

# NOTICE TO BIDDERS

CARROLLTON PUBLIC SCHOOLS

HIGH SCHOOL

GYM RE-ROOF

Bids will be received by Carrollton Public Schools in the Office of the Superintendent at 3211 Carla Drive, Saginaw, MI 48604, until 2:00 p.m. Monday, June 10th, 2019 for the High School Gym re-roof project.

A mandatory walk through will take place at 4:00pm Tuesday, March 27 2019 at

Carrollton High School

1235 Mapleridge Road

Saginaw, MI 48604

Documents are available electronically at <http://www.carrolltonpublicschools.org/> on the home page labeled CHS RE-ROOF.

Each proposal in excess of \$50,000 shall be accompanied by a certified check or bid bond in the amount of 5% of the proposal. Checks shall be drawn payable to: Carrollton Public Schools, as security for the acceptance of the contract and subject to the conditions stated in the Instructions to Bidders. If the contract exceeds \$50,000 the successful bidder will be required to furnish a Performance and Payment Bond. This project does not require the payment of prevailing wages. The owner reserves the right to waive any informality in any proposal and to reject any and all proposals, or accept any proposal that is considered most favorable to the owner.

A. Carrollton Public Schools, Carrollton Michigan, will receive proposals from qualified Duro Last contractors for the re-roofing of sections of the Carrollton High School located at 1235 Mapleridge Rd Saginaw, MI 48604.

B. The Owner will enter into a single contract with the successful Roofing Contractor, who will be fully responsible for coordination of all required work.

C. Proposals must be mailed or delivered in person to Carol Luax at Carrollton Public Schools Central Office, 3211 Carla Dr. Saginaw, MI 48604. All proposals must be sealed in envelopes, plainly labeled "Carrollton High School Re-roof Bid" and must be received prior to 2:00pm local time on June 10, 2019. This will be a public bid opening. Contractors will be notified within the allocated period of time as to their position in the bid process. Evaluation of proposals and award will be at a later date; the contractor will receive a letter of intent prior to the receipt of contract.

D. A mandatory pre-bid meeting will be held at 4:00pm local time, on June 4, 2019  
at Carrollton High School North West Parking lot off Carla Dr.

E. The schedule of work shall be as follows:

Bids Due June 10, 2019 (2:00pm)

Anticipated Award of Contract June 17, 2019

Anticipated Substantial Completion August 30, 2019

F. All bidders are required to furnish Bid Security in the amount of five (5%) percent of the

Base Bid. Form of the security may be a bid bond, certified or cashiers check made payable to Carrollton Public Schools. This is a guarantee that the bidder selected by Carrollton Public Schools will furnish the required PLM bonds; failure to do so could mean forfeiture of the Bid Security.

G. All bidders must indicate, where shown on the proposal form the cost of Performance and Labor and Material Payment Bonds covering 100% of the value of the Project. Do not include the cost of the Bonds in the Base Bid.

H. All bids shall be accompanied by a sworn statement disclosing any familial relationship that exists between the owner(s) or any employee of the bidder and any member of the Board of Education or the Superintendent of the School District. The Board of Education shall not accept a bid that does not include a sworn and notarized familial relationship disclosure statement.

I. All bids shall be accompanied by an Affidavit of Compliance- Iran Economic Sanctions Act in compliance with the "Iran linked business" with in the meaning of the Iran Economic sanctions Act, Michigan Public Act No. 517 of 2012. The Board of Education shall not accept a bid that does not include the Affidavit of Compliance.

J. All bidders shall note that this project does not require prevailing wages.

K. Bidding Documents may be viewed at <http://carrolltonpublicschools.org/cms-reroof-2018>  
Please note that contractors are responsible to review information on all drawings and specifications.

L. Carrollton Public Schools reserves the right to accept or reject any or all bids and to waive all irregularities in Proposals. Proposals shall remain firm for sixty (60) days from date of Bid Opening.

#### INDEMNIFICATION AND GENERAL LIABILITY INSURANCE

Each trade contractor shall agree to indemnify and hold harmless the Owner from and against any and all general liability claims whatsoever arising out of or occurring during and occasioned directly or indirectly by it's negligence or fault. Prior to entering into a contract, each trade contractor shall provide evidence satisfactory to the Owner of adequate general liability insurance coverage which names the Owner as additional insured. Each trade contractor shall also provide evidence of Worker's Compensation Insurance in the amounts required by the State of Michigan.

#### Familial Relationships

As required by State Law (P.A. 232 of 2004), all proposals/bids must be accompanied by a sworn and notarized statement disclosing any familial relationship that exists between the Owner or employee of the bidder and any member of the Carrollton Public School District or School Board. The Board will not accept a bid that does not include this sworn and notarized statement.

FAMILIAL RELATIONSHIP DISCLOSURE FORM

AFFIDAVIT OF BIDDER

The undersigned, the owner or authorized officer of \_\_\_\_\_ (the Bidder), pursuant to the familial disclosure requirements provided in the Advertisement for Bid, hereby represents and warrants, except as provided below, that no familial relationships exist between the owner(s) or any employee of \_\_\_\_\_ (the Bidder) and any member of the Board of Education of the School District or the Superintendent of Carrollton Public School District.

List and describe any Familial Relationships:

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

BIDDER:

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

STATE OF MICHIGAN

COUNTY OF \_\_\_\_\_

Subscribed and sworn to before me on the \_\_\_\_\_ day of \_\_\_\_\_ 2008,  
by \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_ (notary public)

\_\_\_\_\_ County, Michigan

My Commission Expires: \_\_\_\_\_

Acting in County of \_\_\_\_\_

*Iran Business Relationship Affidavit*

*Effective April 1, 2013 all bids, proposals, and/or qualification statements received in the State of Michigan must comply with the "Iran Economic Sanctions Act". The following certification is to be signed and included at time of submittal.*

*Certification*

*Pursuant to the Michigan Iran Economic Sanctions Act, 2012 P.A. 517, by submitting a bid, proposal or response, Respondent certifies, under civil penalty for false certification, that it is fully eligible to do so under law and that it is not an "Iran linked business" as the term is defined in the Act.*

\_\_\_\_\_  
*Signature*

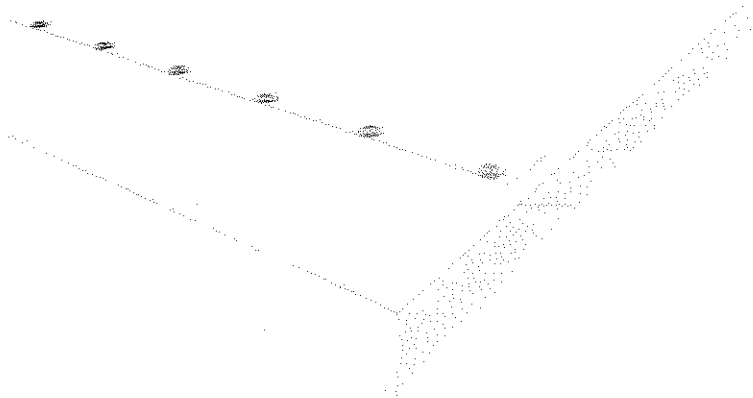
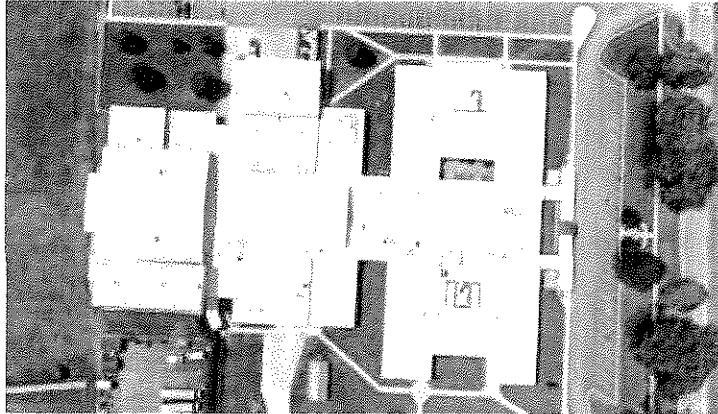
\_\_\_\_\_  
*Title*

\_\_\_\_\_  
*Company*

\_\_\_\_\_  
*Date*

## Carrollton High School

Carrollton, MI



### Duro-Last Roof Assembly Description

- **Duro-Last® PVC thermoplastic membrane**  
Membrane Thickness: 50 mil  
Color: White  
Attachment: Attached with mechanical fasteners
- **Single-Ply: PVC**
- **Cementitious Wood Fiber (Tectum) Roof Deck**



## **SCOPE OF WORK**

1. Remove existing Duro-Last membrane and dispose of.
2. Inspect existing insulation, and replace any saturated insulation with new insulation to match existing.
3. Install 3/8" fanfold per specification.
4. Install a 50 MIL white Duro-Last roof system per manufacturer's specification.
5. Install new Duro-Last custom made parapet wall flashings.
6. Install new Duro-Last two-way breather vents.
7. Install new Duro-Last custom fabricated curb & stack flashings.
8. Install new metal to match existing metal.
9. Install new Duro-Last termination bare where required.
10. Reflash existing roof drains to manufacturer's specification.
11. Seal off all roof edges, all roof penetrations as required by manufacturer.
12. Wrap duct work in Duro-Last.
13. Install walkpad at roof access point and HVAC units where service door is located.
14. Clean up all job debris and dispose of.
15. Provide to owner a 20 year NDL warranty.
16. Provide a base bid for section to be reroofed.
17. Provide alternate bid for other sections.

## **PART 1 GENERAL**

### **1.1 SECTION INCLUDES**

- A. Overlay Single-Ply: PVC.
- B. Duro-Last® PVC thermoplastic membrane attached with mechanical fasteners.
- C. Prefabricated flashings, corners, parapets, stacks, vents, and related details.
- D. Fasteners, adhesives, and other accessories required for a complete roofing installation.
- E. Traffic Protection.

### **1.2 REFERENCES**

- A. NRCA - The NRCA Roofing and Waterproofing Manual.
- B. ASCE 7 - Minimum Design Loads For Buildings And Other Structures.
- C. UL - Roofing Materials and Systems Directory, Roofing Systems (TGFU.R10128).
- D. ASTM C 1289 - Standard Specification for Faced Rigid Cellular Polyisocyanurate Thermal Insulation Board.
- E. ASTM D 751 - Standard Test Methods for Coated Fabrics.
- F. ASTM D 4434 - Standard Specification for Poly(Vinyl Chloride) Sheet Roofing.
- G. ASTM E 108 - Standard Test Methods for Fire Tests of Roof Coverings.
- H. ASTM E 119 - Standard Test Methods for Fire Tests of Building Construction and Materials.

### **1.3 SYSTEM DESCRIPTION**

- A. General: Provide installed roofing membrane and base flashings that remain watertight; do not permit the passage of water; and resist specified uplift pressures, thermally induced movement, and exposure to weather without failure.
- B. Material Compatibility: Provide roofing materials that are compatible with one another under conditions of service and application required, as demonstrated by roofing membrane manufacturer based on testing and field experience.
- C. Physical Properties:
  - 1. Roof product must meet the requirements of Type III PVC sheet roofing as defined by ASTM D 4434 and must meet or exceed the following physical properties.
  - 2. Thickness: 50 mil, nominal, in accordance with ASTM D 751.
  - 3. Thickness Over Scrim:  $\geq 28$  mil in accordance with ASTM D 751.
  - 4. Breaking Strengths:  $\geq 390$  lbf. (MD) and  $\geq 438$  lbf. (XMD) in accordance with ASTM D 751, Grab Method.
  - 5. Elongation at Break:  $\geq 31\%$  (MD) and  $\geq 31\%$  (XMD) in accordance with ASTM D 751, Grab Method.
  - 6. Heat Aging in accordance with ASTM D 3045: 176 °F for 56 days. No sign of cracking, chipping or crazing. (In accordance with ASTM D 4434).
  - 7. Factory Seam Strength:  $\geq 417$  lbf. in accordance with ASTM D 751, Grab Method.
  - 8. Tearing Strength:  $\geq 132$  lbf. (MD) and  $\geq 163$  lbf. (XMD) in accordance with ASTM D 751,

**3-Part Specification**  
Division 07 54 19 - Polyvinyl-Chloride Roofing

Procedure B.

9. Low Temperature Bend (Flexibility): Pass at -40 °F in accordance with ASTM D 2136.
10. Accelerated Weathering: No cracking, checking, crazing, erosion or chalking after 5,000 hours in accordance with ASTM G 154.
11. Linear Dimensional Change: < 0.5% in accordance with ASTM D 1204 at 176 ± 2 °F for 6 hours.
12. Water Absorption: < 1.7% in accordance with ASTM D 570 at 158 °F for 166 hours.
13. Static Puncture Resistance: ≥ 56 lbs. in accordance with ASTM D 5602.
14. Dynamic Puncture Resistance: ≥ 14.7 ft-lbf. in accordance with ASTM D 5635.

\$membrane\_certs\$

- D. Cool Roof Rating Council (CRRC):
1. Membrane must be listed on CRRC website.
    - a. Initial Solar Reflectance: ≥ 88%
    - b. Initial Thermal Emittance: ≥ 87%
    - c. Initial Solar Reflective Index (SRI): ≥ 111
    - d. 3-Year Aged Solar Reflectance: ≥ 68%
    - e. 3-Year Aged Thermal Emittance: ≥ 84%
    - f. 3-Year Aged Solar Reflective Index (SRI): ≥ 82

#### 1.4 SUBMITTALS

- A. Submit under provisions of Section 01300.
- B. Duro-Last data sheets on each product to be used, including:
  1. Preparation instructions and recommendations.
  2. Storage and handling requirements and recommendations.
  3. Installation methods.
  4. Maintenance requirements.
- C. Shop Drawings: Indicate insulation pattern, overall membrane layout, field seam locations, joint or termination detail conditions, and location of fasteners.
- D. Verification Samples: For each product specified, two samples, representing actual product, color, and finish.
  1. 4 inch by 6 inch sample of roofing membrane, of color specified.
  2. 4 inch by 6 inch sample of walkway pad.
  3. Termination bar, fascia bar with cover, drip edge and gravel stop if to be used.
  4. Each fastener type to be used for installing membrane, insulation/recover board, termination bar and edge details.

**3-Part Specification**  
Division 07 54 19 - Polyvinyl-Chloride Roofing

- E. Installer Certification: Certification from the roofing system manufacturer that Installer is approved, authorized, or licensed by manufacturer to install roofing system.
- F. Manufacturer's warranties.

#### 1.5 QUALITY ASSURANCE

- A. Perform work in accordance with manufacturer's installation instructions.
- B. Manufacturer Qualifications: A manufacturer specializing in the production of PVC membranes systems and utilizing a Quality Control Manual during the production of the membrane roofing system that has been approved by and is inspected by Underwriters Laboratories.
- C. Installer Qualifications: Company specializing in installation of roofing systems similar to those specified in this project and approved by the roofing system manufacturer.
- D. Source Limitations: Obtain components for membrane roofing system from roofing membrane manufacturer.
- E. There shall be no deviations from the roof membrane manufacturer's specifications or the approved shop drawings without the prior written approval of the manufacturer.

#### 1.6 REGULATORY REQUIREMENTS

- A. Conform to applicable code for roof assembly wind uplift and fire hazard requirements.
- B. Fire Exposure: Provide membrane roofing materials with the following fire-test-response characteristics. Materials shall be identified with appropriate markings of applicable testing and inspecting agency.
  - 1. Exterior Fire-Test Exposure:
    - a. Class A; ASTM E 108, for application and roof slopes indicated.
  - 2. Fire-Resistance Ratings: Comply with ASTM E 119 for fire-resistance-rated roof assemblies of which roofing system is a part.
  - 3. Conform to applicable code for roof assembly fire hazard requirements.
- C. Wind Uplift:
  - 1. Roofing System Design: Provide a roofing system designed to resist uplift pressures calculated according to the current edition of the ASCE-7 Specification *Minimum Design Loads for Buildings And Other Structures*.

#### 1.7 PRE-INSTALLATION MEETING

- A. Convene meeting not less than one week before starting work of this section.
- B. Review methods and procedures related to roof deck construction and roofing system including, but not limited to, the following.
  - 1. Meet with Owner, Architect, Owner's insurer if applicable, testing and inspecting agency representative, roofing installer, roofing system manufacturer's representative, deck installer, and installers whose work interfaces with or affects roofing including installers of roof accessories and roof-mounted equipment.

**3-Part Specification**  
Division 07 54 19 - Polyvinyl-Chloride Roofing

2. Review and finalize construction schedule and verify availability of materials, installer's personnel, equipment, and facilities needed to make progress and avoid delays.
3. Examine deck substrate conditions and finishes for compliance with requirements, including flatness and fastening.
4. Review structural loading limitations of roof deck during and after roofing.
5. Review base flashings, special roofing details, roof drainage, roof penetrations, equipment curbs, and condition of other construction that will affect roofing system.
6. Review governing regulations and requirements for insurance and certificates if applicable.
7. Review temporary protection requirements for roofing system during and after installation.
8. Review roof observation and repair procedures after roofing installation.

#### 1.8 DELIVERY, STORAGE AND HANDLING

- A. Deliver roofing materials to Project site in original containers with seals unbroken and labeled with manufacturer's name, product brand name and type, date of manufacture, and directions for storing and mixing with other components.
- B. Store liquid materials in their original undamaged containers in a clean, dry, protected location and within the temperature range required by roofing system manufacturer. Protect stored liquid material from direct sunlight.
- C. Protect roof insulation materials from physical damage and from deterioration by sunlight, moisture, soiling, and other sources. Store in a dry location. Comply with insulation manufacturer's written instructions for handling, storing, and protecting during installation.
- D. Store roof materials and place equipment in a manner to avoid permanent deflection of deck.
- E. Store and dispose of solvent-based materials, and materials used with solvent-based materials, in accordance with requirements of local authorities having jurisdiction.

#### 1.9 WARRANTY

- A. Contractor's Warranty: The contractor shall warrant the roof application with respect to workmanship and proper application for two (2) years from the effective date of the warranty issued by the manufacturer.
- B. Manufacturer's Warranty: Must be no-dollar limit type and provide for completion of repairs, replacement of membrane or total replacement of the roofing system at the then-current material and labor prices throughout the life of the warranty. In addition the warranty must meet the following criteria:
  1. Warranty Period: 20 years from date issued by the manufacturer.
  2. Must provide positive drainage (no ponding water).
  3. No exclusion for damage caused by biological growth.
  4. Issued direct from and serviced by the roof membrane manufacturer.
  5. Transferable for the full term of the warranty.

## **PART 2 PRODUCTS**

### 2.1 MANUFACTURER

**3-Part Specification**  
Division 07 54 19 - Polyvinyl-Chloride Roofing

- A. Manufacturer: Duro-Last Roofing, Inc., which is located at: 525 Morley Drive, Saginaw, MI 48601. Telephone: 800-248-0280.
- B. All roofing system components to be provided or approved by Duro-Last Roofing, Inc.
- C. Substitutions: Not permitted.

## 2.2 ROOFING SYSTEM COMPONENTS

- A. Roofing Membrane: Duro-Last® PVC thermoplastic membrane conforming to ASTM D 4434, type III, fabric-reinforced, PVC, NSF/ANSI 347 Gold or Platinum Certification, and a product-specific third-party verified Environmental Product Declaration. Membrane properties as follows:
  - 1. Thickness:
    - a. 50 mil.
  - 2. Exposed Face Color:
    - a. White.
  - 3. Minimum recycle content 7% post-industrial and 0% post-consumer.
  - 4. Recycled at end of life into resilient flooring or concrete expansion joints.
- B. Accessory Materials: Provide accessory materials supplied by or approved for use by Duro-Last Roofing, Inc.
  - 1. Sheet Flashing: Manufacturer's standard reinforced PVC sheet flashing.
  - 2. Duro-Last Factory Prefabricated Flashings: manufactured using Manufacturer's standard reinforced PVC membrane.
    - a. Stack Flashings.
    - b. Curb Flashings.
    - c. Inside and Outside Corners.
  - 3. Sealants and Adhesives: Compatible with roofing system and supplied by Duro-Last Roofing, Inc.
    - a. Duro-Caulk® Plus.
    - b. Strip Mastic.
  - 4. Slip Sheet: Compatible with roofing system and supplied by Duro-Last Roofing, Inc.
  - 5. Fasteners and Plates: Factory-coated steel fasteners and metal or plastic plates meeting corrosion-resistance provisions in FMG 4470, designed for fastening membrane and insulation to substrate. Supplied by Duro-Last Roofing, Inc.
    - a. Auger Fasteners.
  - 6. PV Anchors
  - 7. Termination and Edge Details: Supplied by Duro-Last Roofing, Inc.
    - a. Termination Bar.
  - 8. Vinyl Coated Metal: Supplied by Duro-Last Roofing, Inc. 24 gauge, hot-dipped galvanized, grade 90 metal with a minimum of 17 mil of Duro-Last membrane laminated to one side.
  - 9. Two-Way Roof Vents: Supplied by Duro-Last Roofing, Inc. Install a minimum of 1 vent for each 1,000 ft<sup>2</sup> (93 m<sup>2</sup>) of roof area.

C. Walkways:

1. Provide non-skid, maintenance-free walkway pads in areas of heavy foot traffic and around mechanical equipment.
  - a. Duro-Last Roof Trak® III Walkway Pad.
    - 1.

## **PART 3 EXECUTION**

### **3.1 EXAMINATION**

- A. Verify that the surfaces and site conditions are ready to receive work.
- B. Verify that the deck is supported and secured.
- C. Verify that the deck is clean and smooth, free of depressions, waves, or projections, and properly sloped to drains, valleys, eaves, scuppers or gutters.
- D. Verify that the deck surfaces are dry and free of standing water, ice or snow.
- E. Verify that all roof openings or penetrations through the roof are solidly set.
- F. If substrate preparation is the responsibility of another contractor, notify Architect of unsatisfactory preparation before proceeding.
- G. Prior to re-covering an existing roofing system, conduct an inspection of the roof system accompanied by a representative of the membrane manufacturer or an authorized contractor.
  1. Determine required fastener type, length, and spacing.
  2. Verify that moisture content of existing roofing is within acceptable limits.
  3. Identify damaged areas requiring repair before installation of new roofing.
  4. Conduct core cuts as required to verify information required.

### **3.2 PREPARATION**

- A. Clean surfaces thoroughly prior to installation.
- B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.
- C. Surfaces shall be clean, smooth, free of fins, sharp edges, loose and foreign material, oil, grease, and bitumen.
- D. Re-Roofing Over Existing Single-Ply System:
  1. Remove all loose or high fasteners.
  2. Membrane contaminated with bitumen must be immediately cleaned. If cleaning does not remove the bitumen, the contaminated membrane must be replaced, or covered with both a slip sheet and new membrane.
  3. Blisters, buckles and other surface irregularities must be repaired or removed. If the damage is extensive, an approved rigid board insulation or a cover board must be installed.
  4. When the system is smooth or granular-surfaced, any approved slip sheet, insulation or cover board may be used to provide separation of the roof system and new membrane. Duro-Guard fan folds may be used if the surface is pea gravel or crushed stone which is ¼ to 3/8 inch in size and has been leveled and maintained at 4 psf. For larger rock/gravel, utilize an approved rigid insulation or cover board.

**3-Part Specification**  
Division 07 54 19 - Polyvinyl-Chloride Roofing

5. If rock/gravel surfacing is removed, an approved fan fold, rigid insulation or cover board must be used. If embedded rock/gravel remains that protrudes out of the deck more than ¼ inch, do not use fan fold board. Instead, use an approved cover board or rigid insulation.
6. When installing polystyrene insulation over coal tar pitch or asphalt-based roof systems, a slip sheet must be used between the insulation and existing roof.

### 3.3 INSTALLATION

- A. Install insulation in accordance with the roof manufacturer's requirements.
- B. Roof Membrane: 50 mil, Duro-Last® PVC thermoplastic membrane.
  1. Use only fasteners, stress plates and fastening patterns accepted for use by the roof manufacturer. Fastening patterns must meet the applicable design requirements.
  2. Install fasteners in accordance with the roof manufacturer's requirements. Fasteners that are improperly installed shall be replaced or corrected.
  3. Mechanically fasten membrane to the structural deck utilizing fasteners and fastening patterns that in accordance with the roof manufacturer's requirements.
  4. Cut membrane to fit neatly around all penetrations and roof projections.
  5. Unroll roofing membrane and positioned with a minimum 6 inch overlap.
- C. Seaming:
  1. Weld overlapping sheets together using hot air. Minimum weld width is 1-1/2 inches.
  2. Check field welded seams for continuity and integrity and repair all imperfections by the end of each work day.
- D. Membrane Termination/Securement: All membrane terminations shall be completed in accordance with the membrane manufacturer's requirements.
  1. Provide securement at all membrane terminations at the perimeter of each roof level, roof section, curb flashing, skylight, expansion joint, interior wall, penthouse, and other similar condition.
  2. Provide securement at any angle change where the slope or combined slopes exceeds two inches in one horizontal foot.
- E. Flashings: Complete all flashings and terminations as indicated on the drawings and in accordance with the membrane manufacturer's requirements.
  1. Provide securement at all membrane terminations at the perimeter of each roof level, roof section, curb flashing, skylight, expansion joint, interior wall, penthouse, and other similar condition.
    - a. Do not apply flashing over existing thru-wall flashings or weep holes.
    - b. Secure flashing on a vertical surface before the seam between the flashing and the main roof sheet is completed.
    - c. Extend flashing membrane a minimum of 6 inches (152 mm) onto the main roof sheet beyond the mechanical securement.
    - d. Use care to ensure that the flashing does not bridge locations where there is a change in direction (e.g. where the parapet meets the roof deck).
  2. Penetrations:
    - a. Flash all pipes, supports, soil stacks, cold vents, and other penetrations passing through



**3-Part Specification**  
Division 07 54 19 - Polyvinyl-Chloride Roofing

the roofing membrane as indicated on the Drawings and in accordance with the membrane manufacturer's requirements.

- b. Utilize custom prefabricated flashings supplied by the membrane manufacturer.
  - c. Existing Flashings: Remove when necessary to allow new flashing to terminate directly to the penetration.
3. Pipe Clusters and Unusual Shapes:
- a. Clusters of pipes or other penetrations which cannot be sealed with prefabricated membrane flashings shall be sealed by surrounding them with a prefabricated vinyl-coated metal pitch pan and sealant supplied by the membrane manufacturer.
  - b. Vinyl-coated metal pitch pans shall be installed, flashed and filled with sealant in accordance with the membrane manufacturer's requirements.
  - c. Pitch pans shall not be used where prefabricated or field fabricated flashings are possible.
- F. Roof Drains:
1. Coordinate installation of roof drains and vents specified in Section 15146 - Plumbing Specialties.
  2. Remove existing flashing and asphalt at existing drains in preparation for sealant and membrane.
  3. Provide a smooth clean surface on the mating surface between the clamping ring and the drain base.
- G. Edge Details:
1. Provide edge details as indicated on the Drawings. Install in accordance with the membrane manufacturer's requirements.
  2. Join individual sections in accordance with the membrane manufacturer's requirements.
  3. Coordinate installation of metal flashing and counter flashing specified in Section 07620.
  4. Manufactured Roof Specialties: Coordinate installation of copings, counter flashing systems, gutters, downspouts, and roof expansion assemblies specified in Section 07710.
- H. Walkways:
1. Install walkways in accordance with the membrane manufacturer's requirements.
  2. Provide walkways where indicated on the Drawings.
  3. Install walkway pads at roof hatches, access doors, rooftop ladders and all other traffic concentration points regardless of traffic frequency. Provided in areas receiving regular traffic to service rooftop units or where a passageway over the surface is required.
  4. Do not install walkways over flashings or field seams until manufacturer's warranty inspection has been completed.
- I. Water cut-offs:
1. Provide water cut-offs on a daily basis at the completion of work and at the onset of inclement weather.
  2. Provide water cut-offs to ensure that water does not flow beneath the completed sections of the new roofing system.
  3. Remove water cut-offs prior to the resumption of work.
  4. The integrity of the water cut-off is the sole responsibility of the roofing contractor.

**3-Part Specification**  
Division 07 54 19 - Polyvinyl-Chloride Roofing

5. Any membrane contaminated by the cut-off material shall be cleaned or removed.

#### 3.4 FIELD QUALITY CONTROL

- A. The membrane manufacturer's representative shall provide a comprehensive final inspection after completion of the roof system. All application errors shall be addressed and final punch list completed.

#### 3.5 PROTECTION

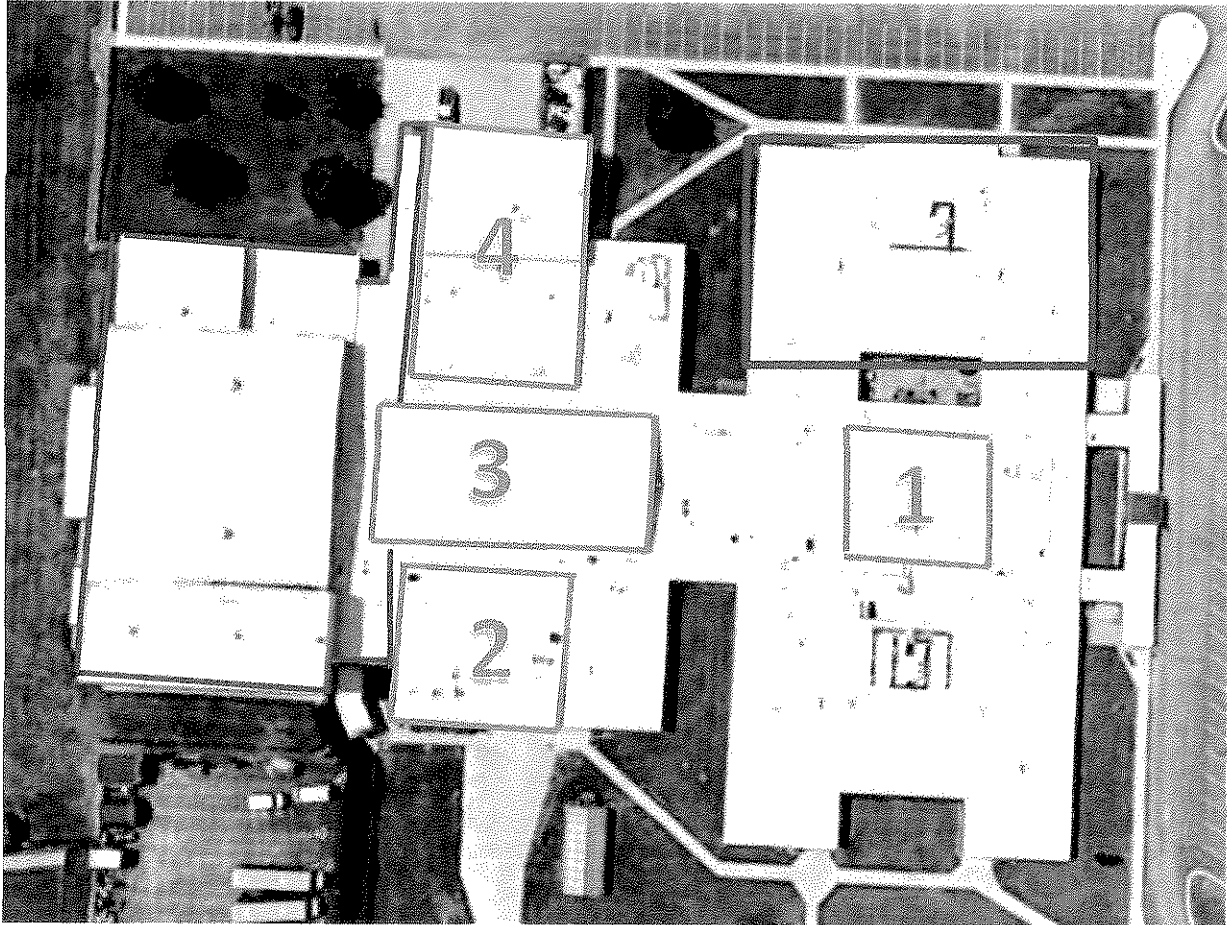
- A. Protect installed roofing products from construction operations until completion of project.
- B. Where traffic is anticipated over completed roofing membrane, protect from damage using durable materials that are compatible with membrane.
- C. Repair or replace damaged products after work is completed.

END OF SECTION

## **SCOPE OF WORK**

1. Remove existing Duro-Last membrane and dispose of.
2. Inspect existing insulation, and replace any saturated insulation with new insulation to match existing.
3. Install 3/8" fanfold per specification.
4. Install a 50 MIL white Duro-Last roof system per manufacturer's specification.
5. Install new Duro-Last custom made parapet wall flashings.
6. Install new Duro-Last two-way breather vents.
7. Install new Duro-Last custom fabricated curb & stack flashings.
8. Install new metal to match existing metal.
9. Install new Duro-Last termination bare where required.
10. Reflash existing roof drains to manufacturer's specification.
11. Seal off all roof edges, all roof penetrations as required by manufacturer.
12. Wrap duct work in Duro-Last.
13. Install walkpad at roof access point and HVAC units where service door is located.
14. Clean up all job debris and dispose of.
15. Provide to owner a 20 year NDL warranty.
16. Provide a base bid for section to be reroofed.
17. Provide alternate bid for other sections.

**3-Part Specification**  
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**\*Section outlined in red was replaced in 2018**

**Additional Sections**

- 1. Library**
- 2. Band Room**
- 3. Cafeteria**
- 4. Shop Area**

**\* Based bid will be the remaining sections of the building not listed as additional section and not listed as replaced in 2018.**

**Bid Sheet**

**Base Bid** \$ \_\_\_\_\_

Saturated Insulation Replacement (\$/sqf) \$ \_\_\_\_\_

**Additional Sections**

Library Bid \$ \_\_\_\_\_

Band Room Bid \$ \_\_\_\_\_

Cafeteria Bid \$ \_\_\_\_\_

Shop Area Bid \$ \_\_\_\_\_

**Total if awarded base plus all additional sections** \$ \_\_\_\_\_

Earliest starting date \_\_\_\_\_

Number of days to completion \_\_\_\_\_

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

Contact Name \_\_\_\_\_

Phone: \_\_\_\_\_

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

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Signature of Contractor: \_\_\_\_\_