

ADDENDUM #1

Roofing Replacement Project (Gymnasium Bldg.) at Main Campus

BID #32-C1, 23/01

April 14, 2023

TO ALL BIDDERS:

The following changes, omissions, and/or additions to the Proposal shall apply to proposals made for and to the execution of the various parts of the work affected thereby, and all other conditions shall remain the same.

All parties of interest shall take careful note of the addendum so that the proper allowances may be made in strict accordance with the Addendum.

Bidder shall acknowledge receipt of this addendum by signing and attaching this form to the Consultant Proposal. Failure to do so may subject Bidder to disqualification.

In case of conflict between bid documents and this addendum, this addendum shall govern.

PLAN & SPECIFCATION ADDS/CHANGES

Section 07 31 13 – Asphalt Shingles (Delete requirements for Roof Insulation and related components)

General Notes:

1. Non-Mandatory Pre-Bid Sign-in sheet attached.

Clarification Questions: See Attached sheet w/response

Please Note: Bidders who "no bid" items understand this is an "All or Nothing Bid." This bid will be awarded to the lowest responsive responsible bidder.

<u>Please confirm receipt of this addendum by date, signature this form and on bid proposal form.</u> Contact the undersigned for any additional questions at e-mail address <u>gparker587@yahoo.com</u> or by phone to (530) 788-3533

George Parker Capital Projects Manager, Consultant		
[Prospective Bidder] Company Name		
By	Date	

Pre-Bid Questions

RE: insulation R-value or thickness

The specifications do not mention what the R-value is or total thickness of the insulation is. it only states the type of substrate (7/16" OSB), venting height (1.5") but does not state what the thickness is or R-value is to be achieved. I did a search in the PDF and did not produce any results for this. Also, our associate that attended the job walk said this was not brought up or he missed that information if it was noted.

Can you please tell me what the overall thickness of the nail base is to be and or what R-value is to be achieved?

- 1. With regards to insulation, you can install as much insulation on the roof as you desire. I am not sure what the minimum thickness of insulation can be used in a vented nail base assembly. Polyisocyanurate insulation is R-5.7 per inch. Common insulation sizes are 1", 1.5", 2", 2.6", 3", 3.5, and 4". You can stack the insulation as well. This does not include the vented portion or the plywood/osb. With 1.5" vented area and 7/16" OSB a 2" would be about 4" thick plus roofing. This would achieve an R-value of roughly 11.4.
- 2. With regards to the lower roof at the roof-to-wall condition at the clearstory. How do you plan to address this condition with the additional thickness of the nail base. As noted in one above, a 2" insulation with 1.5" air vent, 7/16" OSB, and figure an inch for the shingle assembly, the overall height of the of the assembly with the insulation would be 5". It doesn't look like there is enough roof at the lower roof at the roof-to-wall condition to even accommodate that. how will you deal with the clearstory window detail?
- 3. Venting, you need an intake and exhaust. In short, I would recommend the Lomanco Deck-Air vent for both intake and exhaust. With the nail base all you do is cut a relief strip along the eave, roof-to-wall- and high-side barn-ridge condition. These are WUI compliant with mesh screen installed under them. what is specified cannot be used at the intake side (low side). you need both for proper flow as venting one side is pointless.
- 4. How are you going to address the increased height of the insulation at the eave, rake, and barnridge conditions? How do you cover the ends, what are you expecting to see here? Will longer
 drip metal be acceptable to you? even though it's not needed with a nail base insulation setup,
 do you want a wood nailer around the perimeter to kind of close off the ends and then a long
 drip.
 - a. I would suggest a long (or big) faced fascia that is fastened at the face at 12" o.c. make sure the drip is below the new assembly at least an acceptable amount to you. At an increased cost you would install a wood nailer around the perimeter, install a cleat, install fascia metal, then a standard drip metal. this would protect the edge of the insulation better in the long run I feel.
- 5. With the increase height of the nail base, the curbs will need to be raised up as well. All of those items will need to be removed, raised, and re-installed. how will this affect any electrical, plumbing, etc. and who is responsible for any alterations such as these?
- 6. Another thought on the nail base. You don't have to install the same thickness of insulation at both roofs. Since the clearstory is the limiting factor for the lower, you could install as much as you want on the upper.

Answer: No Roof insulation is required or needed, see revised Asphalt Shingle Specification

SECTION 07 31 13

ASPHALT SHINGLES

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Granular surfaced fiberglass asphalt shingle roofing.
- B. Vented Nail Base Insulation.
- C. Moisture shedding underlayment, eave, valley and ridge protection.
- D. Associated metal flashings, trim and accessories

1.2 RELATED SECTIONS

- A. Section 05 31 00 Steel Decking.
- B. Section 07 13 26 Self-Adhering Sheet Waterproofing.
- C. Section 07 62 00 Sheet Metal Flashing and Trim.
- D. Divisions 21-23 Mechanical: Mechanical work projecting through roof.
- E. Divisions 25-28 Electrical: Electrical work projecting through roof.

1.3 REFERENCES

- A. The publications listed below form a part of this Section to the extent referenced. The publications are referred to in the text by the basic designation only. Refer to Section 01 42 00 for definitions, acronyms, and abbreviations.
- B. Unless otherwise noted, standards, manuals, and codes refer to the latest edition of such standards, manuals, and codes as of the date of issue of this Project Manual.

C. Referenced Standards:

- 1. ASTM A653/653M Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process.
- 2. ASTM C1289 Standard Specification for Faced Rigid Cellular Polyisocyanurate Thermal Insulation Board.
- ASTM D226 Standard Specification for Asphalt-Saturated Organic Felt Used in Roofing and Waterproofing.
- 4. ASTM D249 Standard Specification for Asphalt Roll Roofing (Organic Felt) Surfaced with Mineral Granules.
- 5. ASTM D3018 Standard Specification for Class A Asphalt Shingles Surfaced with Mineral Granules.
- ASTM D3161 Standard Test Method for Wind-Resistance of Asphalt Shingles (Fan-Induced Method).
- 7. ASTM D3462 Standard Specification for Asphalt Shingles Made from Glass Felt and Surfaced with Mineral Granules.
- 8. ASTM D4586 Standard Specification for Asphalt Roof Cement, Asbestos Free.

- 9. ASTM D4869 Standard Specification for Asphalt-Saturated Organic Felt Shingle Underlayment Used in Roofing.
- 10. NRCA (National Roofing Contractors Association) Steep Roofing Manual.
- 11. UL 790 (Underwriters Laboratories, Inc.) Test for Fire Resistance of Roof Covering Materials.
- 12. UL 997 (Underwriters Laboratories, Inc.) Wind Resistance of Shingles.

1.4 SUBMITTALS

- A. Submit under provisions of Section 01 33 00.
- B. Product Data: Submit product data for all products listed under this Section. Indicate material characteristics, performance criteria and limitations.
- C. Manufacturer's Installation Instructions: Submit installation instructions for all products listed under this Section. Indicate preparation required and installation procedures and accessories.

1.5 QUALITY ASSURANCE

A. Applicator: The roofing material applicator must be approved by the material manufacturer.

1.6 REGULATORY REQUIREMENTS

A. Conform to applicable code for UL Class A rating for shingle types specified.

1.7 JOB AND ENVIRONMENTAL CONDITIONS

- A. Do not apply any roofing materials when water in any form is present.
- B. Do not install eave edge protection and shingles when ambient temperatures are below 40°F.

1.8 EXTRA MATERIALS

A. Provide 50 sq. ft. of extra shingles of color specified. Deliver to location designated by Owner.

1.9 DELIVERY, STORAGE AND HANDLING

- A. Insulation packages shall be labeled to include material name, thermal value and product code.
- B. When stored outdoors, insulation shall be stacked on pallets or dunnage at least 4 inches above ground level and covered with tarpaulins or other suitable covering. Condensation can be removed by slitting the bottom of the factory-applied packaging.
- C. Store shingles and accessories as recommended by shingle manufacturer.

PART 2 PRODUCTS

2.1 MANUFACTURERS – ASPHALT SHINGLES

A. GAF, Products:

- 1. Roof Shingles: Timberline Select 40 with manufacturer's "Golden Pledge" warranty.
- 2. Ridge Shingles: Pacific Ridge Distinctive Ridge Cap.

- 3. Underlayment: Deck-Armor.
- 4. Ridge Vent: Cobra Snow Country Advanced.
- B. Certainteed.
- C. Elk.
- D. Substitutions: Under provisions of Section 01 60 00.

2.2 ASPHALT ROOF SHINGLES

- A. Asphalt Shingles: ASTM D3018, D3161, 40 year, UL 790 Class A rated with Type 1 Self Sealing UL Rating of A and UL 997 Wind Resistance Label, fiberglass reinforced core, ceramically colored/UV resistant mineral granule surface type; self-sealing type; laminated overlay type; color as selected by Architect.
 - 1. Ridge Shingles: High profile, self-sealing ridge cap shingles in color to match asphalt roof shingles.

2.3 SELF-ADHERING SHEET WATERPROOFING

A. Refer to Section 07 13 26.

2.4 SHEET MATERIALS

- A. Roll Roofing (eave protection): ASTM D249; asphalt saturated roll roofing; 50 lbs./square surfaced on weather side with mineral granules of color same as shingles.
- B. Underlayment: ASTM D226, Type II (No. 30) unperforated asphalt saturated felts.

2.5 VENTED NAIL BASE INSULATION

- A. Top layer of 7/16" APA/TECO rated OSB over 1.5" vent spacer strips over ASTM C1289 Type V, closed-cell, HCFC-free polyisocyanuarate rigid foam insulation board faced with a layer of black glass-fiber reinforced felt. Nail base insulation panels shall be factory laminated. Product: ACFoam CrossVent Nail Base Insulation as manufactured by Atlas Roofing Corporation or accepted equal.
 - 1. Fasteners: Carbon steel screws with epoxy coating, 0.245 inch nominal major diameter and 5/8 inch diameter flat heads. Length as required to fully penetrate thickness of metal roof decking.

2.6 ACCESSORIES

- A. Ridge Vent: Rigid plastic ridge ventilator designed to allow the passage of hot air from attic while prohibiting snow infiltration. Vent shall provide a minimum of 18.5 square inches NFVA per lineal foot.
- B. Roof to Wall Vent: Roof-2-Wall Vent with EC-400 end caps as manufactured by Cor-A-Vent, Inc., or accepted equal. Color as selected by Architect.
- C. Nails: Standard round wire shingle type, zinc-coated steel; 10 to 12 gauge, barbed or deformed shank, with heads 3/8 inch to 7/16 inch in diameter; length sufficient to penetrate through oriented strand board of nail base insulation.

- D. Plastic Cement: ASTM D4586, asphalt type with mineral fiber components, free of toxic solvents, capable of setting within 24 hours at temperatures of 75°F and 50% RH.
- E. Lap Cement: Fibrated cutback asphalt type, recommended for use in application of underlayment, free of toxic solvents.

2.7 FLASHING MATERIALS

- A. Refer to Section 07 62 00.
- B. Sheet Flashings: ASTM A653; 24 gauge thick steel with minimum 1.25 oz./sq. ft. galvanized coating.
- C. Bituminous Paint: Acid and alkali resistant type; black color.
- D. Nails: Standard round wire roofing type, hot dipped zinc coated steel; minimum 19/64" head diameter and 0.104" shank diameter; of sufficient length to penetrate through roof sheathing.

2.8 FLASHING FABRICATION

- A. Form flashings to profiles indicated on Drawings, and to protect roofing materials from physical damage and shed water.
- B. Form sections square and accurate to profile, in maximum possible lengths, free from distortion or defects detrimental to appearance or performance.
- C. Hem exposed edges of flashings minimum 1/4" on underside.
- D. Apply bituminous paint on concealed surfaces of flashings.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Verify existing site conditions and deck to receive roofing.
- B. Verify that roof penetrations and plumbing stacks are in place and flashed to deck surface.
- C. Verify roof openings are correctly framed prior to installing work of this Section.
- D. Verify deck surfaces are dry, free of ridges, warps or voids.

3.2 PREPARATION

- A. Before roof insulation application is started remove trash, debris, grease, oil, water, moisture and contaminates which may affect the attachment of the nail base insulation to the metal decking.
- B. Treated wood insulation stops, the same thickness as the insulation shall be mechanically fastened at the edges of the deck and around all projections and openings through the deck.
- C. Fill knotholes and surface cracks with latex filler at areas of bonded eave protection.
- D. Broom clean deck surfaces under eave protection and underlayment.

3.3 INSTALLATION NAIL BASE INSULATION

- A. Mechanically fasten nail base insulation onto metal decking using screws per manufacturer's recommendations. All screw holes must be pre-drilled.
- B. Installed insulation shall not be left exposed to the weather. Cover and waterproof insulation immediately.
- C. Installed insulation which has become wet and/or damaged shall be removed and replaced with solid and dry materials.
- D. Protect installed insulation and membrane from roof traffic damage and abuse by using surface protection such as plywood in areas where repeated or heavy traffic is anticipated both during and after the installation.

3.4 INSTALLATION – SELF-ADHERING SHEET WATERPROOFING

A. Install self-adhered sheet waterproofing under provisions of Section 07 13 26. Install sheet waterproofing over entire roof area. Install double layer where indicated on Drawings.

3.5 INSTALLATION – PROTECTIVE UNDERLAYMENT

- A. Install one ply of roll roofing eave protection at all eaves.
- B. Install one ply of underlayment over entire roof area, with ends and edges weather lapped minimum 6". Stagger end laps of each consecutive layer. Nail in place.
- C. Install protective underlayment horizontally and perpendicular to slope of roof and weather lap minimum 4" over eave protection.
- D. Lap underlayment over valley flashing a minimum of 6".
- E. Weather lap and seal watertight with plastic cement, items projecting through or mounted on roof.

3.6 INSTALLATION – VALLEY PROTECTION

- A. Install valley sheet metal at all roof valleys.
- B. Extend shingles on one slope across valley and fasten. Trim shingles from other slope 2" from valley centerline to achieve closed cut valley, concealing the valley protection.

3.7 INSTALLATION - FLASHING

- A. Install all sheet metal work per SMACNA manual, latest edition and under provisions of Section 07 62 00.
- B. Weather lap joints minimum 2" and seal weather tight with plastic cement.
- C. Secure in place with nails at 6" on center. Conceal fastenings.
- D. Flash and seal work projecting through or mounted on roofing with plastic cement, weather tight.
- E. Install continuous edge flashings along all eves and rake edges of roofs.

3.8 INSTALLATION – ASPHALT SHINGLES

- A. Install shingles and roof accessories in accordance with manufacturer's instructions.
- B. Install shingles in straight coursing pattern with 5" weather exposure to produce double thickness over full roof area. Provide double course of shingles at eaves.
- C. Secure each shingle with six nails per shingle. Nails shall be driven flush with shingle surface.
- D. Project first course of shingles 3/4" beyond edge of fascia.
- E. Extend shingles 1/2" beyond face of gable edge of fascia.
- F. Cap ridges with individual shingles, maintaining 5" weather exposure. Place to avoid exposed nails.
- G. Coordinate installation of roof-mounted components or work projecting through roof with weather tight placement of counter flashings.
- H. Complete installation to provide weather tight service.

3.9 PROTECTION OF FINISHED WORK

- A. Clean all shingles and adjacent surfaces from plastic cement, sealants, etc.
- B. Do not permit traffic over finished roof surface.
- C. Replace all damaged shingles as directed by the Architect, with no additional cost to Owner.

3.10 CLEAN UP

A. Upon completion of the work on this section, remove all surplus materials, rubbish and debris from the premises.

END OF SECTION

Bid#32-C1, 23/02

NON-MANDATORY Pre-Bid Sign-In Sheet
Roof Replacement Project, Gym Bldg. at FRC Main Campus
Project No. #32-C1, 23/01 — Roofing Replacement Project
Main Gym Bldg.

570 GOLDEN EAGLE AVE. QUINCY, CA 95971 530.283-0202

SIGN-IN SHEET

3204 Tinker Creek Way Chico, CA 95973 Parker Constr. & Consulting, Inc. DATE AND TIME: LOCATION: RFQ / BID NO.: PROJECT: A THE CALL OF THE PARTY OF THE 11/10 Targe reclund Organization - Name/Address/Zip Code インクシンスへ Honerican Tortall Ar しんれんのかか 00 5 (och re てこと Specon April 4, 2023 @ 11:00 AM 570 Golden Eagle Ave, Quincy, CA 95971 #32-C1, 23/02 Roof Replacement Project, Gym Bldg. - FRC Main Campus SA FI 3 16 H ングで くろそ 136004 George Parker **Print and Sign Your Name** 10 mgs Merk 70 h. E-mail: Fax: Fax: Fax: Fax: E-mail: CUCRUD OFF @ Phone: (5)9) 258-1540 E-mail: Harber + ROCK in INCO ama Phone: (530) 723-325 Phone: (533) (166 1586 E-mail: Fax: Fax: Phone: (204) 912 - 2896 E-mail: Phone: (5%) 517-6169 E-mail: gparker587@yahoo.com Phone: (530) 788-3533 hellimana garlandind com brown @ Abocbulds SPS Pro @ YAlton Coan Telephone FRC. FD TEI YOU COM Corn

SIGN-IN SHEET

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