PROJECT 214020
STATEMENT OF WORK
ROOFING PHASE 2
4800 AREA
CAMP BLANDING JOINT TRAINING SITE
STARKE, FL 32091

1. SCOPE:

Camp Blanding Joint Training Site requires the services of a Florida Licensed General Contractor to provide all materials, equipment and labor to install new metal roofs, gable end aluminum siding, prime, paint and install new 2x6 fascia board. Buildings in this project include bldg. No. 4800, 4801, 4802, 4803, 4806, 4807, 4808, 4810, 4812, 4814, 4815, 4817, 4818, 4820, 4825, 4835, 4840, 4845, 4857, 4861, 4863, 4865, 4867, 4871, 4873, 4875, and 4877.

1.1 BACKGROUND:

The facility is located on Camp Blanding Joint Training Center, Starke, FL. The area serves as a billeting, and administrative area for personnel training on Camp Blanding. The existing roofs are asphalt shingle installed over 30 lb felt and installed over a minimum 15/32" plywood/CDX substructure. The roof ages vary with some being relatively new and others at the end of their life cycle.

2. APPLICABLE DOCUMENTS:

Listed are the recommend references for completion of the roof replacements.

- Florida Building Code – 2010
- National Electric Code
- Unified Facilities Criteria

    - Applicable building codes shall be followed and all products shall have Florida Building Code Product Approvals.

    - Permits are required and shall be the responsibility of the Contractor. The cost for permits shall be included in the Base Bid.

    - There are no drawings available for review. The Contractor shall take field measurements to determine the size and scope of project.

3. REQUIREMENTS:

The following is a work breakdown of the major tasks to be performed for the repair. This work breakdown is not all inclusive and other work may be required to achieve an acceptable level of

workmanship for the repairs. Prior to bid submission, the Contractor shall notify DPW of any necessary repairs that he believes are outside the scope of work.

3.1 Work Breakdown:

- Remove and dispose of existing asphalt shingles and roofing underlayment in preparation for installation of new roof underlayment and metal roof.
- Remove existing directional antennas from roof in preparation for new metal roof.
- Remove and dispose of existing gable end shingles and underlayment in preparation for installation of new gable end aluminum siding.
- Cut off approximately three (3) inches of the building over hang in preparation for installation of fascia board.
- Install new pressure treated 2x6 fascia boards around the perimeter of the roof overhang.
- Prime and paint newly installed fascia board and all exposed cut areas. Match paint color to existing paint colors used previously. (Note: Existing soffit is not required to be painted. New paint shall match existing soffit and building trim colors.)
- Install new roof underlayment per manufacturer's recommendations.
- Install new metal roof panels per the manufacturer's recommendations.
- Install all roofing related accessories, valleys, hips, ridges, eaves, corners, rakes and miscellaneous flashing and attaching devices.
- Install new vent boots, and other fresh air vents, etc to metal roof in accordance with manufacturer's recommendations.
- Reinstall directional antennas per the manufacturer's recommendations so to not void the warranty.
- Remove all debris from area. Ensure all nails around the perimeter of the building are collected and disposed of offsite. Inspect all exterior mechanical equipment to ensure nails have not fallen into the casing and coils.
- Return grass and landscape back to the original conditions.

3.2 SPECIFCATIONS:

Metal Roofing

REFERENCES

A. American Iron & Steel Institute (AISI) Specification for the Design of Coldformed Steel Structural Members.
B. ASTM A-653 & ASTM A924 Steel Sheet, Zinc-Coated (Galvanized)
C. ASTM E-1680-95 (Air Infiltration Test)
D. ASTM E-1646-95 (Water Penetration Test)
E. ASTM E-1592
F. Spec Data Sheet - Galvalume Sheet Metal by Bethlehem Corp.
G. SMACNA - Architectural Sheet Metal Manual.
H. Building Materials Directory - Underwriters Laboratories, Test Procedure 580.

ASSEMBLY DESCRIPTION

A. The roofing assembly includes preformed sheet metal panels, related accessories, valleys, hips, ridges, eaves, corners, rakes, miscellaneous flashing and attaching devices.

SUBMITTALS

A. Submit detailed drawings showing layout of panels, anchoring details, joint details, trim, flashing, and accessories. Show details of weatherproofing, terminations, and penetrations of metal work.
(Do not provide a drawing for every building. Submit one drawing for a typical gable roof and one drawing for a typical hipped roof).

B. Submit a sample of each type of roof panel, complete with factory finish.

C. Submit results indicating compliance with minimum requirements of the following performance tests:

1. Air Infiltration, ASTM E-1680-95
2. Water Infiltration, ASTM E-1646-95
3. Wind Uplift - U.L.90

D. Submit calculations with engineer seal, verifying roof panel and attachment method resists wind pressures imposed on it pursuant to applicable building codes.

QUALITY ASSURANCE

A. Manufacturer: Company specializing in Architectural Sheet Metal Products with ten (10) years minimum experience.

B. No product substitutions shall be permitted without meeting specifications.

C. Substitutions shall be submitted 10 Days prior to Bid Date and acceptance put forth in an addendum.

D. No substitutions shall be made after the Bid Date.

DELIVERY, STORAGE AND HANDLING

A. Upon receipt of panels and other materials, installer shall examine the shipment for damage and completeness.

B. Panels should be stored in a clean, dry place. One end should be elevated to allow moisture to run off.

C. Panels with strippable film must not be stored in the open, exposed to the sun.

D. Stack all materials to prevent damage and to allow for adequate ventilation.

WARRANTY

A. Paint finish shall have a twenty year guarantee against cracking, peeling and fade (not to exceed 5 N.B.S. units).

B. Galvalume material shall have a twenty year guarantee against failure due to corrosion, rupture or perforation.

C. Applicator shall furnish guarantee covering water tightness of the roofing system for the period of two (2) years from the date of substantial completion.

PRODUCT

ACCEPTABLE MANUFACTURERS

A. Berridge Manufacturing Company, Houston, Texas.

B. Gulf Coast Supply and Manufacturing, Inc, Horseshoe Beach, FL

SHEET MATERIALS

A. Prefinished metal shall be Aluminum-Zinc Alloy Coated (AZ-55 Galvalume®) Steel Sheet, 24-Gauge, ASTM 792-08, Grade 40, yield strength 40 ksi min.

B. Finish shall be full strength Kynar 500® or Hylar 5000™ fluoropolymer coating applied by the manufacturer on a continuous coil coating line, with a top side dry film thickness of 0.75 ± 0.05 mil over 0.20 ± 0.05 mil prime coat, to provide a total top side dry film thickness of 0.95 ± 0.10 mil. Bottom side shall be coated with a primer and beige urethane coating with a total dry film thickness of 0.35 ± 0.05 mil. Finish shall conform to all tests for adhesion, flexibility, and longevity as specified by the Kynar 500® or Hylar 5000™ finish supplier.

C. Color shall be **Sierra Tan**.

D. Strippable film shall be applied to the top side of all prefinished metal to protect the finish during fabrication, shipping and field handling. This strippable film MUST be removed immediately before installation.

E. Unpainted metal shall be Aluminum-Zinc Alloy Coated (AZ-55 Acrylic Coated Galvalume®) Steel Sheet, 24-Gauge or 22-Gauge, ASTM 792-08, Grade 40, yield strength 40 ksi min., with clear acrylic coating on both sides of material.

F. Field protection must be provided by the contractor at the job site so stacked or coiled material is not exposed to weather and moisture.

G. Flashing maybe factory fabricated or field fabricated. Unless otherwise specified all exposed adjacent flashing shall be of the same material and finish as panel system.

Note: The rolling process of sheet metal results in inherent surface unevenness referred to as "oil-canning." This condition is also caused by several factors including thermal expansion and contraction, dark colors, both medium and high-gloss finishes, and uneven substrate. "Oil-canning" in itself is not sufficient cause for material rejection.

ACCESSORY MATERIALS

A. Fasteners: Galvanized Steel with washers where required.

B. Sealant: Tremco, Inc. Spectrem 1 Silicone Sealant. Do not use clear caulk.

C. Vinyl Weatherseal Insert.

FABRICATION

All exposed adjacent flashing shall be of the same material and finish as the roof panels.

Hem all exposed edges of flashing on underside, 1/2 inch.

BERRIDGE CEE-LOCK STANDING SEAM PANEL

Color:	Sierra Tan, Kynar 500 Factory Finish
Coverage:	16-1/2 in Net Coverage
Gauge:	24 Gauge Steel
Testing:	Fl. Product Approval
	U.L. 90 Wind Uplift
Attachment:	Hidden Fasteners
Warranty:	Minimum 20 year warranty

GULF SEAM PANEL STANDING SEAM

Color:	Sierra Tan, Kynar 500 Factory Finish
Coverage:	16 in Net Coverage
Gauge:	24 Gauge Steel
Testing:	Fl. Product Approval
	U.L. 90 Wind Uplift
Attachment:	Hidden Fasteners
Warranty:	Minimum 20 year warranty

EXECUTION

INSPECTION:

A. Substrate:

1. Examine plywood or metal deck to ensure proper attachment to framing.
2. Inspect roof deck to verify deck is clean and smooth, free of depressions, waves or projections, level to +/- 1/4" in 20', and properly sloped to valleys and eaves.
3. Verify roof openings, curbs, pipes, sleeves, ducts or vents through roof are solidly set, cant strips and reglets in place, and nailing strips located.
4. Verify deck is dry and joints in wood deck to be solidly supported and nailed.

B. Felting:

1. Install new synthetic unperforated roofing felt underlayment over solid sheathing and fastened in place.
2. Ensure felt installed horizontally, starting at eave to ridge and overlap per synthetic felt manufacturer's recommendations.
3. Ensure that all nail heads are totally flush with the substrate. Nails shall be galvanized roofing nails with caps.

INSTALLATION

A. Comply with manufacturers standard instructions and conform to standards set forth in the Architectural Sheet Metal Manual published by SMACNA, in order to achieve a watertight installation.
B. Install panels in such a manner that horizontal lines are true and level and vertical lines are plumb.
C. Install starter and edge trim before installing roof panels.

D. Remove protective strippable film prior to installation of roof panels.
E. Attach panels using manufacturer's standard clips and fasteners, spaced in accordance with approved shop drawings.
F. Install sealants for preformed roofing panels as approved on shop drawings.
G. Do not allow panels or trim to come into contact with dissimilar materials.
H. Do not allow traffic on completed roof. If required, provide cushioned walk boards.
I. Protect installed roof panels and trim from damage caused by adjacent construction until completion of installation.
J. Remove and replace any panels or components which are damaged beyond successful repair.

CLEANING

A. Clean any grease, finger marks or stains from the panels per manufacturer's recommendations.

B. Remove all scrap and construction debris from the site.

3.04 FINAL INSPECTION

A. Final inspection will be performed by a firm appointed and paid for by the owner in accordance with section 01410.

ALUMINUM SIDING:

Manufacturer: - Kaycan Horizontal 8 inch smooth or Equal

Color: - Match Existing buildings

Specifications:

- Siding, soffit and fascia are made of 3105 or equivalent aluminum alloy. Siding is H26 or equivalent hardness.
- Thickness: 0.019" nominal; 0.024" nominal
- Meets performance requirements of AAMA 1402-86
- Coating Characteristics

Name of coatings: Rollex's two coat acrylic coating.
Gloss: 8 to 12 on 60° Photovolt Meter, ASTM test D523.
Formability: No removal of finish with 610 Scotch tape on a 2T bend. NCCA test 11-19.
Pencil Hardness: Eagle Turquoise, HB Minimum.
Adhesion: 8 to 12 on 60° Photovolt Meter, ASTM test D523.
Humidity Resistance: No loss of gloss, cracking or peeling after 3,000 hrs. in 100% relative humidity, ASTM test D714 and method 6201of FTMS 141a.
Salt Spray Resistance: Withstand 5% salt fog for 3,000 hrs. ASTM test B117.
Impact Resistance: No visual cracking or Scotch tape pick-off when subject to impact in inch pounds equal to 1,500 times metal thickness. NCCA test 11-6.
Exterior Exposure: Fade: Shall not exceed more than 5 Color Difference Units within 5 years after removal external deposits. ASTM test D2244.
Dry Film Thickness: .70-1.00 Mils.

SYNTHETIC UNDERLAYMENT:

Manufacturer: - GAF, TigerPaw Roof Deck Protection or Equal

Specifications:

10 squares per roll excluding laps
Roll length: 250 ft.
Roll width: 48 inches
Roll weight: Approx. 40 lbs. per roll
UV stabilized polypropylene construction resists UV degradation for up to 180 days.
Meets or exceeds the physical requirements of ASTM D226 and D4869.
Meets UL Class A fire rating when used with UL Class A rated roof coverings
Florida Building Code Approved
ICC ESR-3286

FACIA/SOFFITT PAINT

Manufacturer: Sherwin Williams A-100 Exterior Gloss A8 Series or Equal

Color: - Match existing facilities in area.

Characteristics:

A-100 Exterior Latex is a quality exterior finish. This product is recommended for use on aluminum, vinyl, and wood siding, clapboard, shakes, shingles, plywood, masonry, and metal down to a surface and air temperature of 35°F.
Color: Match existing facia/soffit color
(To optimize hide and color development, always use the recommended primer)
Coverage: 350 - 400 sq ft/gal @ 4 mils wet; 1.3 mils dry
Drying Time, @ 50% RH:@ 35-45°F @ 45°F +
Touch: 2 hour 2 hours
Recoat: 24-48 hours 4 hours
Drying and recoat times are temperature, humidity, and film thickness dependent
Flash Point: N/A
Finish: 35-45 units @ 60°
Tinting with CCE:

Base	oz/gal	Strength
Extra White	0-5	100%
Deep Base	4-12	100%
Ultradeep Base	4-12	100%

Vehicle Type:
100% Acrylic A08W00151
VOC (less exempt solvents): <50 g/L; <0.42 lb/gal
(As per 40 CFR 59.406 and SOR/2009-264, s.12)
Volume Solids: 36 ± 2%
Weight Solids: 46 ± 2%
Weight per Gallon: 9.8 lb

WVP Perms (US) 14.9 grains/(hr ft^2 in Hg)
Mildew Resistant:
This coating contains agents which inhibit of mildew on the surface of this coating film.

Specifications:
Wood Application
1 coat, Exterior Oil-Based Wood Primer
2 coats, A-100 Exterior Latex

4. SUBMITTALS:

Provide submittals on the following products:

Product	Number of Copies	Due	Comments
Metal Roof Manufacturer	3	15 Days after issuance of NTP	Provide color sample
Shop Drawings of Roof layout	3	15 days after issuance of NTP	Provide one typical for a gable end roof and one typical for a hipped roof.
Air & Water Infiltration Results; Wind Uplift U.L. 90 testing	3	15 days after issuance of NTP	
Engineer Calculations	3	25 days after issuance of NTP	
Roofing Underlayment	3	15 days after issuance of NTP	
Aluminum Siding	3	15 days after issuance of NTP	
Metal Roof Warranty	3	With final invoice	Include in Owner's Manual
Paint, Exterior Specifications	3	15 days after issuance of NTP	Provide manufacturer and paint chip numbers
Owner's Manual	3	With final invoice	

5. POINT OF CONTACT:

The CBJTC DPW point of contact for this project is Mr. Bill Webber at (904) 682- 2201 (work0 or (904) 219-4401 (cell).