**

The award shall be made to the responsible Bidder submitting the lowest responsive bid submitting the lowest total BASE BID. Metro reserves the right to consider any and all alternates offered by the selected Bidder.

Any determination of bidder's responsibility or responsiveness is subject to review and determination by the Office of the Metro Attorney as to legal sufficiency. Metro reserves the right to accept or reject any and all bids in whole or in part and to waive any irregularities in the best interest of Metro. Only those bidders that, in the sole opinion of Metro, meet the minimum experience requirements shall be considered to be responsible bidders.

In the event all Bids exceed the engineer's estimate, Metro reserves the right to negotiate with the selected low Bidder in an effort to meet the project budget.

### **NOTICE OF AWARD**

Within twenty (20) calendar days after the opening of Bids, Metro will accept one of the Bids, or combination of Bids, or reject all Bids in accordance with the Basis of Award. The acceptance of the Bid will be by written Notice of Award, mailed or delivered to the office designated in the Bid. The Notice of Award shall not entitle the party to whom it is delivered to any rights whatsoever.

### **CONTRACT**

Within seven (7) business days of receipt of the contract from Metro, the Successful Bidder shall sign and deliver the Contract to Metro, along with all required insurance certificates and bonds listed below.

# Public Improvement Project

## Request for Bid - Informal (RFB 13-2285)

---

### INSURANCE AND WORKERS COMPENSATION

Contractor shall purchase and maintain at the Contractor's expense, the following types of insurance, covering the Contractor, its employees, and agents:

1. The most recently approved ISO (Insurance Services Office) Commercial General Liability policy, or its equivalent, written on an occurrence basis, with limits not less than \$1,000,000 per occurrence and \$1,000,000 aggregate. The policy will include coverage for bodily injury, property damage, personal injury, contractual liability, premises and products/completed operations. Contractor's coverage will be primary as respects Metro;
2. Automobile insurance with coverage for bodily injury and property damage and with limits not less than minimum of \$1,000,000 per occurrence;
3. Workers' Compensation insurance meeting Oregon statutory requirements including Employer's Liability with limits not less than \$500,000 per accident or disease; and
4. Professional Liability Insurance, with limits of not less than \$1,000,000 per occurrence, covering personal injury and property damage arising from errors, omissions or malpractice.

Metro, its elected officials, departments, employees, and agents shall be named as ADDITIONAL INSUREDS on Commercial General Liability and Automobile policies.

Contractor shall provide to Metro 30 days notice of any material change or policy cancellation.

Contractor shall provide Metro with a Certificate of Insurance complying with this article upon return of the Contractor signed agreement to Metro. Certificate of Insurance shall identify the Metro contract number.

Contractor, and all subsequent subcontractors and suppliers performing work pursuant to this contract shall provide Workers' Compensation benefits as required by and in accordance with all applicable state and federal laws.

### COMMENCEMENT OF WORK

Prior to starting work on a contract or sub-contract for a public works project, a contractor or sub-contractor shall file a public works bond with the Construction Contractors Board. Bond shall be from a corporate surety authorized to do business in the state of Oregon and be in the amount of \$30,000 and shall comply with all other requirements of ORS 279C.800 to 279C.870. Contractor shall provide written documentation of bond number(s) of bond(s) for contractor and all sub contractor(s) to Metro Project Manager with original bid or prior to starting project work.

### FOREIGN CONTRACTOR

A Contractor that is not domiciled in or registered to do business in the State of Oregon shall, upon execution of a contract in excess of \$10,000, promptly report the total contract price, terms of payment, length of contract and all other required information to the Oregon Department of Revenue. Compliance shall be documented and Metro shall be fully satisfied as to complete compliance prior to release of final payment.

### NOTICE OF ASSIGNMENT

Metro will not recognize any assignment or transfer of any interest in this contract without the prior written consent of the Procurement Officer and the Metro Attorney.

### HAZARD COMMUNICATION

The Contractor shall be required to strictly adhere to, coordinate with Metro and document full compliance with the policies and procedures of the Oregon Occupational Health and Safety Code, OAR Chapter 437, Division 155, Hazard Communication. Therefore, the Contractor and all subcontractors and suppliers within his or her control shall notify Metro and all parties to the agreement as to:

- > Hazardous materials to which they may be exposed on site;
- > Employee measures to lessen the possibility of exposure;
- > All contractor measures to reduce the risk;
- > Procedures to follow if exposed.

The Contractor shall provide Metro with all Material Safety Data Sheets (MSDS) prior to delivery or introduction of the material on site. For further information or clarification, contact the Metro Risk Management Division at 503-797-1622.



600 NE Grand Ave.  
Portland, OR 97232-2736  
503-797-1700

# Public Improvement Project

## Request for Bid - Informal (RFB 13-2285)

---

### **PATENTS**

The Contractor agrees to protect, to defend (if Metro requests) and save the agency harmless against any demand for payment for wrongful or unauthorized use of any patented material, process, article, or device that may enter into manufacture, construction, or forms a part of the work covered by this contract.

### **INVOICES, PAY APPLICATIONS**

Invoices/pay applications shall be prepared and submitted to Project Manager unless otherwise specified. Invoices shall contain the following information: Metro contract number, item numbers, description of supplies or services, sizes, quantities, unit prices and extended totals. Payment shall be made by Metro on a Net 30 day basis upon approval of Contractor invoice.

### **LAW OF STATE OF OREGON**

This contract is entered into within the state of Oregon, and the law of said State, whether substantive or procedural, shall apply and be followed with respect to this contract.

### **PREVAILING WAGE**

The contractor, and all subcontractors and suppliers, shall be required to comply with ORS 279C.800 through 279C.870 and ensure that all workers are paid not less than, and in accordance with, the Prevailing Wages published by the Oregon Bureau of Labor and Industries. This project is covered by appropriate Bureau of Labor and Industries (BOLI) prevailing wage rates available at <http://www.boli.state.or.us> or by calling the State of Oregon Bureau of Labor and Industries at 971-673-0839. If the project is subject to Davis-Bacon Act (40U.S.C. 276A), Contractor and all sub-contractors shall pay the higher rate of state or federal prevailing wages.

Bureau of Labor and Industries  
Wage and Hour Division, Prevailing Wage Unit  
800 NE Oregon Street, #32, Portland, OR 97232

### **CERTIFIED PAYROLL**

The Contractor and all sub-contractors, in compliance with ORS 279C.845, shall file certified payroll statements with Metro Project Manager to be due once per month by the fifth business day of the following month. Metro shall retain 25% of any amount earned by Contractor if certified payrolls are not submitted as required. Contractor shall retain 25% of sub-contractor earnings if sub-contractor certified payrolls are not submitted as required. Upon receipt of appropriate certified payrolls, Metro and Contractor shall release any amounts so retained within fourteen (14) days.

### **MINORITY, WOMEN AND EMERGING SMALL BUSINESS PROGRAM**

In the event that any subcontracts are to be utilized in the performance of this agreement, the Bidder's attention is directed to Metro Code Section 2.04.100, which encourages the use of minority, women and emerging small businesses (MWESB) sub-contractors to the maximum extent practical.

Copies of these MWESB requirements are available from Metro Procurement Services, 600 NE Grand Avenue, Portland, OR 97232 or by calling 503-797-1648.

### **NOTICE TO ALL BIDDERS**

The attached agreement included herein reflects preliminary, draft contract language and selected, proposed contract terms for this procurement. Bidders should be aware that such language terms and provisions are for illustrative purposes only and that Metro reserves the right, following submission and ranking of all bids submitted in response to this procurement, to amend, modify or negotiate over any and all such contract language, terms and provisions regarding the agreement rising from this procurement. By submitting a bid in response to this procurement, bidders acknowledge that they are aware of and do not object to any later, potential amendment and modification of such preliminary, draft language and terms. In addition, by responding to this procurement, bidders acknowledge that they are aware of their ability to offer alternatives to any of the preliminary, draft contract language and proposed contract terms set forth herein.

# Public Improvement Project

## Request for Bid - Informal (RFB 13-2285)

---

### DETAILED SCOPE OF WORK AND SUPPLEMENTAL INFORMATION

#### A. Background and History

1. Metro South Transfer Station (MSS) is located at 2001 Washington St, Oregon City, OR 97045. It is a refuse transfer and recovery facility, operated under contract with Republic Services.
2. The Main Operations Building was originally built in 1983, when the facility began operations. The building has been modified several times over the years. It is a pre-engineered metal building with a metal paneled roof, for the most part. There are two areas of built up roof (BUR), and both are in need of replacement
3. The two areas of low slope BUR roof which we plan to replace are as follows:
4. Control Room/Pit Roof- This roof was built in 1991, and is approximately 2640 square feet. The existing roof has a bituminous cover over 2" of insulation, on a sloping deck (1/4" per foot) of galvanized steel decking with 3" corrugations. The deck is supported on W18X55 stringers about 12' apart.
5. Main Entrance Roof- This roof was constructed in 1983. It is approximately 1600 square feet. The existing roof is BUR with tapered insulation on metal decking. The deck is supported on W10X22 stringers about 5' apart. Access for construction on this roof is more difficult due to the sloping terrain at the Main Entrance, and the adjacent Household Hazardous Waste (H2W) Facility.
6. Metro desires the services of a qualified Contractor to replace the roofing on these two areas with an approved 80 mil TPO roof system.

#### B. Description of the Work

1. The design for this project is by Iselin Architects The plans and specifications, included with this RFB outline the work to be done.
2. The work includes but is not limited to the following:
  - a. Demolition and removal of existing roofing materials.
  - b. Replace existing roofing with an approved 80 mil TPO roofing system.
  - c. Reinstall and replace metal flashing as indicated on the plans.
  - d. Install 2 new skylights on the Control Room/Pit roof, including support steel.
  - e. Reinstall or replace existing roof drains.
  - f. Replace existing roof overflow scuppers on the Control Room/Pit roof.
  - g. Install a fall protection anchor on the Main Entrance Roof.

#### C. Coordination

1. Contractor is required to minimize impact on the operations of Metro South Transfer Station and the Household Hazardous Waste (H2W) Facility
2. Contractor shall provide traffic control and a spotter when using lift equipment to load and unload equipment and materials from the roofs.
3. Schedule demolition of existing roofs when favorable weather is predicted for 5 days, to preclude rain damage to the work or the building interior.
4. The H2W Facility is open for the public to drop off hazardous materials from 9:00 am to 4:00 pm, Monday through Saturday. Contractor must avoid those hours when servicing the Main Entrance Roof with lift equipment which will restrict access.
5. Access to the Control Room/Pit Roof is not as restrictive. The paving block area adjacent to the Control Room and Bay 1 entrance will be available to the Contractor for materials and lift equipment. Deliveries should be made before 7:00 am or after 3:00 pm to minimize conflict with refuse trucks entering Bay 1.
6. Work to install the support framing and cutting the decking for the skylights must be coordinated carefully with the station operator. It must be done at night when refuse can be cleared below, to avoid the chance of fire.
7. Contractor will coordinate all inspections required by the City and by the roof system manufacturer.
8. Metro desires that the work be substantially complete by June 30, 2013

# Public Improvement Project

## Request for Bid - Informal (RFB 13-2285)

---

### D. Qualifications

1. Contractor must have 5 years successful experience with the installation of single-ply TPO roof systems
2. The roofer must be trained and authorized by the manufacturer of the approved roofing system, to install that system.

### E. Plans, Specifications and Scope of Work

1. It is understood that the Bidder, before submitting a bid, has made a careful examination of the plans, specifications and contract, that it has fully informed itself as to the quality and quantity of materials and the character of the work required: and that it has made a careful examination of the location of the work and the sources of supply for materials.

### F. Attachments

1. Bid Package
2. Standard Contract
3. Contract Drawings and Specifications (see Project Manual, Attachment A)

# Public Improvement Project

## Request for Bid - Informal (RFB 13-2285)

---

### CONTENTS

Note: The following documents (1-8) **must be returned** as part of the bid response or the bid will be considered non-responsive.

	Bid Response Packet Contents	Due By Bid Due Date and Time	Due Within Seven Days of Award Notification
1	Bidder's Checklist	✓	
2	Bid Forms	✓	
3	Schedule of Bid Prices	✓	
4	Addenda Acknowledgement/Surety	✓	
5	Resident/Non-Resident Bidder Status	✓	
6	Contractor Qualification Statement	✓	
7	Certification of Employee Drug Testing	✓	
8	Signature Page	✓	
9	Standard Public Contract		✓
10	Scope of Work		✓



600 NE Grand Ave.  
Portland, OR 97232-2736  
503-797-1700

# Public Improvement Project

## Request for Bid - Informal (RFB 13-2285)

### BIDDER'S CHECKLIST

FIRM \_\_\_\_\_  
 NAME \_\_\_\_\_  
 MAILING ADDRESS \_\_\_\_\_  
 PHONE \_\_\_\_\_ FAX \_\_\_\_\_ EMAIL \_\_\_\_\_

### BIDDER REPRESENTS/CERTIFIES/ACKNOWLEDGES AS PART OF THIS OFFER THAT:

Contractor shall check or complete all applicable boxes

To Be Submitted by Bid Due Date and Time as indicated on the RFB cover page

**BID WILL BE CONSIDERED NON-RESPONSIVE WITHOUT THE FOLLOWING DOCUMENTS AND INFORMATION**

1. **BIDDER'S CHECKLIST**
2. **BID FORMS**
3. **SCHEDULE OF BID PRICES**
4. **ADDENDA ACKNOWLEDGEMENT**
5. **RESIDENT/NON-RESIDENT BIDDER STATUS** - Undersigned Bidder states that it is a  resident or  non-resident of the state of Oregon. State in which Bidder resides: \_\_\_\_\_
6. **CONTRACTOR QUALIFICATION STATEMENT**
7. **CERTIFICATE OF EMPLOYEE DRUG TESTING PROGRAM**
8. **SIGNATURE PAGE**

**CONFLICT OF INTEREST:** Bidder hereby certifies that no officer, agent, or employee of Metro has participated on behalf of Metro in preparation of this bid, that the bid is made in good faith without fraud, collusion, or connection of any kind with any other Bidder for the same work, and the Bidder is competing solely in its own behalf without connection or obligation to any undisclosed person or firm.

**TYPE OF BUSINESS ORGANIZATION:** Bidder operates as  an individual,  a corporation, incorporated under the laws of the state of \_\_\_\_\_,  a non-profit organization,  a partnership. (If partnership, attach names of the partners)

**OREGON LICENSE:** If a corporation,  it is, or  is not, licensed with Oregon Corporation Commission

**REGISTRATION NO:** \_\_\_\_\_ with Construction Contractors Board.

**DOING BUSINESS AS:** Provide any assumed names utilized.

#### PRIOR TO AWARD:

**Financial records** and other information in accordance with ORS 279C at the option of Metro's Project Manager

NAME AND TITLE OF PERSON AUTHORIZED TO  
CONTRACT/SIGN OFFER (TYPE OR PRINT)

SIGNATURE OF AUTHORIZED PERSON



600 NE Grand Ave.  
Portland, OR 97232-2736  
503-797-1700

# Public Improvement Project Request for Bid - Informal (RFB 13-2285)

## BID FORMS

**NOTE TO BIDDER:** Bidders must provide all of the information requested in this Bid. Bidder should type or use ink for completing this Bid.

To: Metro Procurement Office, 600 N.E. Grand Avenue, Portland, OR 97232  
Bidder: \_\_\_\_\_  
Address: \_\_\_\_\_  
Bidder's Contact: \_\_\_\_\_ Telephone: \_\_\_\_\_ Date: \_\_\_\_\_

### BIDDER'S DECLARATION AND UNDERSTANDING

The undersigned, hereinafter called the Bidder, declares that the only persons or parties interested in this Bid are those named herein, that this Bid is, in all respects, fair and without fraud, that it is made without collusion with any official of Metro, and that the Bid is made without any connection or collusion with any person submitting another Bid on this Contract.

The Bidder further declares that it has carefully examined the Contract Documents for the completion of the Work, has personally inspected the Site, has satisfied itself as to the Work involved, and that this Bid is made in accordance with the provisions and under the terms of the Contract Documents, which are hereby made a part of this Bid.

Any printed matter on any letter or paper enclosed herewith which is not part of the Bidding Documents or which was not requested by Metro is not to be considered a part of this Bid, and the undersigned agrees that such printed matter shall be entirely disregarded and, notwithstanding such printed matter, that the Bid is a bid to do the Work and furnish the labor and materials and all other things required by the Contract Documents strictly within the time and in accordance with such Specifications. This Bid is irrevocable for sixty- (60) days following the date of the opening of Bids.

### CONTRACT EXECUTION, BONDS AND INSURANCE

The Bidder agrees that if this Bid is accepted, it will, within seven (7) days after award of the Contract by the Metro Council, sign the Construction Agreement in the form annexed hereto, along with all certificates of insurance and certified copies of insurance policies specified and required in these Contract Documents, and will, to the extent of its Bid, furnish all machinery, tools, apparatus, and other means of operation and construction and do the Work and furnish all the materials necessary to complete all Work as specified or indicated in the Contract Documents

### COMMENCEMENT OF WORK AND CONTRACT COMPLETION TIME

The time frame for the award and execution of this Contract shall be as described in the Instructions for Bidders and other Contract Documents. The Successful Bidder further agrees to commence the Work within five (5) days of issuance of the Notice to Proceed and to diligently prosecute the Work to its final completion in accordance with the Contract Documents.

### ADJUSTED PAYMENTS

In the event the Bidder is awarded the Contract and fails to complete the Work in compliance with the time required by the Contract Documents, adjusted payments shall be paid to Metro as described in the General Conditions.

### SALES AND USE TAXES

The Bidder agrees that all applicable federal, state and local sales and use taxes are included in the stated bid prices for the Work.

### LUMP SUM AND UNIT PRICE WORK

The Bidder further proposes to accept as full payment for the Work proposed herein the amounts computed under the provisions of the Contract Documents and based on the listed lump sum and unit price amounts. The amounts shall be shown in both words and figures. In case of a discrepancy, the amount shown in words shall govern.

### PREVAILING WAGES FOR PUBLIC WORK

Bidder hereby certifies that the provisions of ORS 279C.800 - 279C.870, regarding prevailing wages, shall be complied with on this project.



600 NE Grand Ave.  
 Portland, OR 97232-2736  
 503-797-1700

# Public Improvement Project

## Request for Bid - Informal (RFB 13-2285)

### SCHEDULE OF BID PRICES

The Bidder, whose legal signature binding the Bidder to the bid process indicated on these pages is found on the signature page, hereby bids as follows:

Item	Description	Qty	Unit	Unit Price	Total Amount (in figures)
1	Replace Main Entrance Roof	1	LS		
2	Replace Control Room/Pit Roof	1	LS		
3	Install Skylights	2	Ea		
<b>Construction Cost</b>					
<b>Base Bid Price</b>					
	Total Base Bid Price (in words)				DOLLARS

Print Name of Company \_\_\_\_\_

Print Name of Bidder \_\_\_\_\_

Signature \_\_\_\_\_

Title \_\_\_\_\_



600 NE Grand Ave.  
Portland, OR 97232-2736  
503-797-1700

# Public Improvement Project Request for Bid - Informal (RFB 13-2285)

---

## ADDENDA ACKNOWLEDGEMENT

The Bidder is presumed to have read and hereby acknowledges receipt and acceptance of Addenda Numbers:

(Insert No. and Date of Each Addendum Received)

---

---

---

Print Name of Company \_\_\_\_\_

Print Name of Bidder \_\_\_\_\_

Signature \_\_\_\_\_

Title \_\_\_\_\_



600 NE Grand Ave.  
Portland, OR 97232-2736  
503-797-1700

# Public Improvement Project Request for Bid - Informal (RFB 13-2285)

---

## RESIDENT/NON-RESIDENT BIDDER STATUS

Oregon law requires that Metro, in determining the lowest responsive Bidder, must add a percent increase on the Bid of a non-resident Bidder equal to the percent, if any, of the preference given to that Bidder in the state in which that Bidder resides.

Consequently, each Bidder must indicate whether it is a resident or non-resident Bidder. A resident Bidder is a Bidder that has paid unemployment taxes or income taxes in the state of Oregon during the twelve (12) calendar months immediately preceding submission of this Bid, has a business address in Oregon, and has stated in its Bid that the Bidder is a "resident Bidder." A "non-resident Bidder" is a Bidder who is not a resident Bidder (ORS 279A.120).

The undersigned Bidder states that it is: (check one)

- 1. \_\_\_\_\_ A resident Bidder
- 2. \_\_\_\_\_ A non-resident Bidder

Indicate state in which Bidder resides: \_\_\_\_\_

Print Name of Company \_\_\_\_\_

Print Name of Bidder \_\_\_\_\_

Signature \_\_\_\_\_

Title \_\_\_\_\_



600 NE Grand Ave.  
Portland, OR 97232-2736  
503-797-1700

# Public Improvement Project Request for Bid - Informal (RFB 13-2285)

## CONTRACTOR QUALIFICATION STATEMENT

**NOTE: The prime contractor or first tier sub-contractor proposed to conduct the following work must complete this Contractor Qualification Statement:** (list type of work applicable)

The undersigned certifies under oath that the information provided herein is true and sufficiently complete so as not to be misleading:

Contractor Name \_\_\_\_\_

Address \_\_\_\_\_

\_\_\_\_\_

Telephone \_\_\_\_\_ Fax \_\_\_\_\_ E-Mail \_\_\_\_\_

### ORGANIZATION \_\_\_\_\_

How many years has your organization been in business as a Contractor? \_\_\_\_\_

Under what former names has your organization operated? \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

### LICENSING AND BONDING

Oregon CCB# \_\_\_\_\_ Public Works Bond # \_\_\_\_\_

Other licenses \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

### EXPERIENCE

List the type of work your organization normally performs with its own forces and the number of full time employees to be assigned to the project? \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

Does your firm own or able to obtain the necessary equipment for this job? Please indicate equipment available to conduct the work. \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_



600 NE Grand Ave.  
Portland, OR 97232-2736  
503-797-1700

# Public Improvement Project

## Request for Bid - Informal (RFB 13-2285)

### CONTRACTOR QUALIFICATION STATEMENT continued

#### CLAIMS AND SUITS

Has your organization ever failed to complete any work awarded to it? \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Are there any judgments, claims, arbitration proceedings or suits pending or outstanding against your organization or officers? \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Has your organization filed any lawsuits or requested arbitration with regard to construction contracts within the last five years? Provide information \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Have any officers or employees been convicted of any crimes relative to a project such as this? \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

#### REFERENCES

List the major construction projects your organization has **in progress**

Project Name	Owner	Architect/Engineer	Amount	% Complete	Completion Date	Contact Person	Phone #



600 NE Grand Ave.  
 Portland, OR 97232-2736  
 503-797-1700

# Public Improvement Project

## Request for Bid - Informal (RFB 13-2285)

### CONTRACTOR QUALIFICATION STATEMENT continued

List the major construction projects your organization has **completed in last 5 years**

Project Name	Owner	Architect/Engineer	Amount	% Complete	Completion Date	Contact Person	Phone #

List 3 subcontractors Metro can contact for a reference.

Name	Specialty	Contact Name	Phone #

List 3 suppliers Metro can contact for a reference.

Name	Specialty	Contact Name	Phone #

### Bank Reference

Name: \_\_\_\_\_

Address: \_\_\_\_\_

Contact Name: \_\_\_\_\_ Phone number: \_\_\_\_\_

### Bidder signature

This information provided is true and complete.

Print Name of Company \_\_\_\_\_

Print Name of Bidder \_\_\_\_\_

Signature \_\_\_\_\_

Title \_\_\_\_\_





600 NE Grand Ave.  
 Portland, OR 97232-2736  
 503-797-1700

# Public Improvement Project

## Request for Bid - Informal (RFB 13-2285)

### SIGNATURE PAGE

The name of the Bidder submitting this Bid is \_\_\_\_\_ doing business at

\_\_\_\_\_

Street	City	State	Zip
--------	------	-------	-----

which is the full business address to which all communications concerned with this Bid and with the Contract shall be sent.

The names of the principal officers of the corporation submitting this Bid, or of all of the partners, if the Bidder is a partnership or joint venture, or of all persons interested in this Bid as individuals are as follows:

\_\_\_\_\_

If Individual

IN WITNESS hereto the undersigned has set his/her hand this \_\_\_\_ day of 20\_\_

Signature of Bidder \_\_\_\_\_

Printed Name of Bidder \_\_\_\_\_

Title \_\_\_\_\_

If Partnership or Joint Venture

IN WITNESS hereto the undersigned has set his/her hand this \_\_\_\_ day of 20\_\_.

\_\_\_\_\_  
 Name of Partnership or Joint Venture

By: \_\_\_\_\_

\_\_\_\_\_  
 Printed Name of Person Signing

Title: \_\_\_\_\_

If Corporation

IN WITNESS WHEREOF the undersigned corporation has caused this instrument to be executed and its seal affixed by its duly authorized officers this \_\_\_\_ day of 20\_\_.

\_\_\_\_\_  
 Name of Corporation

\_\_\_\_\_  
 State of Incorporation

By: \_\_\_\_\_

\_\_\_\_\_  
 Printed Name of Person Signing

Title: \_\_\_\_\_



600 NE Grand Ave.  
Portland, OR 97232-2736  
503-797-1700

# Public Improvement Project Request for Bid - Informal (RFB 13-2285)

SAMPLE of STANDARD PUBLIC CONTRACT

METRO CONTRACT NO. XXXXXX

## For Public Contracts \$50,000 & Above

THIS Contract is entered into between Metro, a metropolitan service district organized under the laws of the State of Oregon and the Metro Charter, whose address is 600 NE Grand Avenue, Portland, Oregon 97232-2736, and Company Name, whose address is address, City, State Zip, hereinafter referred to as the "CONTRACTOR."

THE PARTIES AGREE AS FOLLOWS:

### ARTICLE I SCOPE OF WORK

CONTRACTOR shall perform the work and/or deliver to METRO the goods described in the Scope of Work attached hereto as Attachment A. All services and goods shall be of good quality and, otherwise, in accordance with the Scope of Work.

### ARTICLE II TERM OF CONTRACT

The term of this Contract shall be for the period commencing Month XX, 201X through and including Month XX, 201X.

### ARTICLE III CONTRACT SUM AND TERMS OF PAYMENT

METRO shall compensate the CONTRACTOR for work performed and/or goods supplied as described in the Scope of Work. METRO shall not be responsible for payment of any materials, expenses or costs other than those which are specifically included in the Scope of Work. Payment shall be made by METRO on a Net 30 day basis upon approval of CONTRACTOR invoice.

### ARTICLE IV LIABILITY AND INDEMNITY

CONTRACTOR is an independent contractor and assumes full responsibility for the content of its work and performance of CONTRACTOR'S labor, and assumes full responsibility for all liability for bodily injury or physical damage to person or property arising out of or related to this Contract, and shall indemnify, defend and hold harmless METRO, its agents and employees, from any and all claims, demands, damages, actions, losses, and expenses arising out of or in any way connected with its performance of this Contract. CONTRACTOR is solely responsible for paying CONTRACTOR'S subcontractors and nothing contained herein shall create or be construed to create any contractual relationship between any subcontractor(s) and METRO.

### ARTICLE V TERMINATION

METRO may terminate this Contract upon giving CONTRACTOR seven (7) days written notice. In the event of termination, CONTRACTOR shall be entitled to payment for work performed to the date of termination. METRO shall not be liable for indirect, consequential damages or any other damages. Termination by METRO will not waive any claim or remedies it may have against CONTRACTOR.

### ARTICLE VI INSURANCE & BONDS

CONTRACTOR shall purchase and maintain at the CONTRACTOR'S expense, the following types of insurance, covering the CONTRACTOR, its employees, and agents:

- A. The most recently approved ISO (Insurance Services Office) Commercial General Liability policy, or its equivalent, written on an occurrence basis, with limits not less than \$1,000,000 per occurrence and \$1,000,000 aggregate. The policy will include coverage for bodily injury, property damage, personal



600 NE Grand Ave.  
Portland, OR 97232-2736  
503-797-1700

# Public Improvement Project

## Request for Bid - Informal (RFB 13-2285)

---

injury, contractual liability, premises and products/completed operations. CONTRACTOR'S coverage will be primary as respects Metro;

- B. Automobile insurance with coverage for bodily injury and property damage and with limits not less than minimum of \$1,000,000 per occurrence;
- C. Workers' Compensation insurance meeting Oregon statutory requirements including Employer's Liability with limits not less than \$500,000 per accident or disease; and

METRO, its elected officials, departments, employees, and agents shall be named as ADDITIONAL INSUREDS on Commercial General Liability and Automobile policies.

CONTRACTOR shall provide to Metro 30 days notice of any material change or policy cancellation.

CONTRACTOR shall provide Metro with a Certificate of Insurance complying with this article upon return of the CONTRACTOR signed agreement to Metro. Certificate of Insurance shall identify the Metro contract number.

CONTRACTOR shall not be required to provide the liability insurance described in this Article only if an express exclusion relieving CONTRACTOR of this requirement is contained in the Scope of Work.

In addition, for public works subject to ORS 279C.800 to 279C.870, CONTRACTOR and every subcontractor shall have a public works bond required by 2005 Oregon Laws Chapter 360 filed with the Construction Contractors Board before starting work on the project, unless exempt under Section 2 of 2005 Oregon Laws Chapter 360.

### ARTICLE VII PUBLIC CONTRACTS

All applicable provisions of ORS chapters 187 and 279A, 279B, and 279C and all other terms and conditions necessary to be inserted into public contracts in the State of Oregon, are hereby incorporated as if such provision were a part of this Agreement. Specifically, it is a condition of this contract that CONTRACTOR and all employers working under this Agreement are subject employers that will comply with ORS 656.017 as required by 1989 Oregon Laws, Chapter 684.

For public work subject to ORS 279C.800 to 279C.870, the CONTRACTOR shall pay prevailing wages. If such public work is subject both to ORS 279C.800 to 279C.870 and to 40 U.S.C. 276a, the CONTRACTOR and every subcontractor on such public work shall pay at least the higher prevailing wage. The CONTRACTOR and each subcontractor shall pay workers not less than the specified minimum hourly rate of wage in accordance with Section 7 of 2005 Oregon Laws Chapter 360. METRO shall pay an administrative fee as provided in ORS 279C.825(1) to the Bureau of Labor and Industries pursuant to the administrative rules established by the Commissioner of Labor and Industries. CONTRACTORS must promptly pay, as due, all persons supplying to such contractor labor or material used in this contract. If the CONTRACTOR or first-tier subcontractor fails, neglects, or refuses to make payment to a person furnishing labor or materials in connection with the public contract for a public improvement within 30 days after receipt of payment from the public contracting agency or a contractor, the CONTRACTOR or first-tier subcontractor shall owe the person the amount due plus shall pay interest in accordance with ORS 279C.515. If the CONTRACTOR or first-tier subcontractor fails, neglects, or refuses to make payment, to a person furnishing labor or materials in connection with the public contract, the person may file a complaint with the Construction Contractors Board, unless payment is subject to a good faith dispute as defined in ORS 279C.580. CONTRACTOR must pay any and all contributions and amounts due to the Industrial Accident Fund from contractor or subcontractor and incurred in the performance of the contract. No liens or claims are permitted to be filed against Metro on account of any labor or material furnished. CONTRACTORS are required to pay the Department of Revenue all sums withheld from employees pursuant to ORS 316.167.

For public improvement work all CONTRACTORS must demonstrate that an employee drug-testing program is in place.

### ARTICLE VIII MODIFICATIONS

Metro may approve changes and modifications to the original contract, including deletions of work, order of additional materials, and additional services reasonably related to the original work scope. Contractor may propose



600 NE Grand Ave.  
Portland, OR 97232-2736  
503-797-1700

# Public Improvement Project

## Request for Bid - Informal (RFB 13-2285)

---

changes in the work that Contractor believes are necessary, will result in higher quality work, improve safety, decrease the amount of the contract, or otherwise result in a better or more efficient work product. If such changes are approved by Metro, they shall be executed by written contract amendment signed by both parties. Such changes shall not relieve Contractor of any obligation or warranty under the contract. No oral statements by either party shall modify or affect the terms of the contract.

### ARTICLE IX QUALITY OF GOODS AND SERVICES

Unless otherwise specified, all materials shall be new and both workmanship and materials shall be of the highest quality. All workers and subcontractors shall be skilled in their trades. CONTRACTOR guarantees all work against defects in material or workmanship for a period of one (1) year from the date of acceptance or final payment by METRO, whichever is later. All guarantees and warranties of goods furnished to CONTRACTOR or subcontractors by any manufacturer or supplier shall be deemed to run to the benefit of METRO.

### ARTICLE X OWNERSHIP OF DOCUMENTS

Unless otherwise provided herein, all documents, instruments and media of any nature produced by CONTRACTOR pursuant to this agreement are Work Products and are the property of METRO, including but not limited to: drawings, specifications, reports, scientific or theoretical modeling, electronic media, computer software created or altered specifically for the purpose of completing the Scope of Work, works of art and photographs. Unless otherwise provided herein, upon METRO request, CONTRACTOR shall promptly provide METRO with an electronic version of all Work Products that have been produced or recorded in electronic media. METRO and CONTRACTOR agree that all work Products are works made for hire and Contractor hereby conveys, transfers, and grants to Metro all rights of reproduction and the copyright to all such Work Products.

- A. CONTRACTOR and subcontractors shall maintain all fiscal records relating to such contracts in accordance with generally accepted accounting principles. In addition, CONTRACTOR and subcontractors shall maintain any other records necessary to clearly document:
1. The performance of the CONTRACTOR, including but not limited to the contractor's compliance with contract plans and specifications, compliance with fair contracting and employment programs, compliance with Oregon law on the payment of wages and accelerated payment provisions; and compliance with any and all requirements imposed on the CONTRACTOR or subcontractor under the terms of the contract or subcontract;
  2. Any claims arising from or relating to the performance of the CONTRACTOR or subcontractor under a public contract;
  3. Any cost and pricing data relating to the contract; and
  4. Payments made to all suppliers and subcontractors.
- B. CONTRACTOR and subcontractors shall maintain records for the longer period of (a.) six years from the date of final completion of the contract to which the records relate or (b.) until the conclusion of any audit, controversy or litigation arising out of or related to the contract.
- C. CONTRACTOR and subcontractors shall make records available to METRO, and its authorized representatives, including but not limited to the staff of any METRO department and the staff of the METRO Auditor, within the boundaries of the METRO region, at reasonable times and places regardless of whether litigation has been filed on any claims. If the records are not made available within the boundaries of METRO, the CONTRACTOR or subcontractor agrees to bear all of the costs for METRO employees, and any necessary consultants hired by METRO, including but not limited to the costs of travel, per diem sums, salary, and any other expenses that Metro incurs, in sending its employees or consultants to examine, audit, inspect, and copy those records. If the CONTRACTOR elects to have such records outside these boundaries, the costs paid by the CONTRACTOR to METRO for inspection, auditing, examining and copying those records shall not be recoverable costs in any legal proceeding.
- D. CONTRACTOR and subcontractors authorize and permit METRO and its authorized representatives, including but not limited to the staff of any METRO department and the staff of the METRO Auditor, to inspect, examine, copy and audit the books and records of CONTRACTOR or subcontractor, including tax returns, financial statements, other financial



600 NE Grand Ave.  
Portland, OR 97232-2736  
503-797-1700

# Public Improvement Project

## Request for Bid - Informal (RFB 13-2285)

---

documents and any documents that may be placed in escrow according to any contract requirements. METRO shall keep any such documents confidential to the extent permitted by Oregon law, subject to the provisions of section E.

E. CONTRACTOR and subcontractors agree to disclose the records requested by METRO and agree to the admission of such records as evidence in any proceeding between METRO and the CONTRACTOR or subcontractor, including, but not limited to, a court proceeding, arbitration, mediation or other alternative dispute resolution process.

F. CONTRACTOR and subcontractors agree that in the event such records disclose that METRO is owed any sum of money or establish that any portion of any claim made against Metro is not warranted, the CONTRACTOR or subcontractor shall pay all costs incurred by METRO in conducting the audit and inspection. Such costs may be withheld from any sum that is due or that becomes due from METRO.

G. Failure of the CONTRACTOR or subcontractor to keep or disclose records as required by this document or any solicitation document may result in disqualification as a bidder or proposer for future Metro contracts as provided in ORS 279B.130 and Metro Code Section 2.04.070(c), or may result in a finding that the CONTRACTOR or subcontractor is not a responsible bidder or proposer as provided in ORS 279B.110 and Metro Code Section 2.04.052.

### ARTICLE XI SUBCONTRACTORS

CONTRACTOR shall contact METRO prior to negotiating any subcontracts and CONTRACTOR shall obtain approval from METRO before entering into any subcontracts for the performance of any of the services and/or supply of any of the goods covered by this Contract.

METRO reserves the right to reasonably reject any subcontractor or supplier and no increase in the CONTRACTOR'S compensation shall result thereby. All subcontracts related to this Contract shall include the terms and conditions of this agreement. CONTRACTOR shall be fully responsible for all of its subcontractors as provided in Article IV.

### ARTICLE XII RIGHT TO WITHHOLD PAYMENTS

METRO shall have the right to withhold from payments due CONTRACTOR such sums as necessary, in METRO's sole opinion, to protect METRO against any loss, damage or claim which may result from CONTRACTOR'S performance or failure to perform under this agreement or the failure of CONTRACTOR to make proper payment to any suppliers or subcontractors. In addition for public improvement work, if a CONTRACTOR is required to file certified statements under ORS 279C.845, METRO shall retain 25 percent of any amount earned by the CONTRACTOR on the public works until the contractor has filed all required certified statements with METRO.

If a liquidated damages provision is contained in the Scope of Work and if CONTRACTOR has, in METRO's opinion, violated that provision, METRO shall have the right to withhold from payments due CONTRACTOR such sums as shall satisfy that provision. All sums withheld by METRO under this Article shall become the property of METRO and CONTRACTOR shall have no right to such sums to the extent that CONTRACTOR has breached this Contract.

### ARTICLE XIII SAFETY

If services of any nature are to be performed pursuant to this agreement, CONTRACTOR shall take all necessary precautions for the safety of employees and others in the vicinity of the services being performed and shall comply with all applicable provisions of federal, state and local safety laws and building codes, including the acquisition of any required permits.



600 NE Grand Ave.  
Portland, OR 97232-2736  
503-797-1700

# Public Improvement Project

## Request for Bid - Informal (RFB 13-2285)

---

### ARTICLE XIV INTEGRATION OF CONTRACT DOCUMENTS

All of the provisions of any procurement documents including, but not limited to, the Advertisement for Bids, Proposals or responses, General and Special Instructions to Bidders, Proposal, Scope of Work, and Specifications which were utilized in conjunction with the bidding of this Contract are hereby expressly incorporated by reference. Otherwise, this Contract represents the entire and integrated agreement between METRO and CONTRACTOR and supersedes all prior negotiations, representations or agreements, either written or oral. This Contract may be amended only by written instrument signed by both METRO and CONTRACTOR. The laws of the state of Oregon shall govern the construction and interpretation of this Contract.

### ARTICLE XV COMPLIANCE

CONTRACTOR shall comply with federal, state, and local laws, statutes, and ordinances relative to the execution of the work. This requirement includes, but is not limited to, non-discrimination, safety and health, environmental protection, waste reduction and recycling, fire protection, permits, fees and similar subjects.

### ARTICLE XVI INTERGOVERNMENTAL COOPERATIVE AGREEMENT

Pursuant to ORS 279A and the Metro public contract code, Metro participates in an Intergovernmental Cooperative Purchasing program by which other public agencies shall have the ability to purchase the goods and services under the terms and conditions of this awarded contract. Any such purchases shall be between the Contractor and the participating public agency and shall not impact the Contractor's obligation to Metro under this agreement. Any estimated purchase volumes listed herein do not include volumes for other public agencies, and Metro makes no guarantee as to their participation in any purchase. Any Contractor may decline to extend the prices and terms of this solicitation to any or all other public agencies upon execution of this contract. Unless the Contractor specifically declines to participate in the program by marking the box below, the Contractor agrees to participate in the Intergovernmental Cooperative Purchasing program. **Contractor declines to participate in the Intergovernmental Cooperative Purchasing program or is not applicable to this Contract as indicated by the following initials \_\_\_\_\_**

### ARTICLE XVII SITUS

The situs of this Agreement is Portland, Oregon. Any litigation over this agreement shall be governed by the laws of the State of Oregon and shall be conducted in the Circuit Court of the state of Oregon for Multnomah County, or, if jurisdiction is proper, in the U.S. District Court for the District of Oregon.

### ARTICLE XVIII ASSIGNMENT

CONTRACTOR shall not assign any rights or obligations under or arising from this Contract without prior written consent from METRO.

### ARTICLE XIX SEVERABILITY

The parties agree that any provision of this Contract that is held to be illegal, invalid, or unenforceable under present or future laws shall be fully severable. The parties further agree that this Contract shall be construed and enforced as if the illegal, invalid, or unenforceable provision had never been a part of them and the remaining provisions of the Contract shall remain in full force and effect and shall not be affected by the illegal, invalid, or unenforceable provision or by its severance from this Contract. Furthermore, a provision as similar to the illegal, invalid, or unenforceable provision as is possible and legal, valid and enforceable shall be automatically added to this Contract in lieu of the illegal, invalid, or unenforceable provision. Any failure by METRO to enforce a provision of the Contract is not to be construed as a waiver by METRO of this right to do so.



600 NE Grand Ave.  
Portland, OR 97232-2736  
503-797-1700

# Public Improvement Project Request for Bid - Informal (RFB 13-2285)

---

## ARTICLE XX COUNTERPARTS

This Contract may be executed in counterparts or multiples, any one of which will have the full force of an original.

## ARTICLE XXI DELIVERY OF NOTICES

Any notice, request, demand, instruction, or any other communications to be given to any party hereunder shall be in writing, sent by registered or certified mail or fax as follows:

To METRO:     Pete Hillmann  
                  Metro  
                  600 NE Grand Ave.  
                  Portland, Oregon 97232  
                  503-797-1795 fax

To CONTRACTOR:     XXXXXX  
                          Contractor Name  
                          address  
                          City State Zip  
                          XXX-XXX-XXXX fax

CONTRACTOR

By \_\_\_\_\_

Print Name \_\_\_\_\_

Date \_\_\_\_\_

METRO

By \_\_\_\_\_

Print Name \_\_\_\_\_

Date \_\_\_\_\_



600 NE Grand Ave.  
Portland, OR 97232-2736  
503-797-1700

# Public Improvement Project

## Request for Bid - Informal (RFB 13-2285)

---

Metro Contract No. XXXXXX

1. **Purpose and Goal of Work**
  
2. **Description of the Scope of Work**
  
3. **Deliverables/Outcomes**
  
4. **Payment and Billing**

Contractor shall perform the above work for a maximum price not to exceed XXXXXXX AND XX/100<sup>TH</sup> DOLLARS (\$XXXXXX.XX).

The maximum price includes all fees, costs and expenses of whatever nature. Each of Metro's payments to Contractor shall equal the percentage of the work Contractor accomplished during the billing period. Contractor's billing invoices will include the Metro contract number, an itemized statement of work done and expenses incurred during the billing period, will not be submitted more frequently than once a month, and will be sent to Metro, Attention: Accounts Payable, 600 NE Grand Avenue, Portland, OR 97232-2736 or metroaccountspayable@oregonmetro.gov. Contractor's billing invoices for services through June 30 shall be submitted to Metro by July 15. Payment shall be made by Metro on a Net 30 day basis upon approval of Contractor invoice.

# PROJECT MANUAL

## Metro South Low Slope Roofing

Metro  
600 NE Grand Avenue  
Portland, OR 97232

December 4, 2012

**iA** **ISELIN ARCHITECTS, P.C.**

1307 Seventh Street Oregon City, OR 97045 p: 503-656-1942 f: 503-656-0658

## **TABLE OF CONTENTS**

### DRAWINGS

A1	Cover Sheet
A2	Overall Roof Plan
A3	Partial Roof Plan – Area 1
A4	Partial Roof Plan – Area 2
D-1	Roof Height Transition Detail
D-2	Roof – Wall Flashing Detail
D-3	Parapet – Wall Flashing Detail
D-4	Roof – Wall Flashing Detail
D-5	Skylight Trimmer – Beam Detail
D-6	Skylight Header – Trimmer Detail
D-7	Parapet – Roof Flashing Detail
D-8	Roof – Wall Flashing Detail
D-9	Roof Edge Flashing Detail
D-10	Concrete Pier Flashing Detail
D-11	Roof Overflow Detail
D-12	Roof Drain Detail

### SPECIFICATIONS

Page		
2	Section 01001	Basic Requirements
11	Section 02221	Building Demolition
13	Section 05120	Structural Steel Framing
15	Section 05500	Metal Fabrications Roofing
16	Section 07530	Elastomeric Membrane Roofing
25	Section 08620	Unit Skylights

## DRAWING INDEX

- A1 COVER SHEET
- A2 OVERALL ROOF PLAN
- A3 PARTIAL ENLARGED ROOF PLAN - AREA 1
- A4 PARTIAL ENLARGED ROOF PLAN - AREA 2

## PROJECT INFORMATION

PROJECT DESCRIPTION: REPLACEMENT OF EXISTING BUILT UP ROOFING AT TWO LOW SLOPE ROOF AREAS

ADDRESS: 2001 WASHINGTON ST  
OREGON CITY, OR 97045  
COUNTY: CLACKAMAS  
OCCUPANCY: F-1  
CONSTRUCTION TYPE: II-N, SPRINKLERED

BUILDING SQUARE FOOTAGE  
MAIN LEVEL FLOOR AREA: 45,325 S.F.

ROOF REPLACEMENT SQUARE FOOTAGE 4,410 S.F.

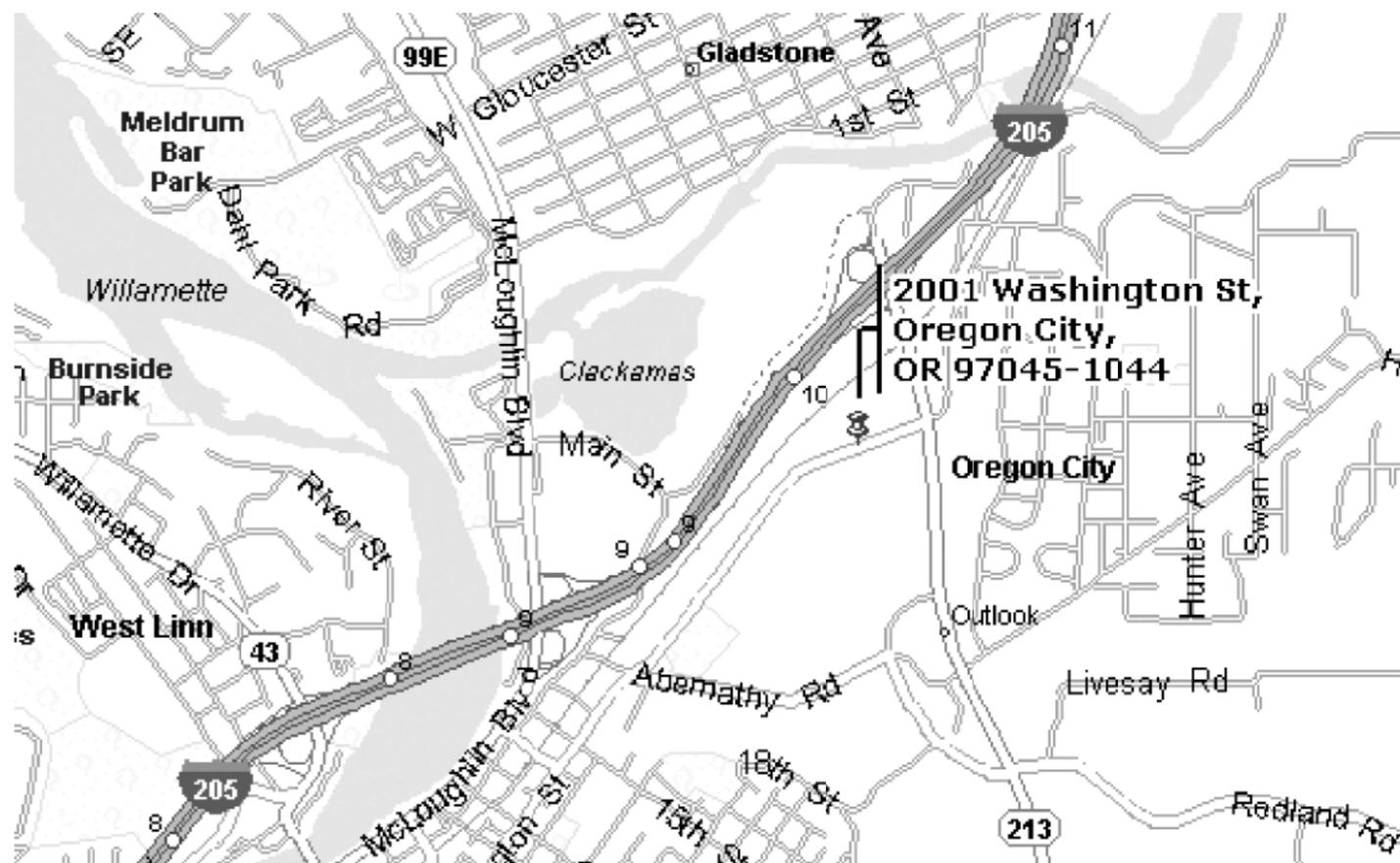
## CONTACT INFORMATION

### OWNER

METRO REGIONAL ENVIRONMENTAL MANAGEMENT  
600 NE GRAND AVENUE  
PORTLAND, OREGON 97201  
CONTACT: PETE HILLMANN  
P. (503) 797-1696  
F. (503) 797-1795

### ARCHITECT

ISELIN ARCHITECTS, PC  
1307 7TH ST  
OREGON CITY, OR 97045  
CONTACT: TODD ISELIN  
P. (503) 656-1942  
F. (503) 656-0658



NTS



**ISELIN**  
ARCHITECTS  
P.C.

1307 Seventh Street  
Oregon City, OR 97045  
503-656-1942 ph  
503-656-0658 fax  
www.iselinarchitects.com



Low-slope roofing replacement  
Metro South Transfer Station

2001 Washington St.  
Oregon City, OR 97045

PROJ. NO. : 1246  
FILE : A-COV  
DATE : 12/4/12

SHEET #

**A1**

COVER SHEET

R:\2012 Projects\Metro South Low Slope Roofing\1246-A-RFP-O.dwg, A2, 12/4/2012 12:29:05 PM, Iselin Architects, PC, 503-656-1942, 1307 7th St Oregon City, OR 97045



**ISELIN ARCHITECTS P.C.**

1307 Seventh Street  
Oregon City, OR 97045  
503-656-1942 ph  
503-656-0658 fax  
www.iselinarchitects.com



Low-slope roofing replacement  
**Metro South Transfer Station**

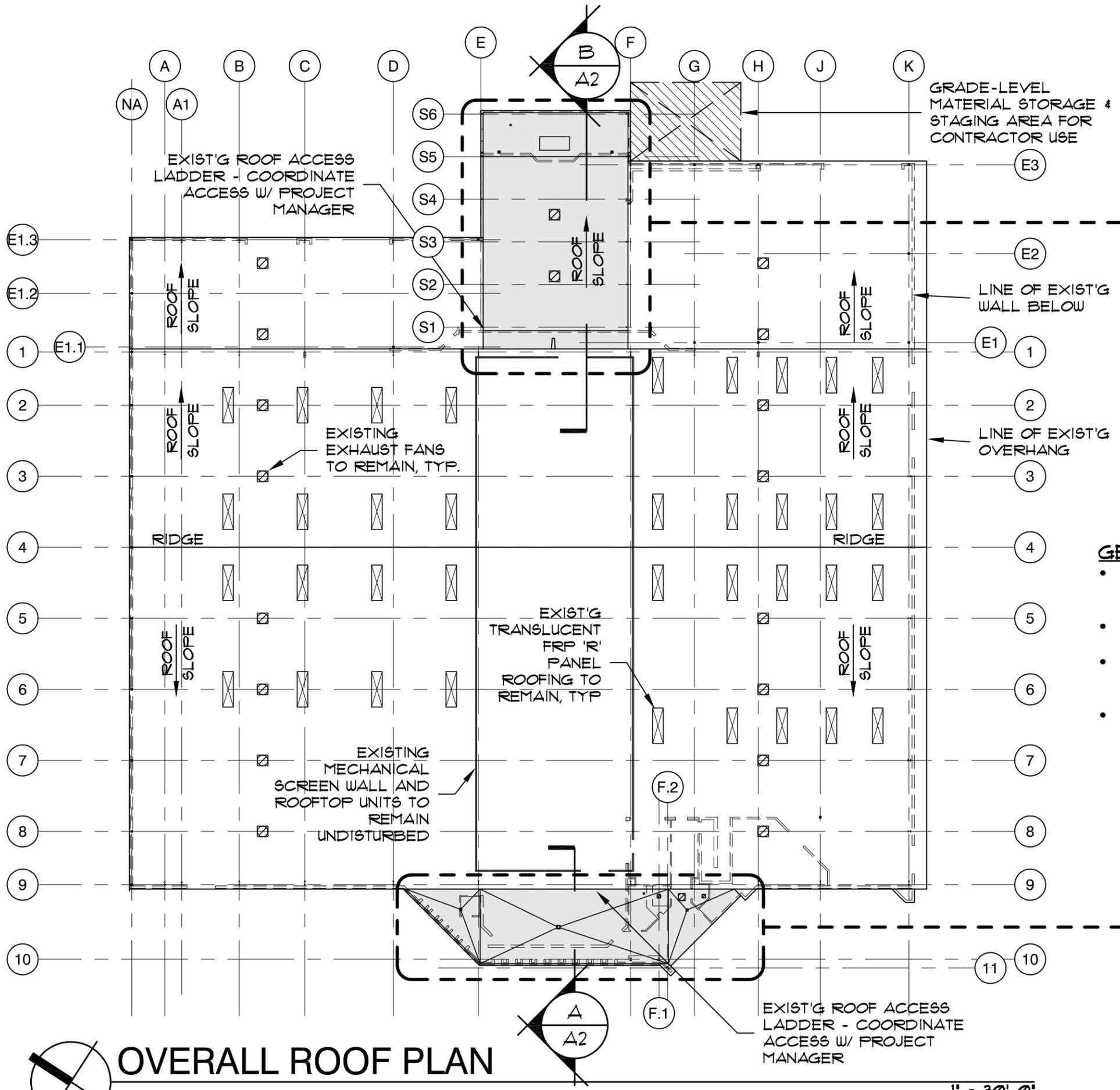
**2001 Washington St.**  
Oregon City, OR 97045

PROJ. NO.: 1246  
FILE: A-RFP-O  
DATE: 12/4/12

SHEET #

**A2**

OVERALL ROOF PLAN



**AREA OF WORK**  
**AREA 2**  
**REF SHEET A4 FOR DETAIL**

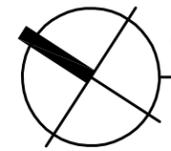
**AREA OF WORK**  
**AREA 1**  
**REF SHEET A3 FOR DETAIL**

**GENERAL NOTES**

- EXISTING CONDITIONS SHOWN - REF PARTIAL ROOF PLANS FOR NEW ELEMENTS
- ALL BUILDING ELEMENTS ARE EXIST'G TO REMAIN UNLESS NOTED OTHERWISE
- BUILDING GRID LINES ARE SHOWN FOR REFERENCE ONLY & ARE BASED ON ORIGINAL CONSTRUCTION DOCUMENTS
- REFER TO INSTRUCTIONS TO BIDDERS & SUPPLEMENTAL INSTRUCTIONS FOR ACCESS, STAGING, & WORK HOUR RESTRICTIONS.

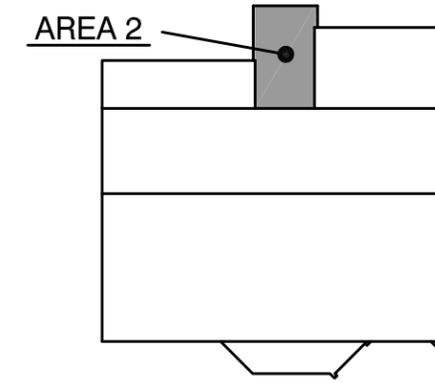
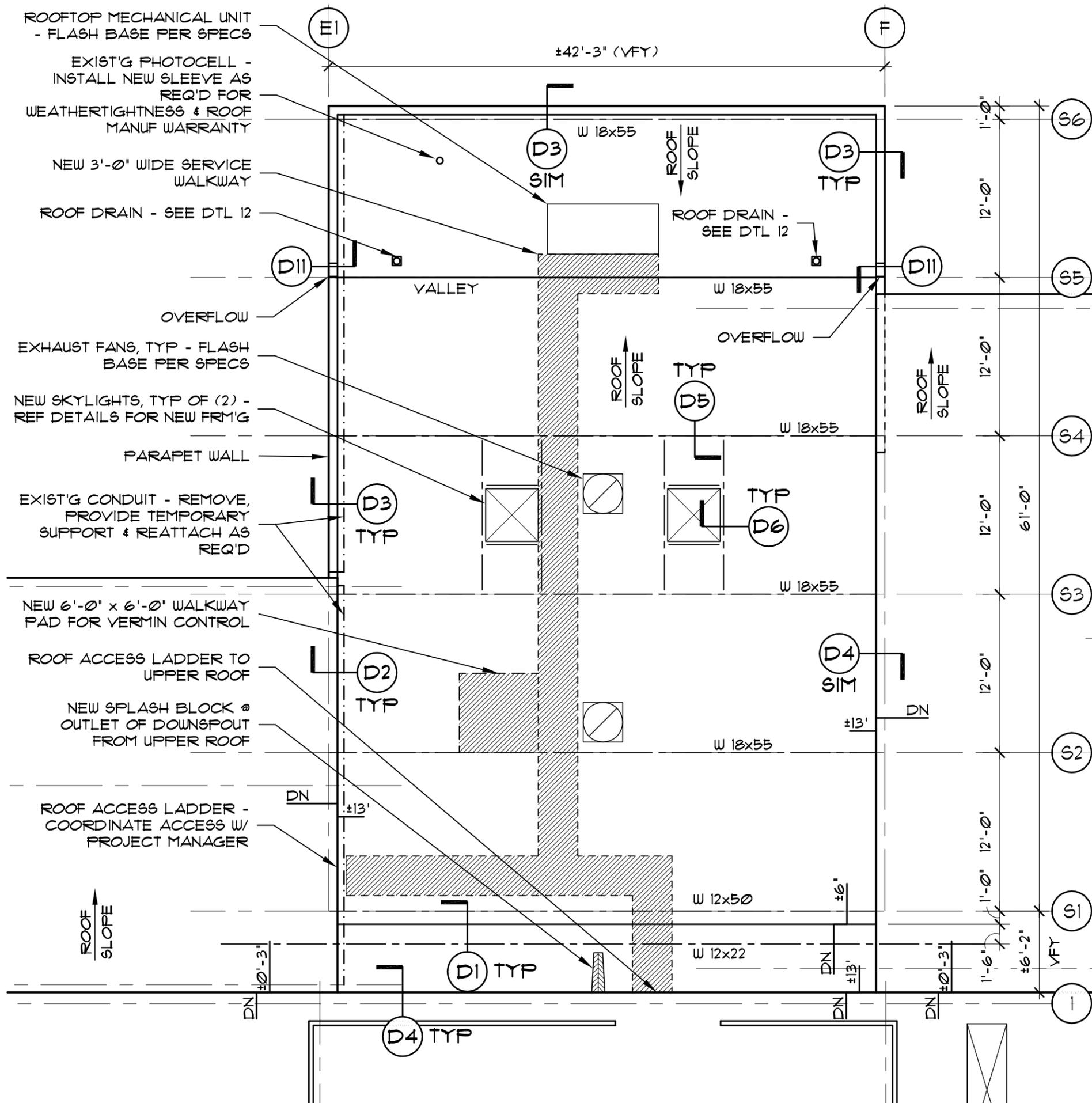
**OVERALL ROOF PLAN**

1" = 30'-0"





R:\2012 Projects\Metro South Low Slope Roofing\1246-A-RFP.dwg, A4, 12/4/2012 12:29:10 PM, Iselin Architects, PC, 503-656-1942, 1307 7th St Oregon City, OR 97045



KEY PLAN

**ISELIN ARCHITECTS P.C.**  
 1307 Seventh Street  
 Oregon City, OR 97045  
 503-656-1942 ph  
 503-656-0658 fax  
 www.iselinarchitects.com



**GENERAL NOTES**

- ALL BUILDING ELEMENTS ARE EXIST'G TO REMAIN UNLESS NOTED OTHERWISE.
- BUILDING GRID LINES ARE SHOWN FOR REFERENCE ONLY & ARE BASED ON ORIGINAL CONSTRUCTION DOCUMENTS.
- STRUCTURAL FRAMING (BELOW) IS BASED ON ORIGINAL CONSTRUCTION DOCUMENTS & IS SHOWN FOR REFERENCE ONLY.
- ALL NEW RIGID INSULATION TO BE SLOPED @ MIN 1/2" PER FOOT. PROVIDE SHOP DRAWINGS FOR ARCHITECT'S REVIEW PRIOR TO INSTALLATION.

**PARTIAL ROOF PLAN  
AREA 2**

1/8" = 1'-0"

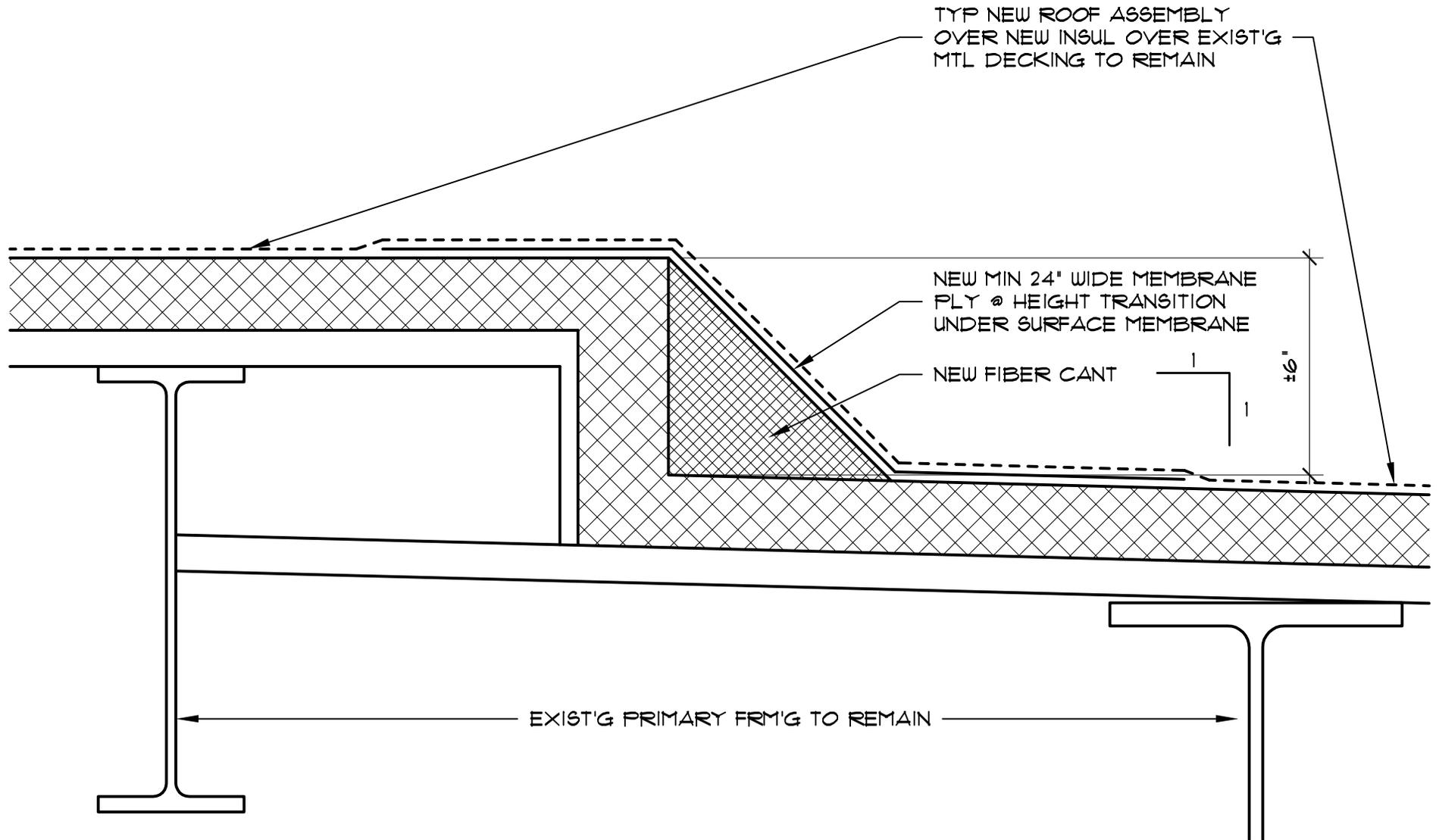
Low-slope roofing replacement  
**Metro South Transfer Station**

**2001 Washington St.**  
 Oregon City, OR 97045

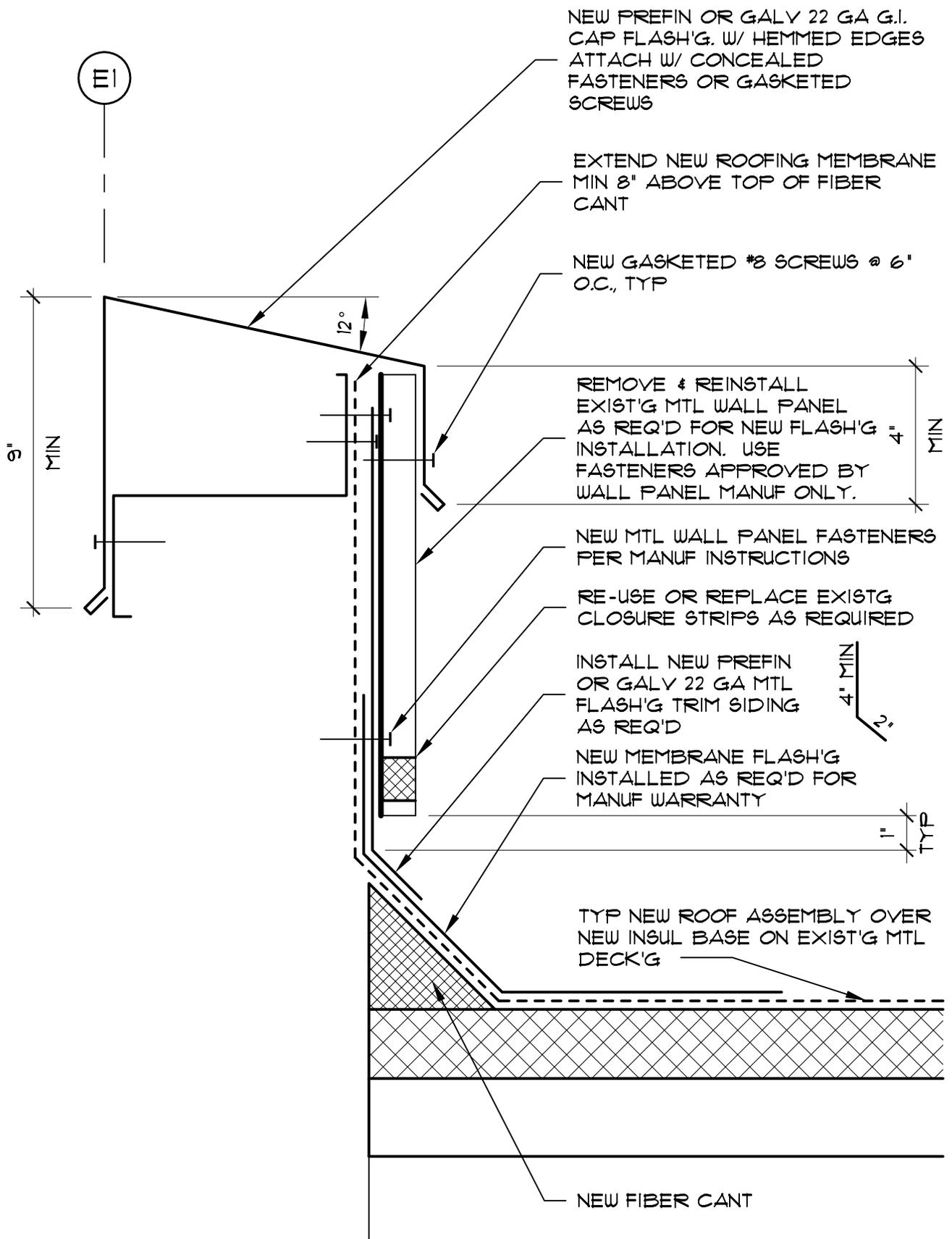
PROJ. NO. : 1246  
 FILE : A-RFP  
 DATE : 12/4/12

SHEET #  
**A4**

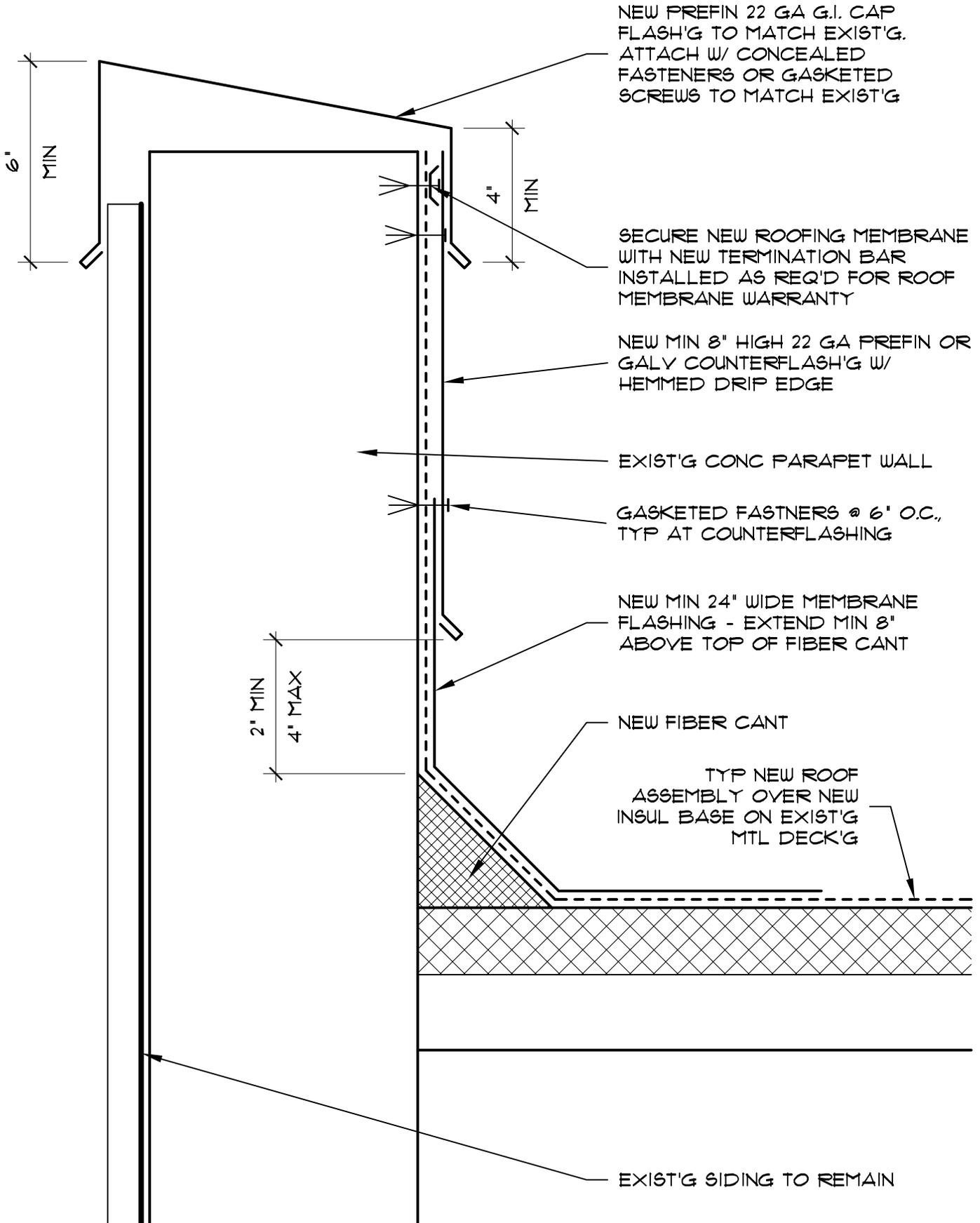
PARTIAL ROOF PLAN  
 AREA 2



**D1** ROOF HEIGHT TRANSITION



D2 ROOF-WALL FLASHING



NEW PREFIN 22 GA G.I. CAP FLASH'G TO MATCH EXIST'G. ATTACH W/ CONCEALED FASTENERS OR GASKETED SCREWS TO MATCH EXIST'G

SECURE NEW ROOFING MEMBRANE WITH NEW TERMINATION BAR INSTALLED AS REQ'D FOR ROOF MEMBRANE WARRANTY

NEW MIN 8" HIGH 22 GA PREFIN OR GALV COUNTERFLASH'G W/ HEMMED DRIP EDGE

EXIST'G CONC PARAPET WALL

GASKETED FASTENERS @ 6" O.C., TYP AT COUNTERFLASHING

NEW MIN 24" WIDE MEMBRANE FLASHING - EXTEND MIN 8" ABOVE TOP OF FIBER CANT

NEW FIBER CANT

TYP NEW ROOF ASSEMBLY OVER NEW INSUL BASE ON EXIST'G MTL DECK'G

EXIST'G SIDING TO REMAIN

6" MIN

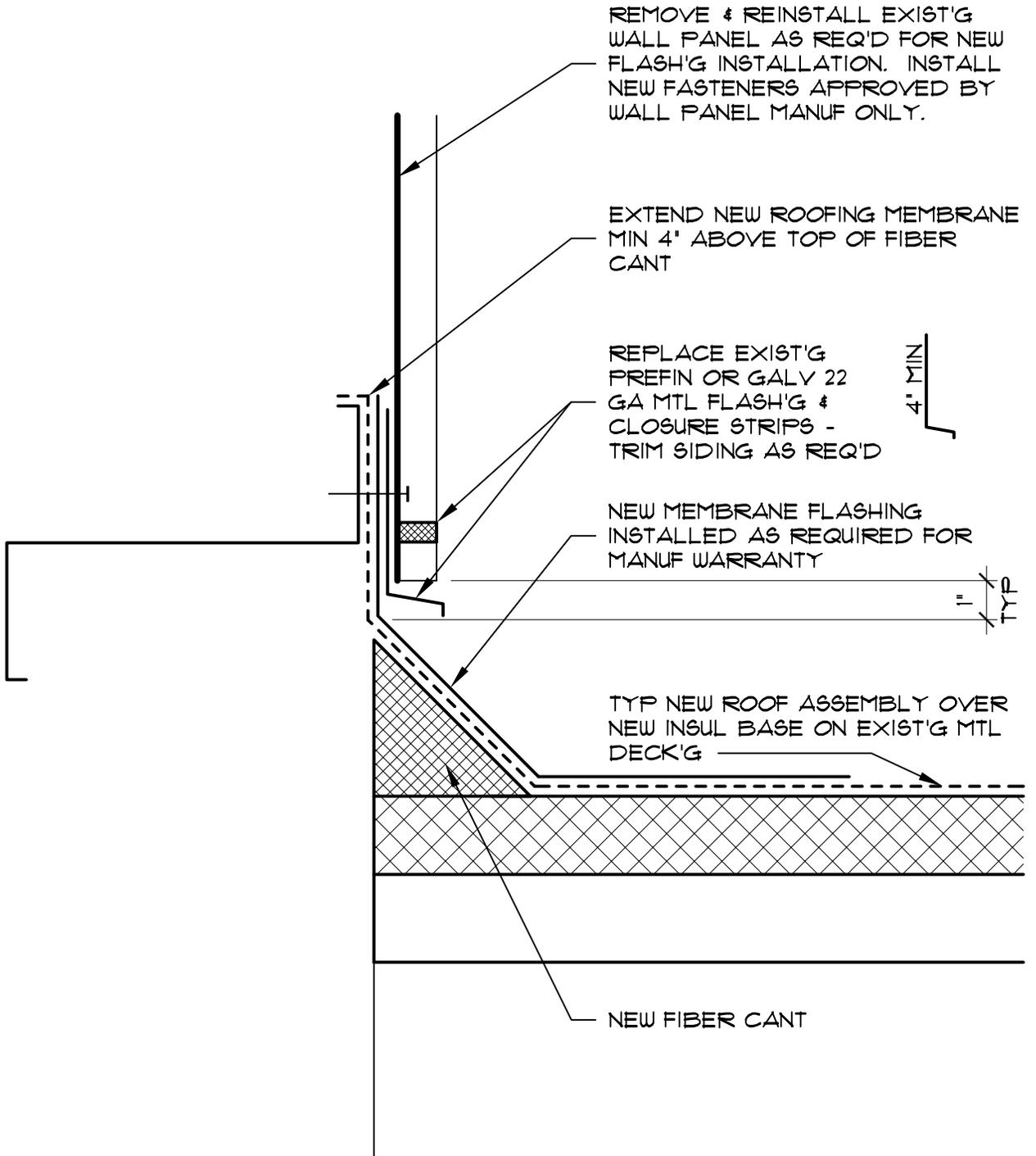
4" MIN

2" MIN  
4" MAX

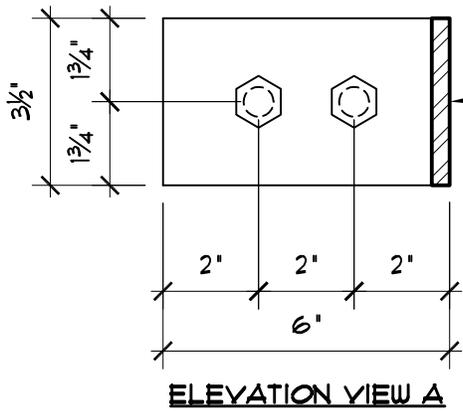
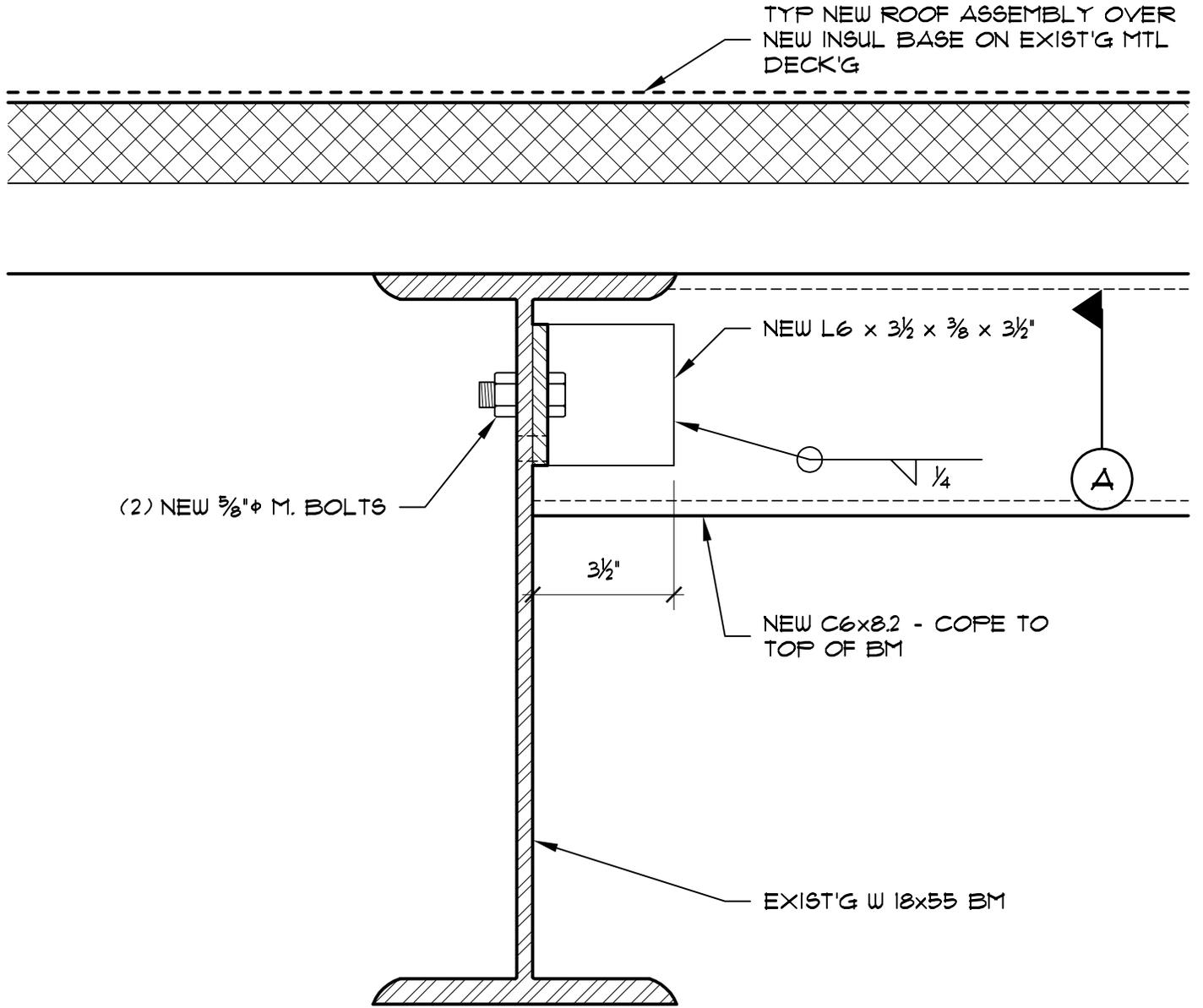
D3

TYP PARAPET WALL-ROOF FLASHING

3" = 1'-0"



D4 ROOF-WALL FLASHING

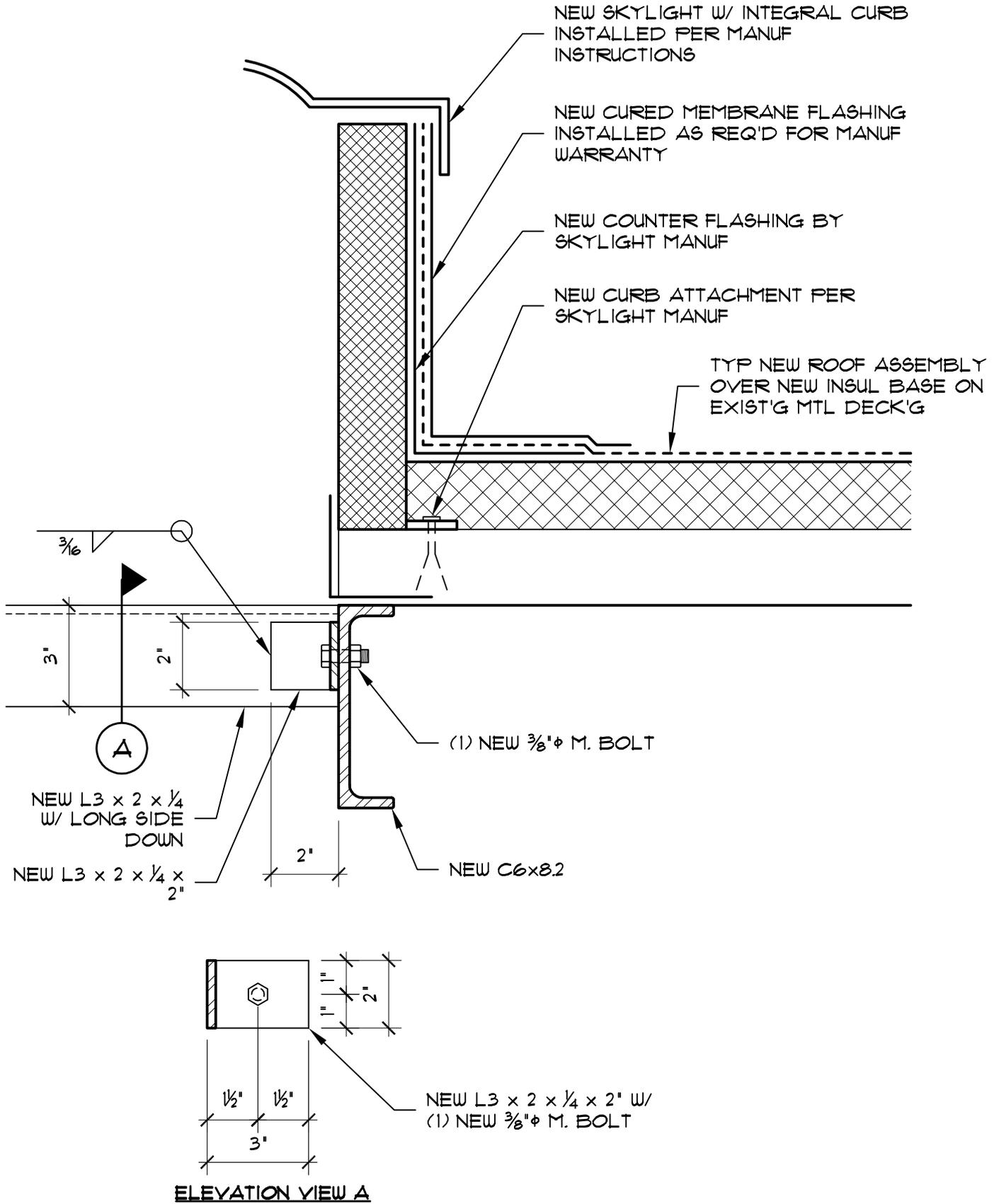


NEW L6 x 3 1/2 x 3/8 x 3 1/2 W/ (2) NEW  
5/8" φ M. BOLTS

D5

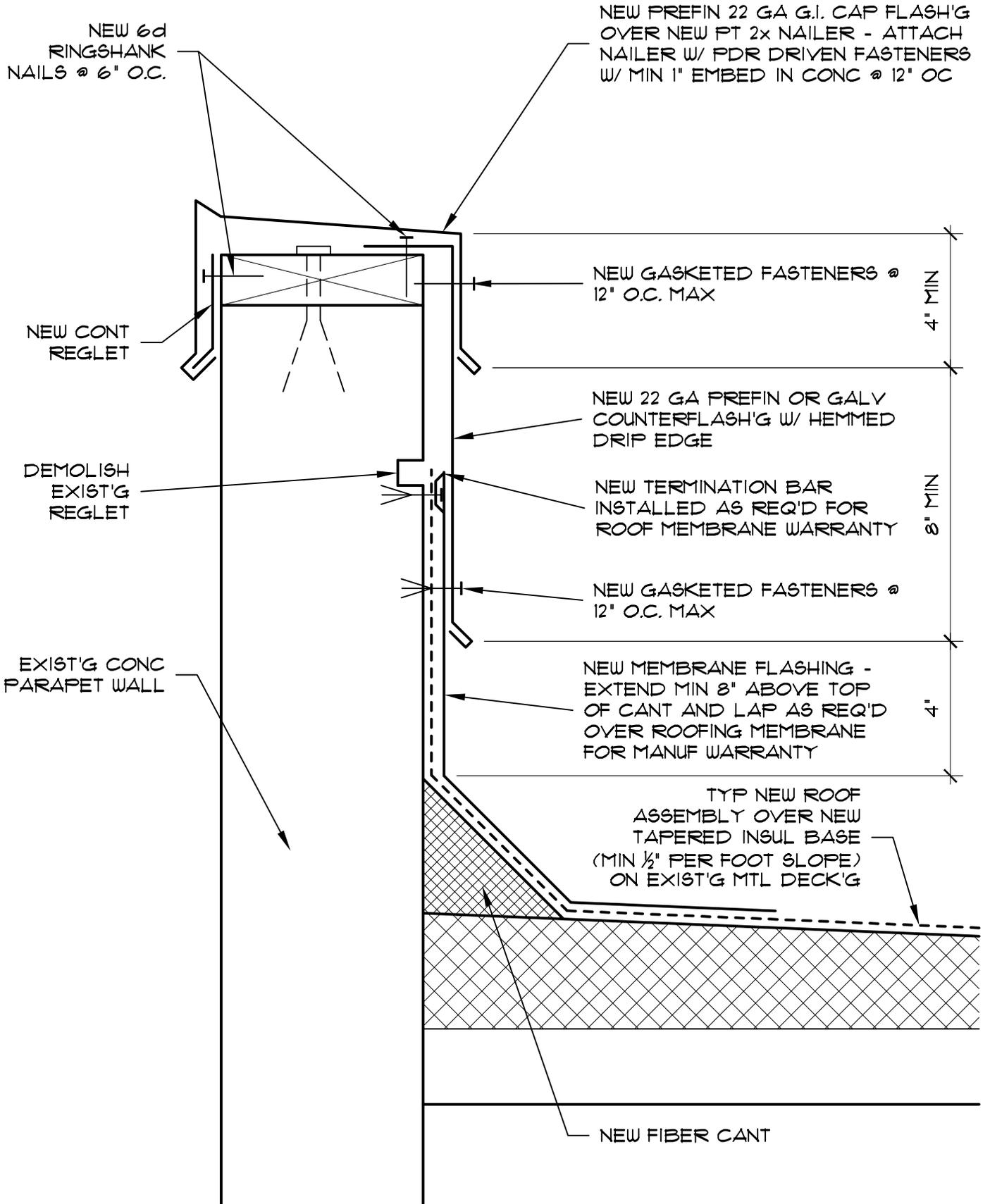
TYP SKYLIGHT TRIMMER-EXISTING BEAM CONNECTION

3" = 1'-0"



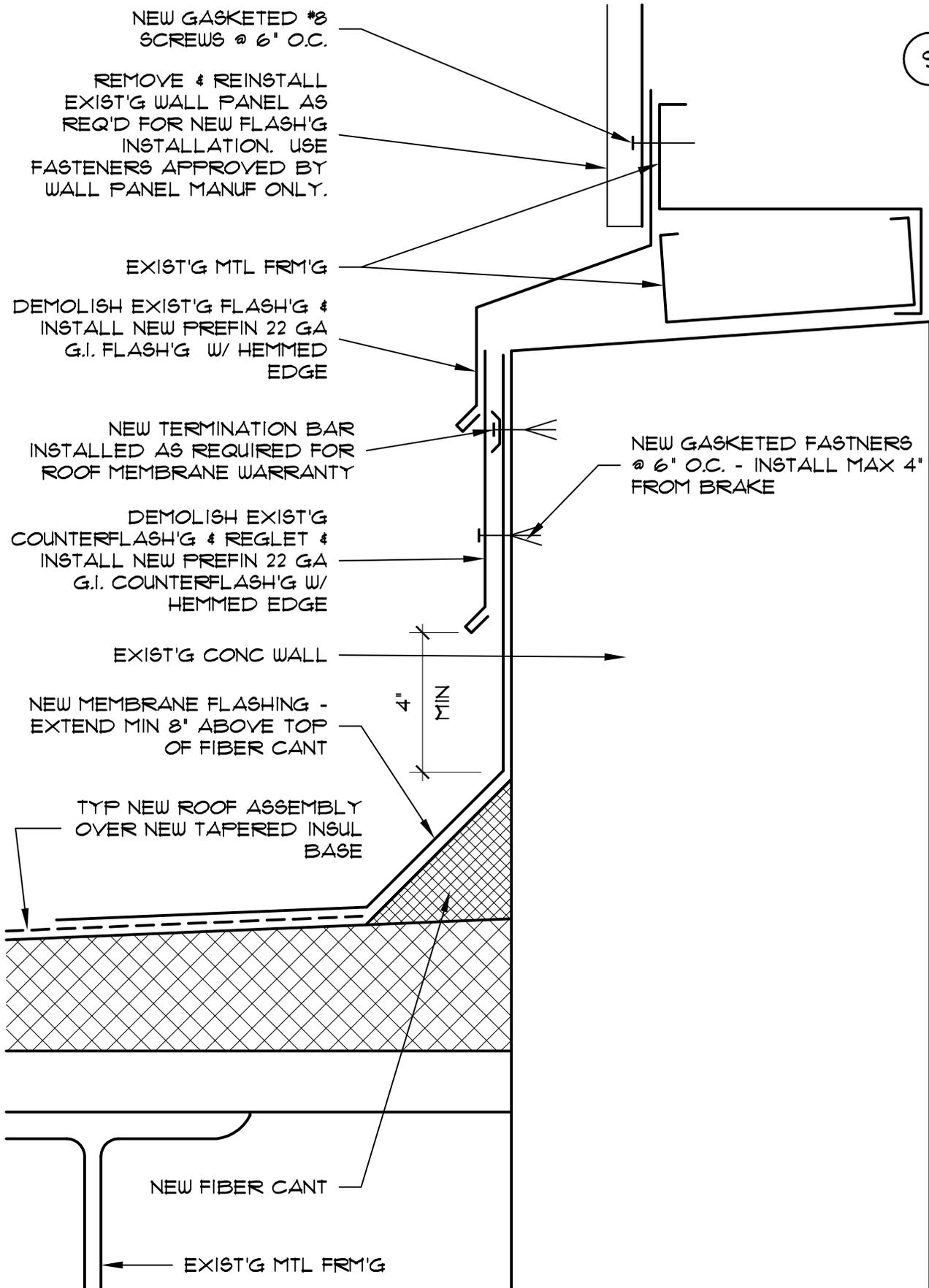
**D6** TYP SKYLIGHT TRIMMER-HEADER CONNECTION

3" = 1'-0"

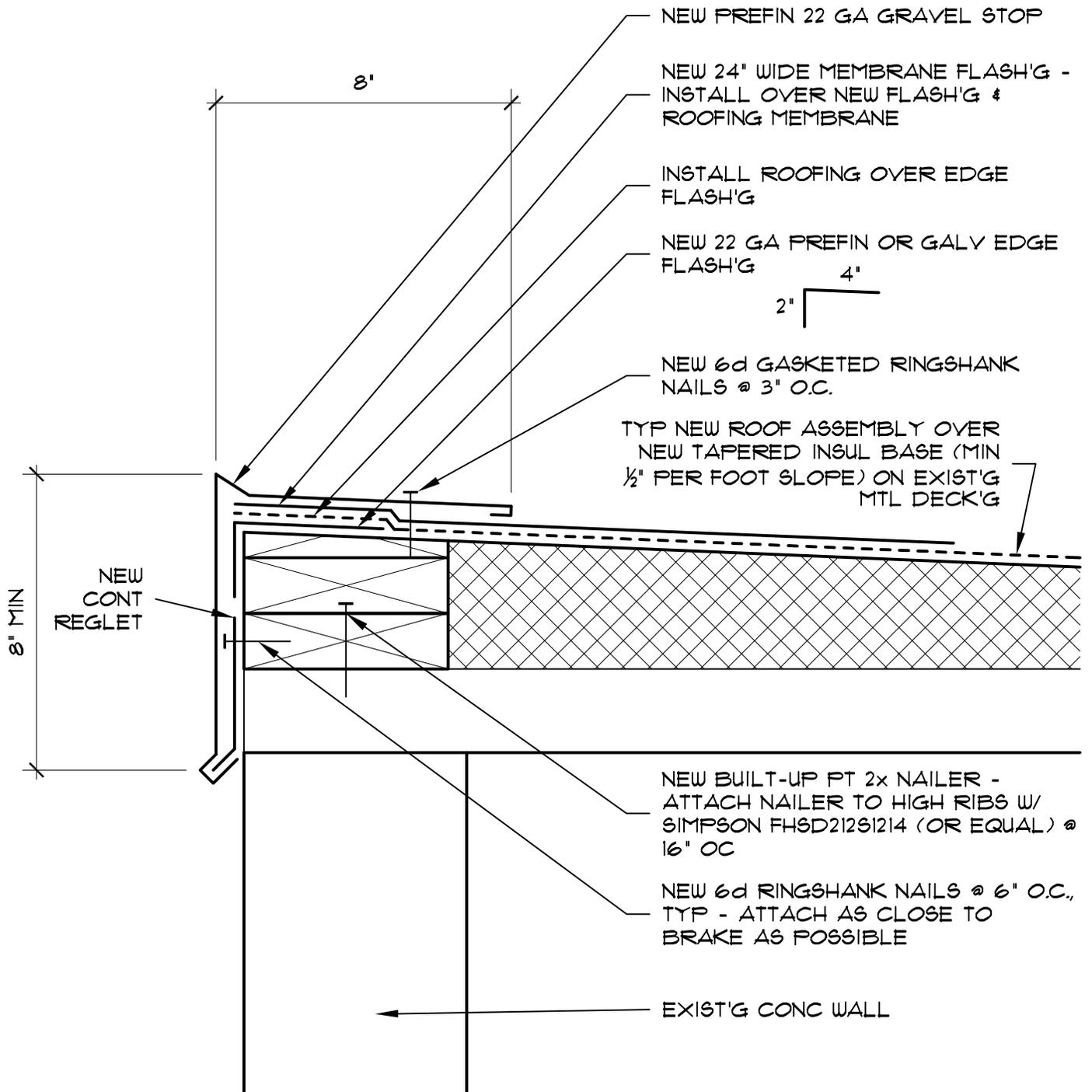


**D7** TYP PARAPET WALL-ROOF FLASHING

1" = 1'-0"

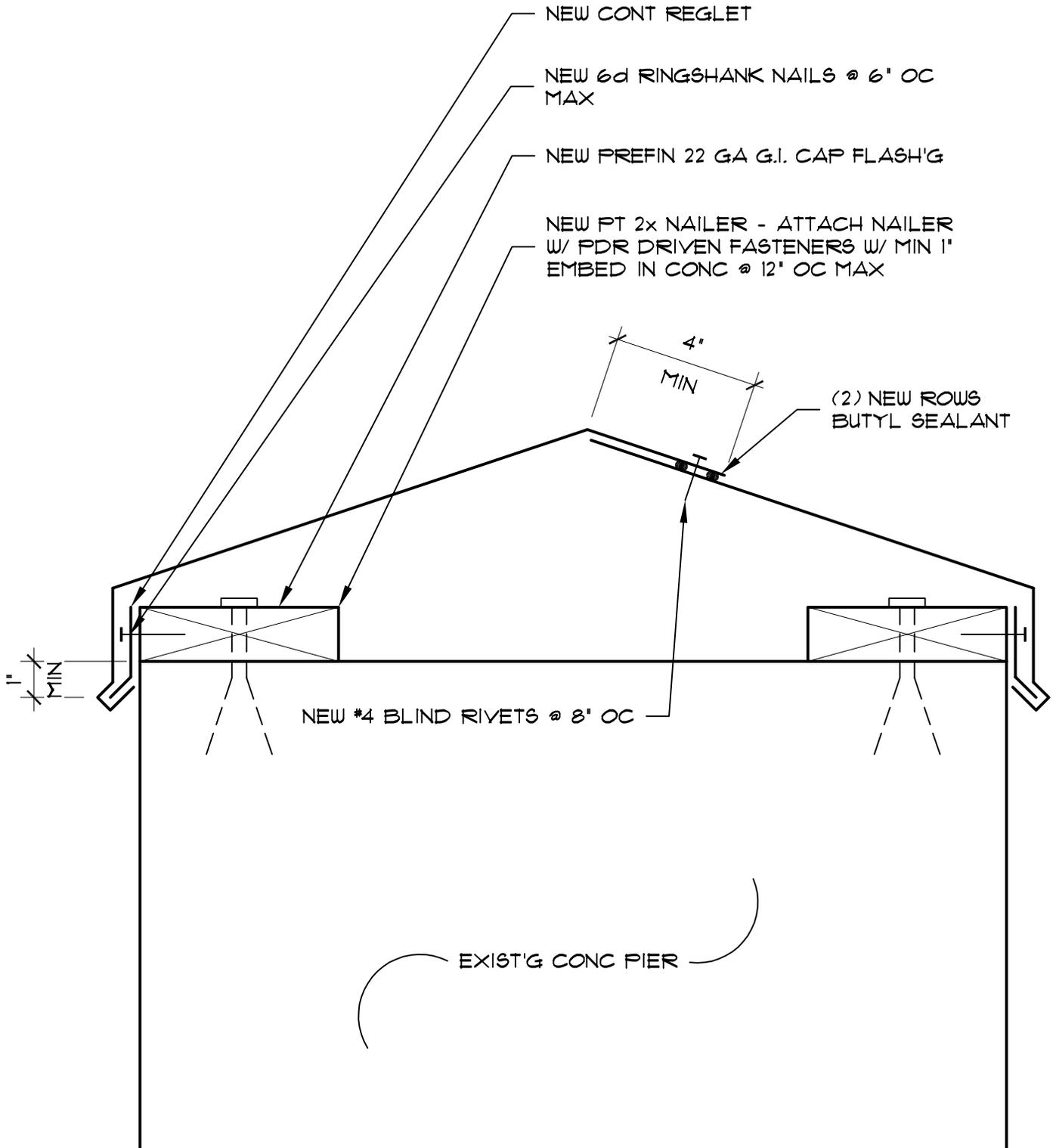


**D8** ROOF-WALL FLASHING



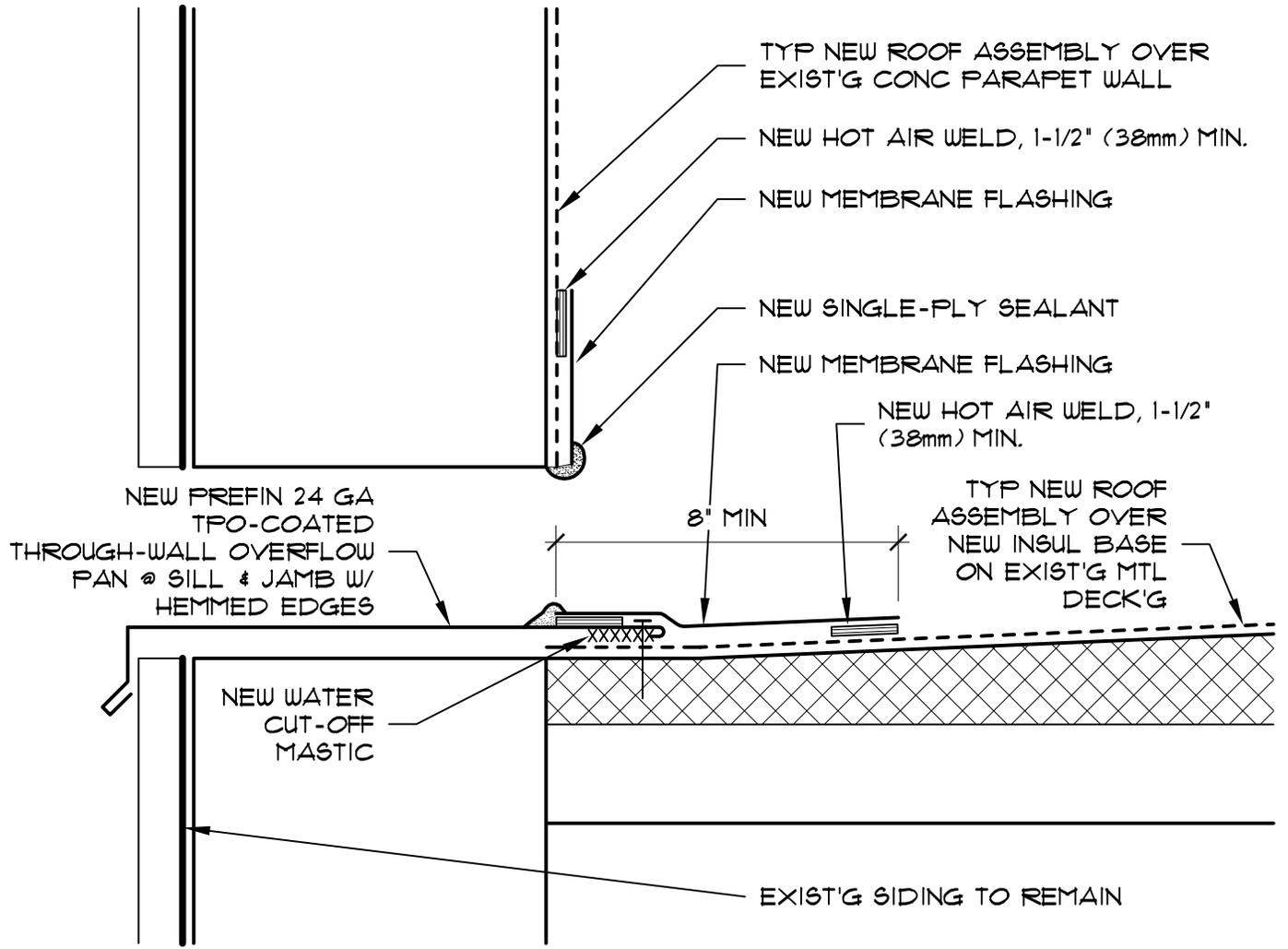
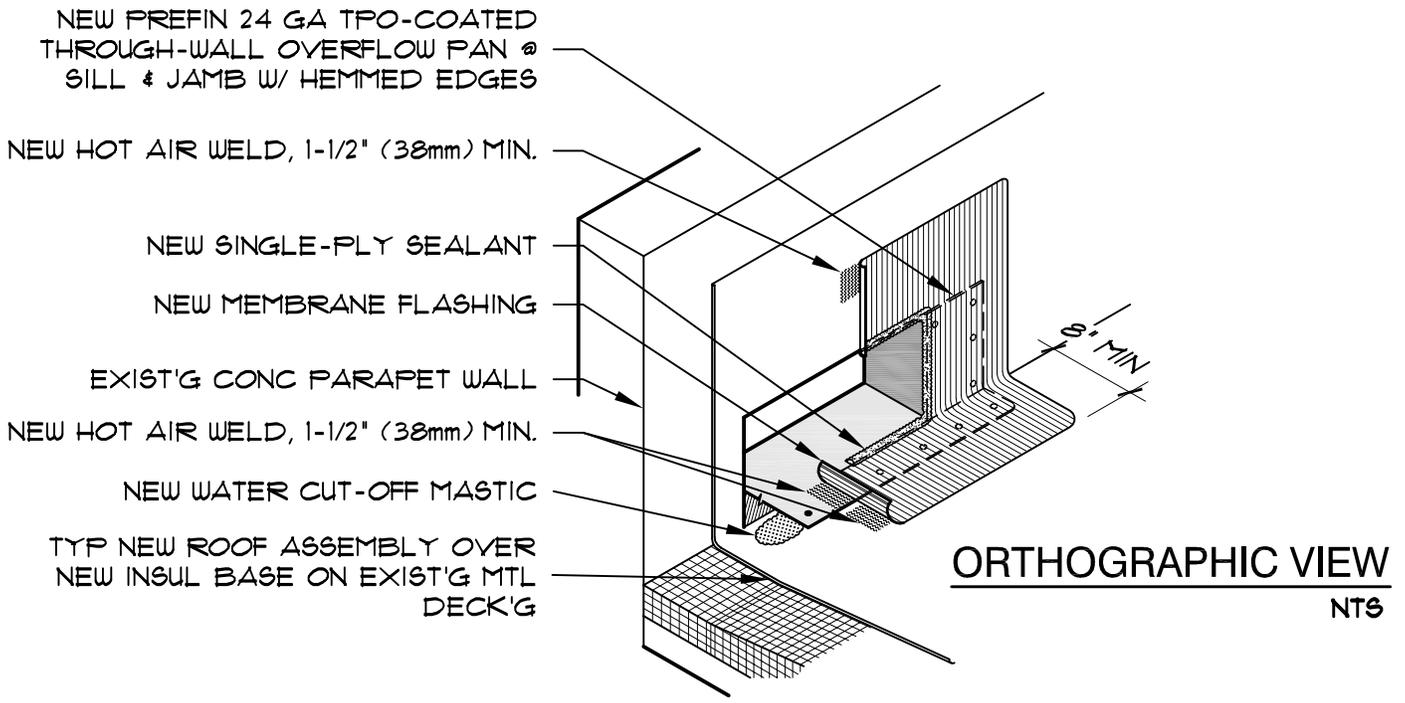
**D9** ROOF EDGE FLASHING

1" = 1'-0"



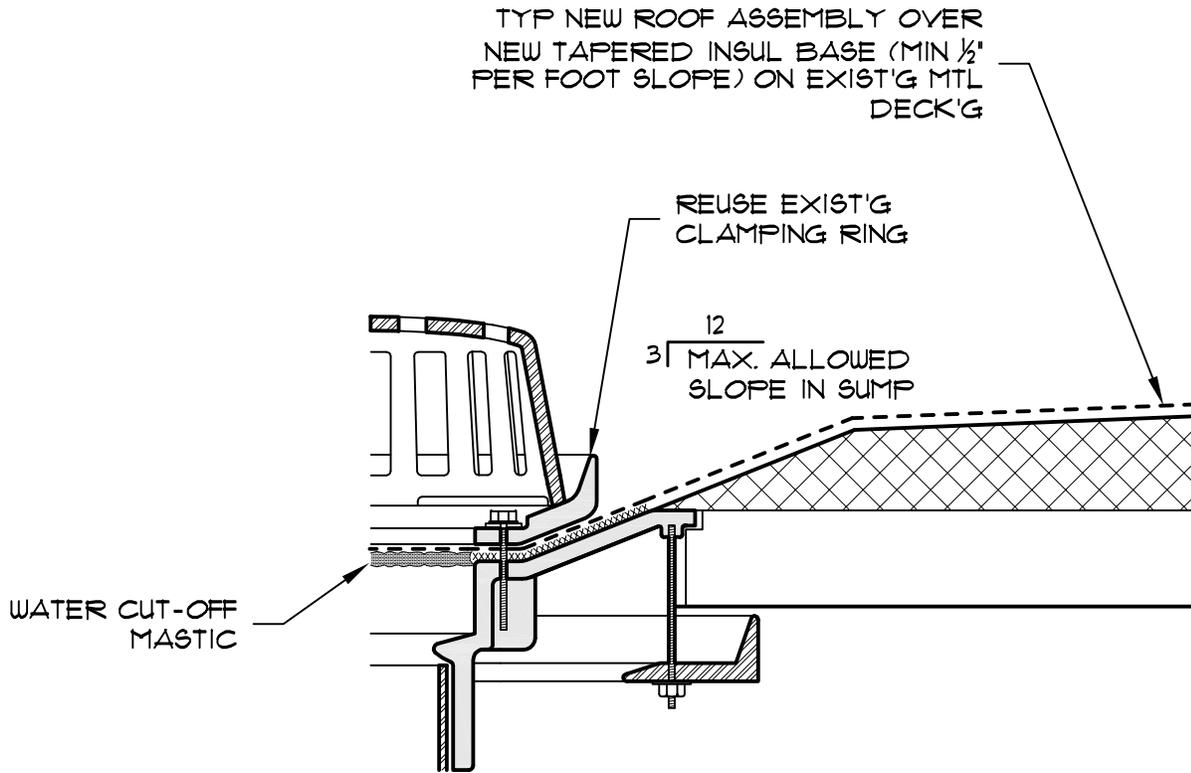
**D10** CONCRETE PIER FLASHING

R:\2012 Projects\1246-Metro South Low Slope Roofing\Dwgs\1246-XD-ROOF-OVERFLOW-11.dwg, Model, 12/4/2012 1:35:40 PM, Iselin Architects, PC, 503-656-1942, 1307 7th St Oregon City, OR 97045



**D11** ROOF OVERFLOW

3" = 1'-0"



NOTES:

1. REMOVE EXISTING LEAD, ASPHALT, FLASHING MATERIAL & ENSURE THE DRAIN RING IS COMPLETELY CLEAN DOWN TO BARE METAL. USE NEW BOLTS TO MATCH ORIGINAL.
2. THE HOLE IN THE MEMBRANE SHALL EXCEED THE DIAMETER OF THE DRAIN PIPE, BUT SHALL BE NO LESS THAN 1/2" (13mm) FROM THE ATTACHMENT POINTS OF THE DRAIN CLAMPING RING.
3. ALL BOLTS OR CLAMPS MUST BE IN PLACE TO PROVIDE CONSTANT COMPRESSION ON WATER CUT-OFF MASTIC.

D12 ROOF DRAIN

3" = 1'-0"

SECTION 01001  
BASIC REQUIREMENTS

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Summary:
  - 1. Refer to instructions to bidders and supplemental instructions.
  - 2. Specification conventions.
  
- B. Price and Payment Procedures:
  - 1. Refer to instructions to bidders and supplemental instructions.
  - 2. Testing and inspection.
  - 3. Schedule of values.
  - 4. Applications for payment.
  - 5. Change procedures.
  
- C. Administrative Requirements:
  - 1. Coordination.
  - 2. Meetings.
  - 3. Progress meetings.
  - 4. Cutting and patching.
  
- D. Submittals:
  - 1. Submittal procedures.
  - 2. Construction progress schedules.
  - 3. Proposed products list.
  - 4. Product data.
  - 5. Shop drawings.
  - 6. Manufacturer's instructions.
  - 7. Manufacturer's certificates.
  
- E. Quality Requirements:
  - 1. Quality control.
  - 2. Tolerances.
  - 3. References.
  - 4. Labeling.
  - 5. Testing and inspection laboratory services.
  - 6. Manufacturer's field services and reports.
  - 7. Examination.
  - 8. Preparation.
  
- F. Temporary Facilities and Controls:
  - 1. Temporary electricity.
  - 2. Temporary lighting for construction purposes.
  - 3. Temporary sanitary facilities.
  - 4. Field offices and sheds.
  - 5. Parking.
  - 6. Progress cleaning and waste removal.

7. Fire prevention facilities.
8. Barriers and fencing.
9. Protection of installed work.
10. Security.
11. Pollution and environmental control.

- G. Product Requirements:
1. Products.
  2. Delivery, handling, storage, and protection.
  3. Product options.
  4. Substitutions.
- H. Execution Requirements:
1. Closeout procedures.
  2. Final cleaning.
  3. Protecting installed construction.
  4. Project record documents.
  5. Warranties.

## 1.2 SPECIFICATION CONVENTIONS

- A. These specifications are written in imperative mood and streamlined form. This imperative language is directed to the Contractor, unless specifically noted otherwise. The words “shall be” are included by inference where a colon (:) is used within sentences or phrases.

## 1.3 TESTING AND INSPECTION

- A. Testing and Inspection services will be paid for by Owner. Cost of any reinspection upon failure of previous test shall be borne by Contractor.

## 1.4 SCHEDULE OF VALUES

- A. Submit schedule on AIA Form G703, EJCDC Form 1910-8-E. Contractor's standard form or electronic media printout will be considered.
- B. Submit Schedule of Values in duplicate within 15 days after Notice to Proceed.

## 1.5 APPLICATIONS FOR PAYMENT

- A. Submit three copies of each application on AIA Form G702 and G703 or similar document acceptable to Owner.
- B. Content and Format: Utilize Schedule of Values for listing items in Application for Payment.
- C. Payment Period: Monthly.

1.6 CHANGE PROCEDURES

- A. Stipulated Sum/Price Change Order: Based on Proposal Request and Contractor's fixed price quotation or Contractor's request for Change Order as approved by Architect/Engineer.
- B. Change Order Forms: AIA G701, EJCDC 1910-8-B, or other form acceptable to Owner.

1.7 COORDINATION

- A. Coordinate scheduling, submittals, and Work of various sections of specifications to ensure efficient and orderly sequence of installation of interdependent construction elements.
- B. Verify utility requirement characteristics of operating equipment are compatible with building utilities.

1.8 PRECONSTRUCTION MEETINGS

- A. Owner will schedule preconstruction meeting after Notice of Award for affected parties.

1.9 PROGRESS MEETINGS

- A. Schedule and administer meetings throughout progress of the Work at maximum bi-monthly intervals.
- B. Preside at meetings, Owner will record minutes, and distribute copies within two days to those affected by decisions made.

1.10 CUTTING AND PATCHING

- A. Employ skilled and experienced installer to perform cutting and patching new Work; restore Work with new Products.
- B. Submit written request in advance of cutting or altering structural or building enclosure elements.
- C. Execute cutting, fitting, and patching to complete Work, and to:
  - 1. Fit several parts together, to integrate with other Work.
  - 2. Uncover Work to install or correct ill-timed Work.
  - 3. Remove and replace defective and non-conforming Work.
- D. Cut masonry and concrete materials using masonry saw or core drill. Restore Work with new Products in accordance with requirements of Contract Documents.
- E. Fit Work tight to adjacent elements. Maintain integrity of wall, ceiling, or floor construction; completely seal voids.
- F. Fit Work tight to pipes, sleeves, ducts, conduit, and other penetrations through surfaces.

1.11 SUBMITTAL PROCEDURES

- A. Submittal form to identify Project, Contractor, subcontractor or supplier; and pertinent Contract Document references.
- B. Apply Contractor's stamp, signed or initialed, certifying that review, verification of Products required, field dimensions, adjacent construction Work, and coordination of information is in accordance with requirements of the Work and Contract Documents.
- C. Identify variations from Contract Documents and Product or system limitations which may be detrimental to successful performance of completed Work.
- D. Revise and resubmit submittals as required; identify changes made since previous submittal.

1.12 CONSTRUCTION PROGRESS SCHEDULES

- A. Submit initial progress schedule in duplicate within [7] days after date of Notice to Proceed for Project Manager's review.
- B. Submit revised schedules with each Application for Payment, identifying changes since previous version. Indicate estimated percentage of completion for each item of Work at each submission.
- C. Submit horizontal bar chart with separate line for each section of Work, identifying first work day of each week.

1.13 PROPOSED PRODUCTS LIST

- A. Within [7] days after date of Notice to Proceed, submit list of major Products proposed for use, with name of manufacturer, trade name, and model number of each product.

1.14 PRODUCT DATA

- A. Product Data:
  - 1. Submitted to Project Manager or Architect/Engineer for review for limited purpose of checking for conformance with information given and design concept expressed in Contract Documents.
  - 2. After review, provide copies and distribute in accordance with SUBMITTAL PROCEDURES article and for record documents purposes as specified.
- B. Submit number of copies which Contractor requires, plus two copies which will be retained by Architect/Engineer.
- C. Mark each copy to identify applicable products, models, options, and other data. Supplement manufacturer's standard data to provide information unique to this project.

1.15 SHOP DRAWINGS

- A. Shop Drawings:

1. Submitted to Architect/Engineer for review for limited purpose of checking for conformance with information given and design concept expressed in Contract Documents.
2. After review, provide copies and distribute in accordance with SUBMITTAL PROCEDURES article and for record documents purposes as specified.

#### 1.16 MANUFACTURER'S INSTRUCTIONS

- A. When specified in individual specification sections, submit manufacturer printed instructions for delivery, storage, assembly, installation, and finishing, in quantities specified for Product Data.

#### 1.17 MANUFACTURER'S CERTIFICATES

- A. When specified in individual specification sections, submit certifications by manufacturer to Architect/Engineer, in quantities specified for Product Data.
- B. Indicate material or Product conforms to or exceeds specified requirements. Submit supporting reference data, affidavits, and certifications as appropriate.

#### 1.18 QUALITY CONTROL

- A. Monitor quality control over suppliers, manufacturers, Products, services, site conditions, and workmanship, to produce Work of specified quality.
- B. Comply with manufacturer's instructions.
- C. Comply with specified standards as minimum quality for the Work except when more stringent tolerances, codes, or specified requirements indicate higher standards or more precise workmanship.

#### 1.19 TOLERANCES

- A. Monitor fabrication and installation tolerance control of installed Products over suppliers, manufacturers, Products, site conditions, and workmanship, to produce acceptable Work. Do not permit tolerances to accumulate.
- B. Comply fully with manufacturer's tolerances.

#### 1.20 REFERENCES

- A. Conform to reference standards by date of issue current as of date of Contract Documents.
- B. When specified reference standard conflict with Contract Documents, request clarification from Architect/Engineer before proceeding.

#### 1.21 LABELING

- A. Attach label from agency approved by authority having jurisdiction for products, assemblies, and systems required to be labeled by applicable code.

- B. Label Information: Include manufacturer's or fabricator's identification, approved agency identification, and the following information, as applicable, on each label.
  - 1. Model number.
  - 2. Performance characteristics.

1.22 TESTING AND INSPECTION LABORATORY SERVICES

- A. Owner will appoint, employ, and pay for specified services of independent firm to perform testing and inspection.
- B. Cooperate with independent firm; furnish samples as requested.
- C. Re-testing required because of non-conformance to specified requirements will be charged to Contractor.

1.23 MANUFACTURER'S FIELD SERVICES AND REPORTS

- A. When specified in individual specification sections, require material or Product suppliers or manufacturers to furnish qualified staff personnel to observe site conditions and to initiate instructions when necessary.
- B. Report observations and site decisions or instructions that are supplemental or contrary to manufacturer's written instructions.

1.24 EXAMINATION

- A. Verify existing site conditions and substrate surfaces are acceptable for subsequent Work. Beginning new Work means acceptance of existing conditions.

1.25 PREPARATION

- A. Clean substrate surfaces prior to applying next material or substance.
- B. Apply manufacturer required or recommended substrate primer, sealer, or conditioner prior to applying new material or substance in contact or bond.

1.26 TEMPORARY ELECTRICITY

- A. Owner will pay cost of electricity used.
- B. Provide temporary electricity and power outlets for construction operations, connections, branch wiring, distribution boxes, and flexible power cords as required. Do not disrupt Owner's need for continuous service.

1.27 TEMPORARY LIGHTING FOR CONSTRUCTION PURPOSES

- A. Provide and maintain temporary lighting for construction operations.
- B. Provide branch wiring from power source to distribution boxes with lighting conductors, pigtails, and lamps as required.
- C. Permanent building lighting may be utilized during construction.

1.28 TEMPORARY SANITARY FACILITIES

- A. Existing facilities may be used.
- B. Maintain in clean and sanitary condition.

1.29 FIELD OFFICES AND SHEDS

- A. Office: No field office required.
- B. Owner will provide space for Project meetings, with table and chairs to accommodate [6] persons as required.

1.30 PARKING

- A. On-site parking will be limited to (2) vehicles at any time. All other vehicles must park off-site.

1.31 PROGRESS CLEANING AND WASTE REMOVAL

- A. Collect and maintain areas free of waste materials, debris, and rubbish. Maintain site in clean and orderly condition.

1.32 FIRE PREVENTION FACILITIES

- A. Prohibit smoking within buildings under construction and demolition including roofs.
- B. Establish fire watch for cutting and welding and other hazardous operations capable of starting fires. Maintain fire watch before, during, and after hazardous operations until threat of fire does not exist.
- C. Portable Fire Extinguishers: NFPA 10; 10 pound capacity, 4A-60B: C UL rating.
  - 1. Provide one fire extinguisher at each stair ladder on each floor of buildings under construction [and demolition].
  - 2. Provide minimum one fire extinguisher on roof during roofing operations using heat producing equipment.

1.33 BARRIERS AND FENCING

- A. Provide barriers and / or fencing to prevent unauthorized entry to construction areas and to protect existing facilities and adjacent properties from damage.

1.34 PROTECTION OF INSTALLED WORK

- A. Protect installed Work and provide special protection where specified in individual specification sections.
- B. Prohibit traffic or storage upon waterproofed or roofed surfaces.

1.35 SECURITY

- A. Provide security and facilities to protect Work and stored materials against vandalism, or theft. Site is occupied 24 hrs / day, 7 days per week. Security is at discretion of Contractor.

1.36 POLLUTION AND ENVIRONMENTAL CONTROL

- A. Provide methods, means, and facilities to prevent contamination of soil, water, and atmosphere from discharge of noxious, toxic substances, and pollutants produced by construction operations.

1.37 PRODUCTS

- A. Products: Means new material, machinery, components, equipment, fixtures, and systems forming the Work, but does not include machinery and equipment used for preparation, fabrication, conveying and erection of the Work.
- B. Do not use materials and equipment removed from existing premises, except as specifically identified or allowed by the Contract Documents.

1.38 DELIVERY, HANDLING, STORAGE, AND PROTECTION

- A. Deliver, handle, store, and protect Products in accordance with manufacturer's instructions.

1.39 PRODUCT OPTIONS

- A. Products Specified by Naming One or More Manufacturers with Provision for Substitutions: Submit request for substitution for manufacturers not named prior to bid.

1.40 SUBSTITUTIONS

- A. Instructions to Bidders specify time for submitting requests for Substitutions during bidding period to requirements specified in this section.
- B. Substitutions will only be considered when Product becomes unavailable through no fault of Contractor.
- C. Document each request with complete data substantiating compliance of proposed Substitution with Contract Documents.
- D. Submit three copies of request for Substitution for consideration. Limit each request to one proposed Substitution.

1.41 CLOSEOUT PROCEDURES

- A. Submit written certification Contract Documents have been reviewed, Work has been inspected, and Work is complete in accordance with Contract Documents and ready for Architect/Engineer's inspection.

- B. Submit final Application for Payment identifying total adjusted Contract Sum/Price, previous payments, and amount remaining due.

1.42 FINAL CLEANING

- A. Execute final cleaning prior to final inspection.
- B. Clean interior and exterior surfaces exposed to view.
- C. Clean debris from site, roofs, gutters, downspouts, and drainage systems.
- D. Remove waste and surplus materials, rubbish, and construction facilities from site.

1.43 PROTECTING INSTALLED CONSTRUCTION

- A. Provide temporary and removable protection for installed products. Control activity in immediate work area to prevent damage.
- B. Prohibit traffic or storage upon waterproofed or roofed surfaces. When traffic or activity is necessary, obtain recommendations for protection from waterproofing or roofing material manufacturer.
- C. Prohibit from landscaped areas.

1.44 PROJECT RECORD DOCUMENTS

- A. Maintain on site one set of Contract Documents to be utilized for record documents.
- B. Record actual revisions to the Work. Record information concurrent with construction progress.
- C. Specifications: Legibly mark and record at each Product section description of actual Products installed.
- D. Record Documents and Shop Drawings: Legibly mark each item to record actual construction.
- E. Submit documents to Owner with claim for final Application for Payment.

1.45 WARRANTIES

- A. Provide duplicate notarized copies.
- B. Execute and assemble transferable warranty documents from subcontractors, suppliers, and manufacturers.
- C. Submit prior to final Application for Payment.

PART 2 PRODUCTS – Not Used

PART 3 EXECUTION – Not Used.

END OF SECTION

SECTION 02221  
BUILDING DEMOLITION

PART 3 GENERAL

3.1 SUMMARY

- A. Section Includes:
  - 1. Demolishing designated building components, equipment and fixtures.
  - 2. Protecting items designated to remain.
  - 3. Removing demolished materials.

3.2 SUBMITTALS

- A. Shop Drawings and Schedule: Describe demolition, removal procedures, sequence and schedule.

PART 4 PRODUCTS

Not Used.

PART 5 EXECUTION

5.1 EXAMINATION

- A. Monitor buildings for movement during demolition operations. Notify Architect/Engineer of measured movement.

5.2 PREPARATION

- A. Provide, erect, and maintain temporary barriers and security devices.
- B. Notify adjacent owners of work which may affect their property, potential noise, utility outage, or disruption three days prior to the start of Work. Coordinate with Owner.
- C. Prevent movement or settlement of adjacent structures. Provide bracing and shoring.
- D. Protect existing landscaping materials, structures, building components indicated to remain.
- E. Erect and maintain temporary partitions to prevent spread of dust, odors and noise to permit continued Owner occupancy.
- F. Protect existing items indicated to remain.

5.3 DEMOLITION REQUIREMENTS

- A. Conduct demolition to minimize interference with adjacent building areas.

- B. Conduct operations with minimum interference to public or private accesses.
- C. Maintain [protected] egress and access at all times. Do not close or obstruct roadways or sidewalks without Owner's prior approval.
- D. Cease operations immediately when adjacent structures appear to be in danger. Notify Architect/Engineer.

5.4 BUILDING DEMOLITION

- A. Demolish components indicated in orderly and careful manner.

5.5 SELECTIVE DEMOLITION

- A. Demolish and remove components in orderly and careful manner, in sequence as indicated on Drawings.
- B. Protect existing supporting structural members and building components to remain.

5.6 CLEAN UP

- A. Remove demolished materials from site as work progresses.
- B. Leave areas of work in clean condition.

END OF SECTION

SECTION 05120  
STRUCTURAL STEEL

PART 6 GENERAL

6.1 SUMMARY

- A. Section Includes:
  - 1. Channels and angles.
  - 2. Structural plates.
  - 3. Fasteners, connectors, and anchors.

6.2 SUBMITTALS

- A. Shop Drawings: Indicate sizes, spacing, and locations of structural members, connections, and welded connections.

6.3 SUSTAINABLE DESIGN SUBMITTALS

- A. Manufacturer's Certificate: Provide mill certificates identifying steel grade and location of manufacturer / rolling plant.

6.4 QUALITY ASSURANCE

- A. Perform Work in accordance with the following:
  - 1. AISC Code of Standard Practice for Steel Buildings and Bridges.
  - 2. RCSC Specification for Structural Joints Using ASTM A 325 or A 490 Bolts.

6.5 QUALIFICATIONS

- A. Erector: Company specializing in performing Work of this section with minimum two years documented experience with the following current AISC Certification:
  - 1. Certified Steel Erector (CSE).
- B. Welders and Welding Procedures: AWS D1.1 qualified within previous 12 months.

PART 7 PRODUCTS

7.1 STRUCTURAL STEEL

- A. Channels and Angles: ASTM A36/A36M.
- B. Structural Plates: ASTM A36/A36M.

7.2 FASTENERS, CONNECTORS, AND ANCHORS

- A. Bolts: ASTM A307; Grade A or B.
  - 1. Finish: Hot dipped galvanized.

- B. Nuts: ASTM A563 heavy hex type.
  - 1. Finish: Hot dipped galvanized.
- C. Washers: ASTM F436; Type 1, circular.
  - 1. Finish: Hot dipped galvanized.

### 7.3 WELDING MATERIALS

- A. Welding Materials: AWS D1.1; type required for materials being welded.

### 7.4 ACCESSORIES

- A. Shop Primer: SSPC Paint 15, Type 1, red oxide.
- B. Touch-Up Primer: Match shop primer.

### 7.5 FABRICATION

## PART 8 EXECUTION

### 8.1 EXAMINATION

- A. Verify bearing surfaces are at correct elevation. Field verify all existing conditions.

### 8.2 ERECTION

- A. Allow for erection loads, and for sufficient temporary bracing to maintain structure safe, plumb, and in alignment until completion of erection and installation of permanent bracing.
- B. Field weld components indicated on shop drawings.
- C. Do not field cut or alter structural members without approval of Architect/Engineer.
- D. After erection, touch up welds and abrasions to match shop finishes.

### 8.3 FIELD QUALITY CONTROL

- A. Bolted Connections: Inspect in accordance with AISC specifications.
  - 1. Visually inspect all bolted connections.
- B. Welding:
  - 1. Certify welders and conduct inspections and tests as required. Record types and locations of defects found in work. Record work required and performed to correct deficiencies.
  - 2. Visually inspect all welds.
- C. Correct defective bolted connections and welds.

END OF SECTION

SECTION 05500  
METAL FABRICATIONS

PART 9 GENERAL

9.1 SUMMARY

- A. Section Includes:
  - 1. Shop fabricated stainless steel wall anchors for roof fall protection.

9.2 SYSTEM DESCRIPTION

- A. Anchor and attachment to building frame shall be capable of supporting an ultimate load of 5,000# against fracture or detachment, and working load rated for 1,250#

9.3 SUBMITTALS

- A. Shop Drawings: Indicate profiles, sizes, connection attachments, reinforcing, anchorage, size and type of fasteners, and accessories. Include erection drawings, elevations, and details where applicable.
  - 1. Indicate welded connections using standard AWS A2.4 welding symbols. Indicate net weld lengths.

PART 10 PRODUCTS

10.1 METAL FABRICATIONS

- A. Fabricators:
  - 1. Rooftop Anchor Inc. Model WB00012 (field verify bolt length required).
  - 2. American Anchor Model BTWA.0503.12.55.
  - 3. Guardian Fall Protection Model 00371 and Required Accessory.
  - 4. Substitutions: Permitted.

PART 11 EXECUTION

11.1 EXAMINATION

- A. Verify field conditions are acceptable and are ready to receive Work.

11.2 PREPARATION

- A. Make provisions for erection stresses. Install temporary bracing to maintain alignment, until permanent bracing and attachments are installed.

END OF SECTION

SECTION 07530

ELASTOMERIC MEMBRANE ROOFING

PART 1 GENERAL

1.01 DESCRIPTION

- A. The project consists of installing fully adhered, reinforced TPO (thermoplastic polyolefin) as outlined below:

Apply the fully adhered Roofing System in conjunction with new rigid insulation after tear off of the existing built up bituminous roof and insulation to expose the existing steel for verification of suitable substrate as specified in this specification.

1.02 EXTENT OF WORK

- A. Provide all labor, material, tools, equipment, and supervision necessary to complete the installation of an approved 80-mil thick gray reinforced TPO (Thermoplastic Polyolefin) reinforced membrane Adhered Roofing System including flashings and insulation as specified herein and as indicated on the drawings in accordance with the manufacturer's most current specifications and details.
- B. The roofing contractor shall be fully knowledgeable of all requirements of the contract documents and shall make themselves aware of all job site conditions that will affect their work.
- C. The roofing contractor shall confirm all given information and advise the building owner, prior to bid, of any conflicts that will affect their cost proposal.

1.03 SUBMITTALS

- A. Prior to starting work, the roofing contractor must submit the following:
  - 1. Shop drawings showing layout, details of construction and identification of materials.
  - 2. A sample of the manufacturer's Membrane System Warranty.
  - 3. Submit a letter of certification from the manufacturer which certifies the roofing contractor is authorized to install the manufacturer's roofing system and lists foremen who have received training from the manufacturer along with the dates training was received.
  - 4. Certification from the membrane manufacturer indicating the membrane thickness over the reinforcing scrim (top ply membrane thickness) is nominal 15 mil or thicker.
- B. Upon completion of the installed work, submit copies of the manufacturer's final inspection to the specifier prior to the issuance of the manufacturer's warranty.

1.04 PRODUCT DELIVERY, STORAGE AND HANDLING

- A. Deliver materials to the job site in the manufacturer's original, unopened containers or wrappings with the manufacturer's name, brand name and installation instructions intact and legible. Deliver in sufficient quantity to permit work to continue without interruption.
- B. Coordinate material deliveries and on-site storage with Project Manager and operator. Area is limited.
- C. Comply with the manufacturer's written instructions for proper material storage.
  - 1. Store TPO roofing membrane in the original undisturbed plastic wrap in a cool, shaded area. Roofing membrane that has been exposed to the elements for more than approximately 7 days must be prepared with manufacturer approved membrane cleaner prior to hot air welding.
  - 2. Store curable materials (adhesives and sealants) between 60°F and 80°F in dry areas protected from water and direct sunlight. If exposed to lower temperature, restore to 60°F minimum temperature before using.
  - 3. Store materials containing solvents in dry, well ventilated spaces with proper fire and safety precautions. Keep lids on tight. Use before expiration of their shelf life.
- D. Insulation must be on pallets, off the ground and tightly covered with waterproof materials.
- E. Any materials which are found to be damaged shall be removed and replaced at the applicator's expense.

1.05 WORK SEQUENCE

- A. Schedule and execute work to prevent leaks and excessive traffic on completed roof sections. Care should be exercised to provide protection for the interior of the building and to ensure water does not flow beneath any completed sections of the membrane system.
- B. Remove existing roofing and insulation in sections that can be replaced weathertight with a five day forecast of precipitation-free weather. Protect all finished areas from moisture damage at all times.
- C. Do not disrupt activities in occupied spaces.

1.06 EXISTING CONDITIONS

If discrepancies are discovered between the existing conditions and those noted on the drawings, immediately notify the owner's representative by phone and solicit the manufacturer's approval prior to commencing with the work. Necessary steps shall be taken to make the building watertight until the discrepancies are resolved.

1.07 JOB SITE PROTECTION

- A. The roofing contractor shall adequately protect building, paved areas, service drives, lawn, shrubs, trees, etc. from damage while performing the required work. Provide canvas, boards and sheet metal (properly secured) as necessary for protection and remove protection material at completion. The contractor shall repair or be responsible for costs to repair all property damaged during the roofing application.
- B. During the roofing contractor's performance of the work, the building owner will continue to occupy the existing building. The contractor shall take precautions to prevent the spread of dust and debris, particularly where such material may sift into the building. The roofing contractor shall provide labor and materials to construct, maintain and remove necessary, temporary enclosures to prevent dust or debris in the construction area(s) from entering the remainder of the building.
- C. Do not overload any portion of the building, by either use of or placement of equipment, storage of debris, or storage of materials.
- D. Protect against fire and flame spread. Maintain proper and adequate fire extinguishers.
- E. Take precautions to prevent drains from clogging during the roofing application. Remove debris at the completion of each day's work and clean drains, if required. At completion, test drains to ensure the system is free running and drains are watertight. Remove strainers and plug drains in areas where work is in progress. Install flags or other telltales on plugs. Remove plugs each night and screen drain.
- F. Store moisture susceptible materials above ground and protect with waterproof coverings.
- G. Remove all traces of piled bulk material and return the job site to its original condition upon completion of the work.

1.08 SAFETY

The roofing contractor shall be responsible for all means and methods as they relate to safety and shall comply with all applicable local, state and federal requirements that are safety related. Safety shall be the responsibility of the contractor. All related personnel shall be instructed daily to be mindful of the full time requirement to maintain a safe environment for the facility's occupants including staff, visitors, customers and the occurrence of the general public on or near the site.

1.09 WORKMANSHIP

- A. Applicators installing new roof, flashing and related work shall be factory trained and approved by the manufacturer they are representing.
- B. All work shall be of highest quality and in strict accordance with the manufacturer's published specifications and to the building owner's satisfaction.
- C. There shall be a supervisor on the job site at all times while work is in progress.

1.10 QUALITY ASSURANCE

- A. The TPO Membrane Roofing System must achieve a UL Class A or B rating.
- B. The specified roofing assembly must have been successfully tested by a qualified testing agency to resist the design uplift pressures calculated according to Oregon Structural Specialty Code (OSSC) and International Building Code (IBC) based on 95 MPH, Exposure C wind loading.
- C. Unless otherwise noted in this specification, the roofing contractor must strictly comply with the manufacturer's current specifications and details.
- D. The roofing system must be installed by an applicator authorized and trained by the manufacturer in compliance with shop drawings as approved by the manufacturer. The roofing applicator shall be thoroughly experienced and upon request be able to provide evidence of having at least five (5) years successful experience installing single-ply TPO roofing systems.
- E. Provide adequate number of experienced workmen regularly engaged in this type of work who are skilled in the application techniques of the materials specified. Provide at least one thoroughly trained and experienced superintendent on the job at all times roofing work is in progress.
- F. Upon completion of the installation, the applicator shall arrange for an inspection to be made by a non-sales technical representative of the membrane manufacturer in order to determine whether or not corrective work will be required before the warranty will be issued. Notify the building owner seventy-two (72) hours prior to the manufacturer's final inspection.

1.11 JOB CONDITIONS, CAUTIONS AND WARNINGS

- A. Material Safety Data Sheets (MSDS) must be on location at all times during the transportation, storage and application of materials.
- B. When positioning membrane sheets, exercise care to locate all field splices away from low spots and out of drain sumps. All field splices should be shingled to prevent bucking of water.
- C. Proceed with roofing work only when weather conditions are in compliance with the manufacturer's recommended limitations, and when conditions will permit the work to proceed in accordance with the manufacturer's requirements and recommendations.
- D. The surface on which the insulation or roofing membrane is to be applied shall be clean, smooth, dry, and free of projections or contaminants that would prevent proper application of or be incompatible with the new installation, such as fins, sharp edges, foreign materials, oil and grease.

1.15 WARRANTY

- A. Provide manufacturer's 30 year Total System Warranty covering both labor and material with no dollar limitation. The maximum wind speed coverage shall be peak gusts of 100

mph measured at 10 meters above ground level. Certification is required with bid submittal indicating the manufacturer has reviewed and agreed to such wind coverage.

- B. Pro-rated System Warranties shall not be accepted.

## PART 2 PRODUCTS

### 2.01 GENERAL

- A. All components of the specified roofing system shall be products of Carlisle SynTec, Firestone, Johns Manville, GAF or approved equal.
- B. All products (including insulation, fasteners, fastening plates, prefabricated accessories and edgings) must be manufactured and/or supplied by the roofing system manufacturer and covered by the warranty.

### 2.02 MEMBRANE

Furnish fully adhered 80-mil thick gray reinforced TPO (Thermoplastic Polyolefin) membrane as needed to complete the roofing system. Membrane thickness over the reinforcing scrim (top-ply thickness) shall be nominal 15 mil thick or greater. Membrane sheets in rolls 12', 10' or 8' wide by 100' long.

### 2.03 INSULATION/UNDERLAYMENT

- A. When applicable, insulation shall be installed in multiple layers. The first and second layers of insulation shall be mechanically fastened to the substrate in accordance with the manufacturer's published specifications.
- B. Insulation shall be rigid roof board type composed of a closed cell polyisocyanurate foam core bonded in the foaming process to universal fiber glass reinforced facers as acceptable to roof covering manufacturer for full warranty. Minimum thickness to be 2", tapered as required to match existing for drainage. Carlisle "Insulfoam HD Composite", Johns Manville "R-Panel Roof insulation", Owens Corning "Foamular", Firestone "ISO95+" or approved equal.
- C. Insulation shall be compatible and acceptable to roof covering manufacturer for full warranty and to comply with Quality Assurance requirements per Section 1.10.

### 2.04 ADHESIVES AND CLEANERS

All products shall be furnished by or approved in writing by roof covering manufacturer for the intended purpose.

- A. Bonding Adhesive: A high-strength, synthetic rubber adhesive used for bonding membrane to various surfaces. The adhesive shall be applied to both the membrane and the substrate at a coverage rate acceptable to the roof covering manufacturer for full warranty.
- B. Cut-Edge Sealant: Sealant approved by roof covering manufacturer for smooth edge

transition applied in accordance with manufacturer’s warranty requirements. All excess sealant on exposed surfaces to be removed with cleaners approved by roof manufacturer.

- C. Universal Single-Ply Sealant: A 100% solids, solvent free, voc free, one part polyether sealant that provides a weather tight seal to a variety of building materials. Match roof cover color as close as possible.
- D. Thermoplastic One-Part Pourable Sealer: A one-part, moisture curing, elastomeric polyether sealant used to fill TPO Molded Pourable Sealant Pockets as approved by roof covering manufacturer. Use to be limited to areas approved by Owner’s project manager.
- E. Weathered Membrane Cleaner: Used to prepare membrane for heat welding that has been exposed to the elements or to remove general construction dirt per direction of roof membrane manufacturer.
- F. TPO Primer: A solvent-based primer used to prepare the surface of TPO Roof Membrane prior to application of Pressure-Sensitive Coverstrip.
- G. TPO Low VOC Primer: A solvent-based, low solids primer used to prepare the surface of Sure-Weld Membrane prior to application of Pressure-Sensitive Coverstrip and TPO Pressure-Sensitive RUSS. This low VOC product is ideal for use in states where environmental issues are a concern.
- H. Insulation Adhesive:
  - 1. Two component, construction-grade, low-rise, expanding polyurethane adhesive approved by roof covering manufacturer designed for bonding insulation to various substrates and acceptable for full manufacturer’s warranty.

## 2.05 FASTENERS AND PLATES

To be used for mechanical attachment of insulation.

- A. Pre-assembled or field assembled heavy duty type utilizing a #15 threaded fastener with a #3 phillips drive used approved for insulation securement into existing steel deck acceptable to roof covering manufacturer for full warranty.

## 2.06 METAL EDGING AND MEMBRANE TERMINATIONS

- A. General: All metal edgings, terminations, copings and drip flashings shall be tested and meet ANSI/SPRI ES-1 standards and comply with IBC and OSSC requirements. All flashings, copings and terminations are to be fabricated and installed in accordance with current SMANCA manual recommendations. All anchor bars / retainer bars to be min 0.040” minimum thickness aluminum and have snap on covers with G90 galvanized steel or factory applied PVDF (Kynar or equal) finish over minimum 24 gauge steel. Color to be from manufacturer’s standard as designated by the Owner’s Representative. All flashings exposed to view are to be minimum 24 gauge galvanized steel field painted to match existing flashings with Owner provided (Metro recycled paint). All edgings, terminations, copings and flashings are to be fabricated and installed in longest lengths practicable with minimum laps of 24”.

2.07 TPO COATED STEEL FLASHINGS

- A. Minimum 24 gauge G90 steel coil with factory laminated TPO coating approved for heat welding of roofing membrane in applications acceptable to roof manufacturer for full warranty. Color to match roof membrane. Versico “Versiweld”, Firestone “Ultraply Metal”, GAF “Everguard” or equal.

2.08 WALKWAYS

- A. Protective surfacing for roof traffic shall be minimum 36” wide x 80 mil reinforced, unbalasted TPO walkway rolls approved by manufacturer installed in accordance with warranty requirements.

PART 3 EXECUTION

3.01 GENERAL

- A. Comply with the manufacturer's published instructions for the installation of the membrane roofing system including proper substrate preparation, job site considerations and weather restrictions.
- B. Position sheets to accommodate contours of the roof deck and shingle splices to avoid bucking water.

3.03 INSULATION PLACEMENT AND ATTACHMENT

- A. Install insulation or membrane underlayment over the substrate with boards butted tightly together with no joints or gaps greater than 1/4 inch. Stagger joints horizontally and vertically if multiple layers are provided.
- B. Secure insulation to the substrate with the required mechanical fasteners or insulation adhesive in accordance with the manufacturer’s specifications.

3.04 MEMBRANE PLACEMENT AND ATTACHMENT

- A. Position TPO membrane over the acceptable substrate. Fold membrane sheet back onto itself so half the underside of the membrane is exposed.
- B. Apply Bonding Adhesive in accordance with the manufacturer's published instructions, to the exposed underside of the membrane and the corresponding substrate area. Do not apply Bonding Adhesive along the splice edge of the membrane to be hot air welded over the adjoining sheet. Allow the adhesive to dry until it is tacky but will not string or stick to a dry finger touch.
  - 1. Roll the coated membrane into the coated substrate while avoiding wrinkles. Brush down the bonded section of the membrane sheet immediately after rolling the membrane into the adhesive with a soft bristle push broom to achieve maximum contact.
  - 2. Fold back the unbonded half of the sheet and repeat the bonding procedures.

- C. Position adjoining sheets to allow a minimum overlap of 2 inches to provide a minimum 1-1/2" hot air weld.
- D. Continue to install adjoining membrane sheets in the same manner, overlapping edges a minimum of 2 inches and complete the bonding procedures as stated previously.

### 3.05 MEMBRANE HOT AIR WELDING PROCEDURES

- A. Hot air weld the TPO membrane using an Automatic Hot Air Welding Machine or Hot Air Hand Welder in accordance with the manufacturer's specifications. Overlay all splice intersections with manufacturer approved joint cover or flexible fabric flashing, roll the seam with a silicone roller immediately after welder crossed the membrane step-off to ensure a continuous hot air welded seam.
- B. Probe all seams once the hot air welds have thoroughly cooled.
- C. Repair all seam deficiencies the same day they are discovered.
- D. Apply Cut Edge Sealant on all cut edges of reinforced membrane (where the scrim reinforcement is exposed) after seam probing is complete.

### 3.06 FLASHING

- A. Flashing of parapets, curbs, expansion joints, pipe penetrations, scuppers, etc shall be as approved by roof membrane manufacturer and installed as required for full warranty. Prefabricated accessories shall be installed per manufacturer's instructions where possible.
- B. Follow manufacturer's typical flashing procedures for all wall, curb, and penetration flashing including metal edging/coping and roof drain applications.

### 3.07 WALKWAYS

- A. Install walkways at all traffic concentration points (such as roof hatches, access doors, rooftop ladders, etc.) and all locations as identified on the specifier's drawing.
- B. Hot air weld walkway material to the membrane.

### 3.08 DAILY SEAL

- A. On phased roofing, when the completion of flashings and terminations is not achieved by the end of the work day, a daily seal must be performed to temporarily close the membrane to prevent water infiltration.
- B. Complete an acceptable membrane seal in accordance with the manufacturer's requirements.

### 3.09 CLEAN UP

- A. Perform daily clean up to collect all wrappings, empty containers, paper, and other debris

from the project site. Upon completion, all debris must be disposed of in a legally acceptable manner.

- B. Prior to the manufacturer's inspection for warranty, the applicator must perform a pre-inspection to review all work and to verify all flashing has been completed as well as the application of all caulking.

END OF SECTION

SECTION 08620

UNIT SKYLIGHTS

PART 12 GENERAL

12.1 SUMMARY

- A. Section includes operable preformed single or double dome type plastic skylights with integral curb and integrated metal grid type fall protection or designed to accommodate a 40 PSF live load and 200# impact load.

12.2 SUBMITTALS

- A. Product Data: Submit information on configurations, fastening methods, installation details, and structural, thermal, and daylighting performance values.

12.3 QUALITY ASSURANCE

- A. Test and label unit skylights in accordance with AAMA 1601-76, including performance grade for positive and negative wind pressure.
- B. Light Transmitting Plastics: Class CC2 defined by applicable code when tested in accordance with ASTM D635 in thickness for intended use.
  - 1. Self Ignition Temperature: Minimum 650 degrees F (343 degrees C) when tested in accordance with ASTM D1929.
  - 2. Smoke Developed Index: Maximum 450 when tested in accordance with ASTM E84 or maximum 75 when tested in accordance with ASTM D2843 in thickness for intended use.

PART 13 PRODUCTS

13.1 PLASTIC UNIT SKYLIGHTS

- A. Manufacturers:
  - 1. Architectural Specialties Inc. Model DCM5252.
  - 2. Wasco Model SCFP-5252
  - 3. Exarc Skylights Model SCSD
  - 4. Substitutions: Permitted.
- B. Product Description: Factory-assembled glazing in aluminum frame; single or double dome; operable from exterior for cleaning and ventilation; set in aluminum frame; with insulated aluminum curb and counterflashings.

13.2 COMPONENTS

- A. Single Glazing: Acrylic plastic; clear transparent; rectangular domed.

- B. Frame: ASTM B221 Extruded aluminum reinforced and welded corner joints, integral curb frame mounting flange and counterflashing to receive roofing flashing system, with integral condensation drainage gutter, glazing retainer; clear anodized finish.
  - 1. Ventilation: Furnish protected pivot hinge and lifting/latching mechanism allowing skylight units to be opened manually and secured in both open and closed positions from exterior. Include removable fall protection grid.
- C. Support Curb: ASTM B 209 Sheet aluminum, sandwich construction; 1 inch (25 mm) thick, 10 inches (250 mm) high; glass fiber insulation or non-insulated; with integral flange for anchorage to roof deck.

### 13.3 ACCESSORIES

- A. Anchorage Devices: Type recommended by manufacturer, concealed.
- B. Counterflashings: Same metal type and finish as skylight frame.
- C. Protective Backing Paint: Zinc molybdate alkyd or Bituminous coating, FS TT-C-494.
- D. Integral Sealants: Manufacturer's recommended sealants integral with unit skylight installation; nonhardening, nonskinning, nondrying, nonmigrating butyl based sealants.

### 13.4 FABRICATION

- A. Fabricate free of visual distortion and defects.
- B. Fabricate to achieve leakproof, weathertight assembly.

## PART 14 EXECUTION

### 14.1 EXAMINATION

- A. Verify openings and substrate conditions are ready to receive work of this section.

### 14.2 INSTALLATION

- A. Install aluminum curb assembly, fastening securely to roof decking. Coordinate with installation of roofing system and related flashings.
- B. Apply backing paint on aluminum surfaces of units in contact with dissimilar metals.
- C. Final installation to be weathertight.

END OF SECTION