

HERITAGE HOME PROGRAM (HHP)
**A Linked Deposit Program of the Cuyahoga County Treasurer and
the Cleveland Restoration Society**

Cleveland Restoration Society
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BID SPECIFICATIONS

HHLF funds cannot be used to fund the purchase or installation of the following items:

- Vinyl siding
- Vinyl windows
- Swimming Pools
- Hot tubs
- Decks

Appropriate permits shall be secured through the Building Department of the city that the work is being completed in and the contractor shall be registered with such Building Department in order to secure permits.

**ALL REHAB AND INSTALLATION MUST BE PER CITY BUILDING CODES
AND MANUFACTURER’S SPECIFICATIONS.**

**PROJECT COSTS EXCEEDING CONTRACT AMOUNT ARE TO BE PAID BY
HOMEOWNER(S).**

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Article I. THERMAL & MOISTURE PROTECTION

Section 1.01 REPAIR OF EXISTING ROOF (SLATE OR TILE)

(a) MATERIALS

- (i) Chimney Base & Counter Flashing: 2-1/2# lead, 16 oz. copper, or anodized aluminum to match the roof as close as possible.**
- (ii) Stack pipe Flashing: Neoprene, of the correct size to suite each stack pipe.**
- (iii) Step, Wall, and Misc. Flashing: .032" aluminum "coil stock" with baked-enamel finish to match shingle color as close as possible.**
- (iv) Valleys: .032" aluminum "coil stock" with baked-enamel finish to match shingle color as close as possible. Minimum of 18" wide stock. Woven shingle valley with CRS approval.**
- (v) Nails: Minimum 1-1/2"- 14 gage copper slating nails, or appropriate fasteners for type and size of tile.**
- (vi) New Sheathing Boards: 1X12 pine #3 sheathing or 3/4" CDX plywood. On small patches, match thickness of existing boards. Joints to end on rafters or solid backing.**
- (vii) Underlayment: 30# felt. Ice and water shield 40 mils thick.**
- (viii) Roofing Cement: "Flintkote" or approved equal.**
- (ix) Shingles: Slate/tile shingles to match the existing as closely as possible in shape, profile, and color. Submit samples for review and approval by the CRS Historic Preservation Specialist and Homeowner.**

(b) WORKMANSHIP

- (i) Roof Board Repair: Where roof is leaking, remove and dispose of all cracked, rotted, or damaged roof sheathing boards or sections of roof sheathing. Re-nail all sound boards that have come loose.**
- (ii) Flashing: Reseal or replace all flashing to make roof weathertight. Step-flash all roof/wall junctures. (Note: Wall and step flashing must go behind exterior siding, even if this constitutes replacement of siding.) Chimney shall have separate base and cap flashings. Where chimneys are not being taken down below the roofline, cut out joints and the old flashings and insert new flashings, wedge with lead and point joint with matching mortar. Neatly cut, fold and hammer together the flashings, lapping them in the proper direction to shed water, leaving no loose pieces or gaps.**
- (iii) Valleys: Edges shall be installed under existing and/ or new roofing with a minimum exposed total width of 6". Roofing edges shall be fully cemented to the flashing. Install trim and seal per the manufacturer's specifications.**
- (iv) Roofing Cement: Where needed, seal the shingles to the flashing with roofing cement. No roofing cement shall be visible on the finished job.**
- (v) Shingles: Replace all broken or missing slates/tiles on the roof. Secure any loose slate/tiles. Repair ridge cap as needed.**

Section 1.02 ROOF TEAR OFF AND REPAIR

(a) MATERIALS

- (i) New Sheathing Boards: 1x12 pine, #3 sheathing or 3/4" CDX plywood. On**

small patches, match thickness of existing boards.

- (ii) **New Rafters and Other Framing:** See *Error! Reference source not found.*
- (iii) **Roofing Vents:** Static roof vents or continuous ridge vent to match shingle color as close as possible.
- (iv) **Tarpaper:** 30 lb. roofing felt. Ice and water shield 40 mils thick.

(b) WORKMANSHIP

- (i) **Scope:** This section covers preparation only- rafter repair, flashings, and roofing are covered in other sections.
- (ii) **Stripping and Preparation:** Includes removal of all layers of roof covering and the restoration of sheathing to a solid condition ready for the application of a new roof. Properly dispose of all roofing materials. Remove or drive in all projecting nails.
- (iii) **Sheathing Board Repair:** Remove and dispose of all cracked, rotted, or damaged roofing boards or sections of roofing boards. Joints to end on rafters or solid backing. Re-nail all sound old boards that have come loose.
- (iv) **Roof Vents:** Provide proper ventilation by the use of static roof vents or a continuous ridge vent. Allow 1 S.F. of free ventilation for every 300 S.F. of attic floor space. Cut opening of the required size in the locations necessary to properly ventilate. Leave the vents loose until the roofing is installed; lap roofing under flange at base and over the flange at side and top to insure a watertight seal.
- (v) **Sweeping and Underlayment:** Sweep off and properly dispose of all dirt and debris from roof deck. Clean gutters of any roofing debris. Check for any projecting nails and drive in. Install a layer of 30# felt over the deck; lap all seams at least two inches. Install Ice and Water shield to all eaves and valleys. Ice guard should extend up from gutter board 6ft.

Section 1.03 ARCHITECTURAL SHINGLES

(a) MATERIALS

- (i) **Chimney Base & Counter Flashing:** 2-1/2# lead, 16 oz. copper or .032 aluminum with baked-enamel finish to match shingle color as close as possible.
- (ii) **Stack pipe Flashings:** Neoprene, or the correct size to suit each stack pipe.
- (iii) **Step, Wall, and Misc. Flashings:** 2-1/2# lead, 16 oz. copper, or .032 aluminum with baked-enamel finish to match existing shingle color as close as possible. **Note:** Wall and step flashings must go behind exterior siding, even if this constitutes replacement of siding.
- (iv) **Valleys:** 2-1/2# lead, 16 oz. copper, or .032 aluminum with baked-enamel finish to match shingle color as close as possible. Minimum of 18" wide stock. Woven shingles may be used with CRS approval.
- (v) **Drip Edge:** 1x3-1/4" aluminum, with baked-enamel finish to match shingle color as closely as possible
- (vi) **Tarpaper:** 30 lb. roofing felt or approved equal.
- (vii) **Bituthene:** "Ice and Water Shield" or equivalent. Approx. 40mls thick.
- (viii) **Nails:** Hot-dipped galvanized roofing nails, 3/8" head, large enough to

penetrate sheathing at least 3/4". No staples are to be used.

(ix) **Roofing Cement:** "Flintkote" or approved equal.

(x) **Shingles:** Shall be architectural with a minimum of 30 years warranty. Color shall be selected by the CRS Historic Preservation Specialist and Owner for approval.

(b) WORKMANSHIP

(i) **Flashing:** Step-flashing all roof/wall junctures. Chimneys shall have separate base and cap flashings.

(ii) **Tar Paper:** Install 30# felt paper to entire deck, lap all seams at least 2 inches. Properly secure to deck. Install flat on deck without bulges or ripples. Install ice and water shield to all eaves and valleys.

(iii) **Bituthene:** Install "Ice & Water Shield" on clean wood decking to all eaves and valleys as per manufacturer's specifications.

(iv) **Drip Edge:** Install the drip edge around the entire perimeter of the roof, including rakes. Overhang shingles a minimum of 1/4" from drip edge.

(v) **Starter Strip:** Apply a 7" starter strip to the bottom edge of the roof.

(vi) **Valley:** Edge shall be installed under existing or new roofing with a minimum exposed total width of 6". Install, trim and seal following the manufacturer's specifications.

(vii) **Ridges and Hips:** Install "Boston" caps at all hips and ridges.

(viii) **Nailing:** Use at least 4 nails per strip, located above the "fingers" according to the manufacturer's recommendations. At mansard roof, use 6 nails per strip.

(ix) **Roofing Cement:** Where needed, seal the shingles to the flashings with roofing cement. No roofing cement shall be visible on the finished job.

(x) **References:** Comply with recommendations of "Residential Asphalt Roofing Manual" of Asphalt Roofing Manufacturer's Association, and S.M.A.C.N.A. Architectural Sheet Metal Manual.

Note: Contractors will supply the homeowner with a manufacturers and workmanship warranty upon completion of job, minimum 5 years labor warranty. .

Section 1.04 MEMBRANE ROOFING

(a) MATERIALS

(i) **Membrane:** SBS modified bitumen roof with granules, cold applied process, manufactured by GAF Ruberoid or equal.

(ii) **Adhesive Seam Caulk and Splice Cement:** Manufactured by the maker of the membrane chosen or specifically approved by that manufacturer for use with their membranes.

(iii) **Cap Strip:** Aluminum with baked-enamel finish, min. 0.032". Cap strips shall be custom-fabricated to extend vertically down the face of the crown moulding approximately 1", and cover the top edge of the crown.

(iv) **Screws for Cap Strip:** #8 round-head aluminum at least one inch long.

(v) **Caulking for Screw Heads:** GE Silicone- Color to closely match cap strip.

(vi) **Mechanical Fasteners:** Disc anchors, bar anchors, metal screw, toggle

connectors as appropriate to substrate, as recommended by the manufacturer.

(b) WORKMANSHIP

- (i) Substrate:** Install roofing material and base coat on a cleaned and smooth decking per manufacturer's specifications.
- (ii) Membrane Installation:** Fully adhere membrane according to manufacturer's specifications and when the temperature is 40 degrees or better.
- (iii) Layout:** Individual pieces of membrane shall be as long as possible to avoid the need for unnecessary seams and keeping material flat on decking.
- (iv) Bonding:** Follow all adhesive manufacturer's instructions to provide a complete bond to the substrate. Repair all blisters, voids, and other defects to the satisfaction of the Homeowner and CRS Construction Manager (Dean Pavlik)
- (v) Seams:** Follow all manufacturer's instructions to provide fully bonded seams.
- (vi) Cap Strips:** Install cap strip along exposed edges of membrane. Lap the joints between lengths of cap strip at least two inches. Fasten the strips into place using screws spaced no more than 18 inches apart. Cover all joints and screw heads with caulk.
- (vii) Warranty:** Contractor will supply homeowner with a manufacturer and a workmanship warranty upon completion of the job, minimum 5 years labor warranty.

Section 1.05 METAL ROOFING

(a) MATERIALS

- (i) Metal Patches:** 26 ga. Galvanized sheet metal, for steel roofing and 16 oz. copper for copper roofing.
- (ii) Nails for Metal Patches:** Galvanized for steel roofing and copper for copper roofing.
- (iii) Caulking:** "GE" Paintable Silicone or other paintable silicone caulking approved by the CRS Construction Manager (Dean Pavlik) before use.
- (iv) Primer:** Rustoleum: Rust Metal Primer #7769 or approved equal.
- (v) Finish Coat:** Rustoleum: enamel or approved equal.

(b) WORKMANSHIP

- (i) Preparation:** Remove roofing cement, scaling paint, and rust from metal surfaces.
- (ii) Metal Patches:** Install metal patches wherever old metal is rusted-through. Extend patch beyond rusted area at least 1" on all sides. Cover back of patch with caulking, press into place, and tack down with enough nails around its edges to hold it securely. Cover nail heads with caulking and allow to cure.
- (iii) Caulking of Split Seams:** Scrape off the area 1/2" wide around all split seams to bright, shiny metal. Apply a bead of caulking to the bare metal and neatly smooth it out.
- (iv) Painting:** Apply a full coat of primer and a full coat of finish paint to all

metal surfaces. Apply coat neatly with no drips on adjoining surfaces.

Section 1.06 MEMBRANE TROUGH LININGS

(a) MATERIALS

- (i) Membrane: Single-ply uncured E.P.D.M. “flashing strip” similar to that manufactured by Manville, Genflex, or equal.**
- (ii) Adhesive, Seam Caulk: Manufactured by the maker of the membrane chosen or specifically approved by that manufacturer for use with their membranes.**
- (iii) Downspout Leads: Lead-coated copper, 2-1/2” diameter, 20 oz. or heavier.**
- (iv) Sheet Metal Repairs: Galvanized metal, 26 gal. or heavier.**
- (v) Nails for Sheet Metal Repairs: Galvanized roofing nails**
- (vi) Cap Strip: Aluminum with baked-enamel finish, min. 0.032”. Cap strips shall be custom-fabricated to extend vertically down the face of the crown moulding approximately 1”, and cover the top edge of the crown.**
- (vii) Screws for Cap Strip: #8 round-head aluminum at least 1” long.**
- (viii) Caulking for Screw Heads: GE Silicone, color to closely match cap strip.**

(b) WORKMANSHIP

- (i) Scheduling: Install membrane after all carpentry, flashing repair, and stripping of adjacent roofing is done and before the installation of any adjacent roofing, and after all carpentry repairs to the trough and cornice are completed.**
- (ii) Downspout Leads: Fasten new leads into place using copper, stainless, or aluminum nails driven through the outer edge of the flange.**
- (iii) Pitch: All troughs shall be pitched to drain readily toward the downspouts and have no low places.**
- (iv) Metal Preparation (where applicable): Scrape, wire brush, and clean all old surfaces to be covered. Repair rusted out areas and holes with galvanized sheet metal.**
- (v) Membrane Installation: Install membrane according to manufacturer’s specifications.**
- (vi) Layout: Individual pieces of membrane shall be as long as possible.**
- (vii) Bonding: Follow all adhesive manufacturer’s instructions to provide a complete bond to the substrate. Repair all blisters, voids, and other defects to the satisfaction of the Homeowner and CRS Construction Manager.**
- (viii) Seams: Follow all manufacturer’s instruction to provide fully bonded seams.**
- (ix) Cap Strips: Install cap strip along exposed edges of membrane. Lap the joints between lengths of cap strip at least two inches. Fasten the strip into place using screws spaced no more than 18” apart. Cover all joints and screw heads with caulk.**

Section 1.07 HYDROSTOP ROOFING SYSTEM

(a) MATERIALS

- (i) Hydrostop is latex-based roofing product with a fibrous membrane. This roofing system is approved for flat roofs. See manufacturer’s product**

information and installation guidelines.

(b) WORKMANSHIP

- (i) Contractor must install product per manufacturer's installation procedures and specifications. Contractor must provide labor and materials warranties in accordance with, or exceeding, manufacturer's published procedures and guarantees.**

Section 1.08 GUTTERS AND DOWNSPOUTS

(a) MATERIALS

- (i) Gutters: 3X5" K-style aluminum .032" thick, seamless, with baked-enamel finish. Color to be approved by Homeowner and CRS Historic Preservation Specialist. Submit sample for approval.**
- (ii) Downspouts, Elbows, Shoes, and Straps: Aluminum .032" thick, seamless, with baked-enamel finish to compliment K-style gutters. Color to be approved by Homeowner and CRS Historic Preservation Specialist. Submit sample for approval.**
- (iii) Hangers: Bar hangers with clip-on fascia apron or other type hanger approved by Homeowner and CRS Construction Manager (Dean Pavlik).**
- (iv) Fasteners to Attach Hanger Straps to Fascia: Galvanized, aluminum or stainless steel nails/screws.**
- (v) Sealant: Manufactured by or approved by the gutter manufacturer.**
- (vi) Pop-Rivets: All aluminum, color to match gutter.**
- (vii) Splash Blocks: Pre-formed concrete.**
- (viii) Crocks: Clay to match original.**
- (ix) Gutter Boards: Cedar or equivalent. Primed and painted.**

(b) WORKMANSHIP

- (i) Pitch: Gutters shall be pitched slightly toward the downspouts.**
- (ii) Hangers: Space hanger no more than three feet apart and securely attach to the fascia and the rafter ends. Hangers shall not be nailed or screwed through the top of the roof shingles. Downspout straps to be spaced not more than 8 feet apart.**
- (iii) Diverter Elbows and Splash blocks: Provide a diverter elbow at the base of every downspout that is not connected to a crock and install splash block. Provide backfill as required to ensure that water is directed away from the structure but not onto a neighboring property.**
- (iv) Downspout Tubes and End Caps: Seal tubes and ends to gutters before riveting together; use enough rivets to draw all parts tightly together.**
- (v) Crocks: Seal downspouts into crocks with masonry cement, filling all voids around downspout. Downspout shall be inserted a minimum of 4" into top center of crock. Use caution to avoid having mortar fall into the crock. Damage or missing crocks shall be replaced in kind. Submit substitutions to CRS Construction Manager (Dean Pavlik).**
- (vi) Gutter Boards: Spike gutter boards to rafter tails. All butt joints should end on rafters or solid blocking. Any deteriorated rafter tails should be sistered**

with matching size and materials.

- (vii) **Coordination:** Coordinate with carpentry and painting. Upon completion, gutters and downspouts may be painted to match color of the adjoining trim.

Section 1.09 INSULATION

(a) MATERIALS

- (i) **Batt Insulation:** Type II fiberglass with “Kraft facing,” 1.0 perm rating. Min R-11 in all sidewalls and R-19 in ceiling spaces. John Manville, Owens Corning, or approved equal.
- (ii) **Blown-in Insulation:** Class I cellulose, or approved equal.
- (iii) **Sound Attenuation Blanket:** US Gypsum, thermafiber fire blanket single layer insulation, 3” or approved equal.
- (iv) **Insulation should not be installed over knob and tube electrical, per Ohio code.**

(b) WORKMANSHIP

- (i) **General:** Comply with all manufacturer’s recommended installation instructions.
- (ii) **Batt Insulation:** Extended insulation full thickness over entire area to be insulated. Cut and fit tightly around obstructions, and fill voids with insulation. Install fiberglass batt insulation where finish has been removed and framing is accessible. Insulation shall be stapled every 8” to the inside edge of the studs. Where ends of blankets or batts meet, the paper should overlap slightly. Insulation shall not be compressed or installed in more than one layer. Approximately 1” of space shall be left between insulation and sheathing.
- (iii) **Cellulose Insulation:** Install blown-in insulation where finishes are to remain. Such installation shall, wherever possible, be through exterior walls and under siding (no plugs) before repair or replacement of siding. With approval, insulation may be installed using holes cut through interior finishes. In attic ceilings, remove all debris, soiled or water damaged existing insulation and install or increase existing blown-in insulation to R-20. Install sheet metal barriers to provide 3” barriers around all fixtures where insulation is to be blown in, and install baffles at the end of joist spaces to prevent insulation from blocking eaves and eave vents. Where sash cords are not to be retained, fill all spaces between window jambs and studding with fiberglass insulation.
- (iv) **Exterior Repairs:** Replace all removed damaged siding and match existing. Prime all new lumber.
- (v) **Coordination:** Insulation should be done before repair or replacement of siding and after the installation of any mechanicals in the exterior walls.
- (vi) **DO NOT FILL COLD AIR RETURNS**