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DATE	DATE	DESCRIPTION
3/2023 <td>1/26/2023 <td>FEE & NOTES UPDATE</td> </td>	1/26/2023 <td>FEE & NOTES UPDATE</td>	FEE & NOTES UPDATE
		DRAWN BY
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		K. TURNER
		CHECKED BY
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		SCALE
		1" = 10'

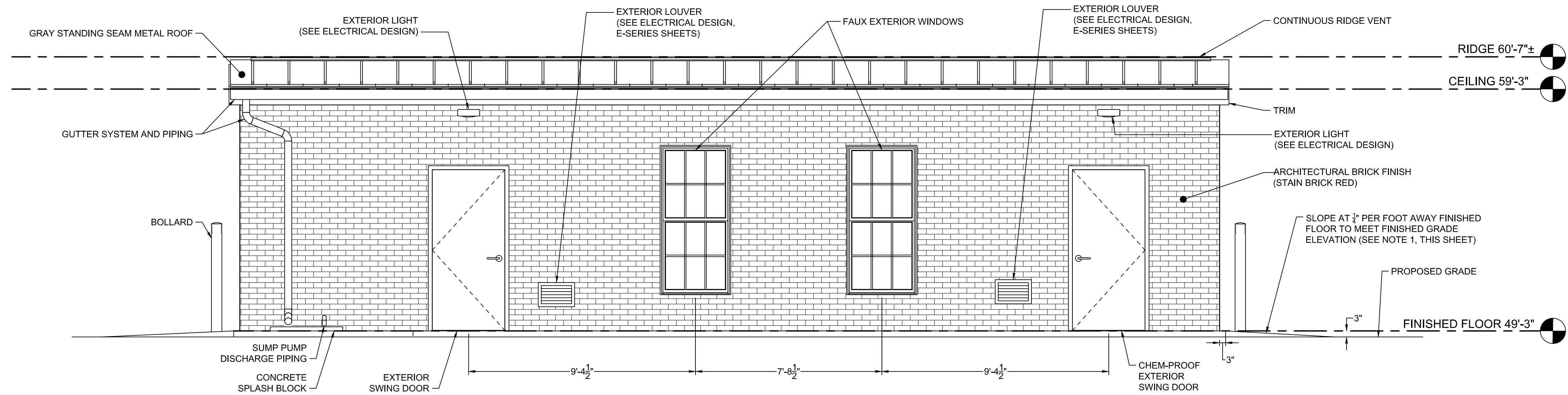
TIMMONS GROUP

OLD STAGE ROAD BOOSTER PUMP STATION
 ISLE OF WIGHT COUNTY - VIRGINIA

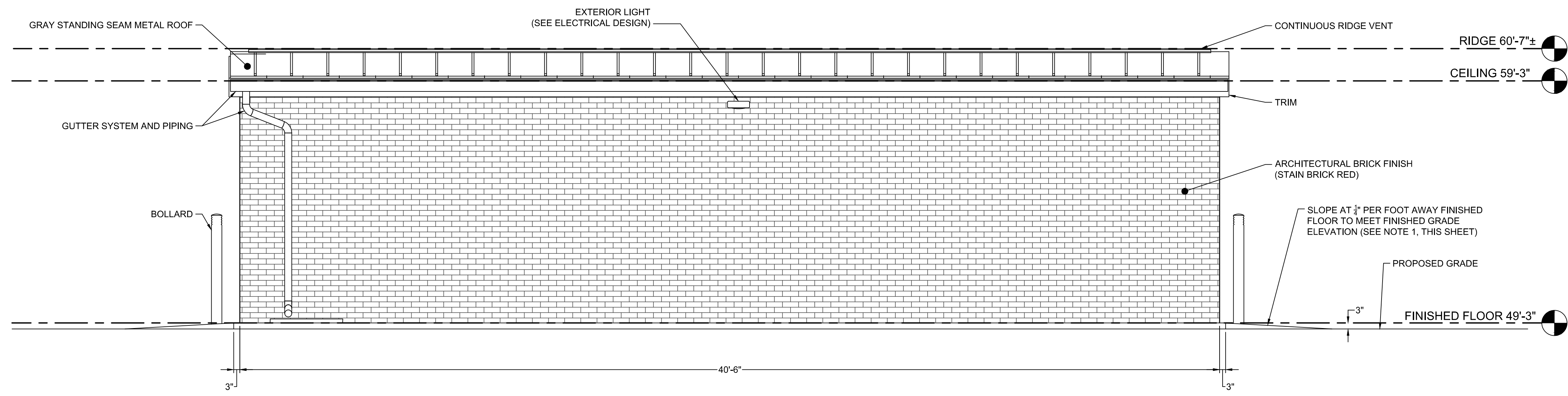
BPS BUILDING ELEVATIONS

JOB NO. 48527
 SHEET NO. M2

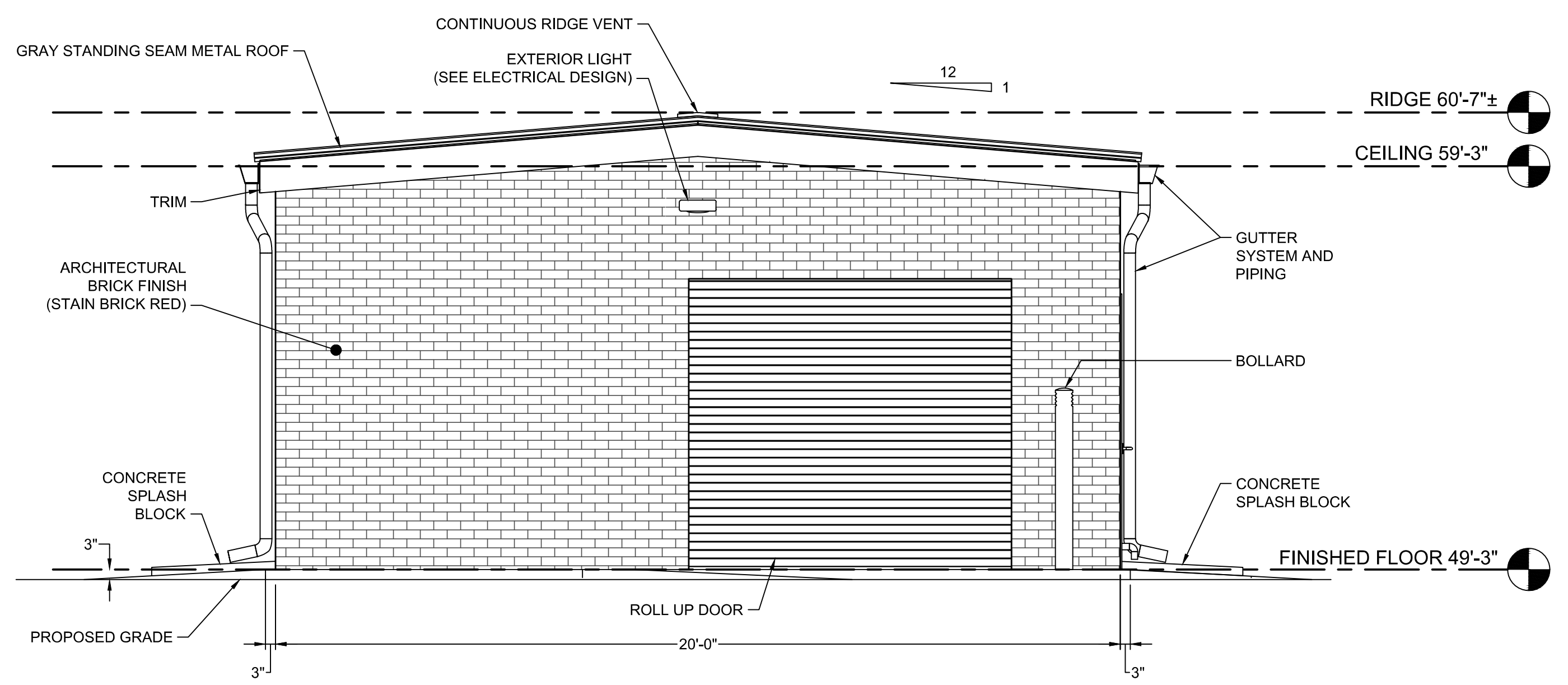
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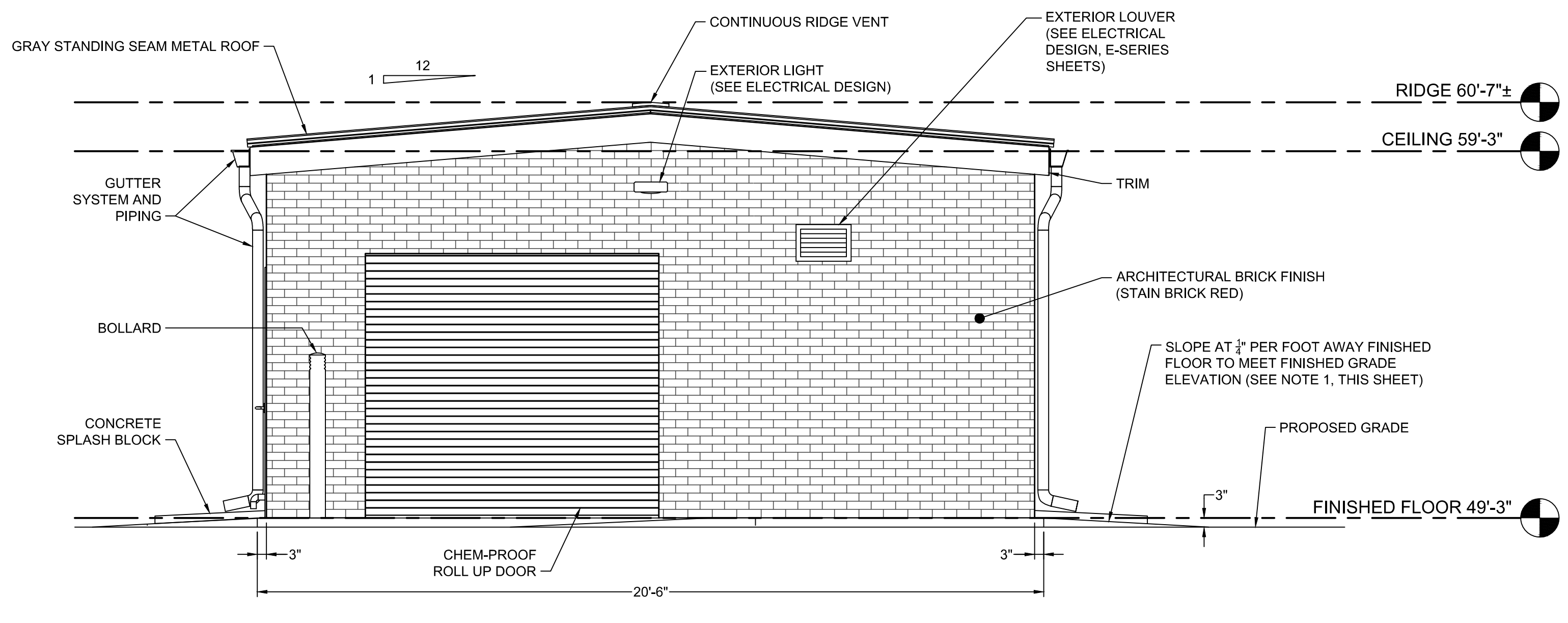
EAST ELEVATION
 SCALE: 3/8" = 1'-0"



WEST ELEVATION
 SCALE: 3/8" = 1'-0"



WEST ELEVATION
 SCALE: 3/8" = 1'-0"



NORTH ELEVATION
 SCALE: 3/8" = 1'-0"

NOTES:

- BUILDING FINISHED FLOOR ELEVATION SHALL BE SET 3" ABOVE FINISHED GRADE ELEVATION.
- BUILDING SHALL BE A SMITH MIDLAND PRECAST CONCRETE STRUCTURE WITH SLAB-ON-GRADE FOUNDATION (SEE STRUCTURAL DESIGN, S-SERIES SHEETS).
- ALL EXTERIOR AND INTERIOR DOORS FOR THE CHEMICAL SUPPLY ROOM SHALL BE CHEMICAL PROOF, CHEMICAL PROOF DOORS IDENTIFIED ON SHEET M1 FLOOR PLAN AND SHEET M2 PROFILE VIEWS.
- (2) - 36" X 72" FAUX WINDOWS SHALL BE CENTERED ON THE FRONT OF THE PRECAST BUILDING FACADE BETWEEN THE CHEMICAL PROOF ENTRY DOOR TO CHEMICAL ROOM AND THE PERSONNEL DOOR TO PUMP ROOM. FAUX WINDOWS SHALL BE DOUBLE HUNG WITH 6 PANE ON THE TOP AND BOTTOM PORTION OF THE WINDOW. WINDOW PANEL COLOR SHALL MATCH DOOR, ROOF, AND LOUVER COLOR AND SHALL BE APPROVED BY THE OWNER. FAUX WINDOWS SHALL BE SUPPLIED BY WINDOW WORLD OF TIDEWATER, PELLA, THOMPSON CREEK WINDOW COMPANY, OR IMAGINATION MILLWORK. FAUX WINDOW TRIM SHALL MATCH MILL FINISH OF PERSONNEL DOOR HARDWARE FINISH AS APPROVED BY THE OWNER.

FACADE VISIBILITY RATIOS:

- EAST SIDE OF BUILDING**
 TOTAL AREA OF BUILDING SIDE: 470.69 SF
 TOTAL AREA OF WINDOWS: 36.04 SF
 TOTAL AREA OF DOORS: 45.56 SF
 RATIO OF WINDOWS & DOORS: 17.34%
- WEST SIDE OF BUILDING**
 TOTAL AREA OF BUILDING SIDE: 232.78 SF
 TOTAL AREA OF WINDOWS: 0 SF
 TOTAL AREA OF DOORS: 57.67 SF
 RATIO OF WINDOWS & DOORS: 24.77%
- NORTH SIDE OF BUILDING**
 TOTAL AREA OF BUILDING SIDE: 232.78 SF
 TOTAL AREA OF WINDOWS: 0 SF
 TOTAL AREA OF DOORS: 57.67 SF
 RATIO OF WINDOWS & DOORS: 24.77%

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These technical specifications are supplemental to the Isle of Wight County Department of Utility Service Standards, Town of Smithfield Standards, and Hampton Road Planning District Commission (HRPDC) Regional Technical Standards. Where requirements overlap or conflict, the more stringent requirements shall apply.

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SECTION 07411 - PREFORMED METAL ROOF PANELS

1. GENERAL

1.01 SECTION INCLUDES

- A. Architectural roofing system of preformed aluminum panels.
- B. Fastening system.
- C. Factory finishing.
- D. Accessories and miscellaneous components.

1.02 RELATED REQUIREMENTS

- A. Section 13500 Precast Building.

1.03 REFERENCE STANDARDS

- A. ASTM B 209/B209M-21 - Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate
- B. ASTM D 226 - Standard Specification for underlayment ice and water shield 2006.
- C. UL 580 Class 1-120 - Standard for Tests for Uplift Resistance of Roof Assemblies; 2021.

1.04 SUBMITTALS

- A. Product Data: Manufacturer's data sheets on each product to be used, including:
 - 1. Summary of test results, indicating compliance with specified requirements.
 - 2. Storage and handling requirements and recommendations.
 - 3. Installation methods.
- B. Shop Drawings: Include layouts of roof panels, details of edge and penetration conditions, spacing and type of connections, flashings, underlayment's, and special conditions.
 - 1. Show work to be field-fabricated or field-assembled.
 - 2. Accessories: Include details of the following items, at a scale not less than 1-1/2 inches per 12 inches:
 - a) Flashing and Trim.
 - b) Gutters.
 - c) Downspout.
 - d) Ridge Cap.
- C. Selection Samples: For each roofing system specified, submit color chips representing manufacturer's full range of available colors and patterns.
- D. Manufacturer Certificates: Signed by manufacturer certifying that roof panels comply with performance requirements specified in "Performance Requirements" Article.
- E. Test Reports: Indicate compliance of preformed metal roofing system to specified requirements.
- F. Warranty: Submit specified manufacturer's warranty and ensure that forms have been completed in Owner's name and are registered with manufacturer.

1.05 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Company specializing in the manufacture of roofing systems similar to those required for this project, with not less than 5 years of documented experience.
- B. Installer Qualifications: Company trained and authorized by roofing system manufacturer.

1.06 DELIVERY, STORAGE, AND HANDLING

- A. Provide strippable plastic protection on prefinished roofing panels for removal after installation.
- B. Store roofing panels on project site as recommended by manufacturer to minimize damage to panels prior to installation.

1.07 WARRANTY

- A. Special Warranty: Contractor shall submit a written guarantee in which he agrees to maintain the entire roof system in a completely watertight condition against defects to faulty materials and workmanship at no cost to the Owner.
 - 1. Warranty Period: Two years from date of Substantial Completion.

2. PRODUCTS

2.01 MANUFACTURERS

- A. Acceptable manufacturers are:
 - 1. Architectural Building Components: www.archmetalroof.com.
 - 2. ATAS International, Inc: www.atas.com.
 - 3. Petersen Aluminum Corporation: www.pac-clad.com.
 - 4. Englert Roofing: www.englertinc.com
 - 5. Baker Roofing Company.

2.02 ARCHITECTURAL ROOF PANELS

- A. Performance Requirements: Provide complete engineered system complying with specified requirements and capable of remaining weathertight while withstanding anticipated movement of substrate and thermally induced movement of roofing system.
- B. Performance Requirements: Provide complete roofing assemblies, including roof panels, clips, fasteners, connectors, and miscellaneous accessories, tested for conformance to the following minimum standards:
 - 1. Overall: Complete weathertight system tested and approved in accordance with ASTM E 1592-05.
 - 2. Provide complete engineered system complying with specified requirements and capable of remaining weathertight while withstanding anticipated movement of substrate and thermally induced movement of roofing system.
 - 3. Thermal Movement: Design system to accommodate without deformation anticipated thermal movement over ambient temperature range of 120 degrees F.

- C. Metal Roofing: Factory-formed panels with factory-applied finish.
 - 1. Aluminum Panels:
 - a) Thickness: Minimum 0.032 inch.
 - 2. Profile: Standing seam, with minimum 1.5-inch seam height; concealed fastener system for field seaming with special tool.
 - 3. Texture: Smooth, with intermediate ribs for added stiffness.
 - 4. Length: Full length of roof slope, without lapped horizontal joints.
 - 5. Width: Maximum panel coverage of 18 inches.
- 2.03 ATTACHMENT SYSTEM
- A. Concealed System: Provide manufacturer's standard stainless steel or nylon-coated aluminum concealed anchor clips designed for specific roofing system and engineered to meet performance requirements, including anticipated thermal movement. Standing seam roof shall be applied over precast concrete roof underlayment as referenced in section 2.06. Attachment system for roof panels shall be in accordance with roof panel supplier and precast concrete building supplier. Installation of aesthetic standing seam roof shall not void the warranty of the precast building roof or structure.
- 2.04 PANEL FINISH
- A. Fluoropolymer Coating System: Manufacturer's standard multi-coat thermocured coating system, including minimum 70 percent fluoropolymer color topcoat with minimum total dry film thickness of 0.9 mil; color and gloss as selected from manufacturer's full range of colors.
- 2.05 ACCESSORIES AND MISCELLANEOUS ITEMS
- A. Roof Panel Accessories: Provide components approved by roof panel manufacturer and as required for a complete metal roof panel assembly including trim, ridge closures, clips, flashings, sealants, gaskets, fillers, closure strips, and similar items. Match material and finish of metal roof panels unless otherwise indicated.
 - 1. Closures: Provide closures at eaves and ridges, fabricated of same metal as metal roof panels.
 - 2. Closure Strips: Closed-cell, expanded, cellular, rubber or cross-linked, polyolefin-foam or closed-cell laminated polyethylene; minimum 1-inch- (25-mm-) thick, flexible closure strips; cut or pre-molded to match metal roof panel profile. Provide closure strips where indicated or necessary to ensure weather tight construction.
 - 3. Backing Plates: Provide metal backing plates at panel end splices, fabricated from material recommended by manufacturer.
 - B. Flashing and Trim: Formed from same material as roof panels, pre-painted with coil coating, minimum .032-inch thick. Provide flashing and trim as required to seal against weather and to provide finished appearance. Locations include, but are not limited to, eaves, rakes, corners, ridges, and fillers. Finish flashing and trim with same finish system as adjacent metal roof panels.
 - 1. Provide custom trim as necessary to achieve the finished appearance of details as shown on the drawings.

- C. Gutters: Formed from same material as roof panels. Profile as indicated on drawings, complete with end pieces, outlet tubes, and other special pieces as required. Fabricate in minimum 96-inch-long sections of size and metal thickness according to SMACNA's "Architectural Sheet Metal Manual." Furnish gutter supports spaced a maximum of 36 inches o.c., fabricated from same metal as gutters. Provide wire ball strainers of compatible metal at outlet. Finish on gutters to match roof fascia and rake trim.
- D. Downspouts: Formed from same material as roof panels. Fabricate in 10-foot-long sections, complete with formed elbows and offsets, of size and metal thickness according to SMACNA's "Architectural Sheet Metal Manual." Finish downspouts to match gutters.
- E. Rib and Ridge Closures: Provide prefabricated, close-fitting components of closed-cell synthetic rubber, neoprene, or PVC.
- F. Sealants: Elastomeric type containing no oil or asphalt.
 - 1. Exposed sealant must cure to rubber-like consistency.
 - 2. Concealed sealant must be non-hardening type.

2.06 UNDERLAYMENT INSTALLATION

- A. Adhesive Roofing Material: ASTM D 226, Ice and Water Shield as manufactured by GAF or Approved Equal.

2.07 FABRICATION

- A. Panels: Fabricate panels and accessory items at factory, using manufacturer's standard processes as required to achieve specified appearance and performance requirements.

3. EXECUTION

3.01 EXAMINATION

- A. Do not begin installation of preformed metal roof panels until substrates have been properly prepared.
- B. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.

3.02 PREPARATION

- A. Broom clean wood sheathing prior to installation of roofing system.
- B. Coordinate roofing work with provisions for roof drainage, flashing, trim, penetrations, and other adjoining work to assure that the completed roof will be free of leaks.
- C. Remove protective film from surface of roof panels immediately prior to installation. Strip film carefully, to avoid damage to prefinished surfaces.
- D. Separate dissimilar metals by applying a bituminous coating, self-adhering rubberized asphalt sheet, or other permanent method approved by roof panel manufacturer.
- E. Where metal will be in contact with wood or other absorbent material subject to wetting, seal joints with sealing compound, and apply one coat of heavy-bodied bituminous paint.

3.03 INSTALLATION

- A. Overall: Install roofing system in accordance with approved shop drawings and panel manufacturer's instructions and recommendations, as applicable to specific project condi-

tions. Anchor all components of roofing system securely in place while allowing for thermal and structural movement.

1. Install roofing system with concealed clips and fasteners, except as otherwise recommended by manufacturer for specific circumstances.
 2. Minimize field cutting of panels. Where field cutting is absolutely required, use methods that will not distort panel profiles. Use of torches for field cutting is absolutely prohibited.
- B. Accessories: Install all components required for a complete roofing assembly, including flashings, gutters, downspouts, trim, moldings, closure strips, preformed crickets, caps, equipment curbs, rib closures, ridge closures, and similar roof accessory items.
- C. Underlayment: Install roofing felt and building paper slip-sheet on roof deck before installing preformed metal roof panels. Secure by methods acceptable to roof panel manufacturer, minimizing use of metal fasteners. Apply from eaves to ridge in shingle fashion, overlapping horizontal joints a minimum of 2 inches and side and end laps a minimum of 3 inches. Offset seams in building paper and seams in roofing felt.
- D. Roof Panels: Install panels in strict accordance with manufacturer's instructions, minimizing transverse joints except at junction with penetrations.
1. Provide sealant tape or other approved joint sealer at lapped panel joints.
 2. Install sealant or sealant tape, as recommended by panel manufacturer, at end laps and side joints.
 3. Install clips to supports with self-tapping fasteners.
 4. Install pressure plates at locations indicated in manufacturer's written installation instructions.
 5. Install standing seams equidistant from building ends.
 6. End lap flashing and trim at least 3 inches.
 7. Use full-length panels.

3.04 CLEANING AND PROTECTION

- A. Clean exposed sheet metal work at completion of installation. Remove grease and oil films, excess joint sealer, handling marks, and debris from installation, leaving the work clean and unmarked, free from dents, creases, waves, scratch marks, or other damage to the finish.
- B. Do not permit storage of materials or roof traffic on installed roof panels. Provide temporary walkways or planks as necessary to avoid damage to completed work. Protect roofing until completion of project.
- C. Touch-up, repair, or replace damaged roof panels or accessories before date of Substantial Completion.

END OF SECTION

SECTION 13500 - PRECAST BUILDINGS

1. GENERAL

1.01 SUMMARY

- A. Contractor to furnish and install complete all precast buildings and appurtenances shown on the Contract Drawings and as described herein. Precast buildings shall be as manufactured by the Smith-Midland Company or approved equal.

1.02 RELATED SECTIONS

- A. Intent: The provisions and intent of the AGREEMENT, including the General Conditions, Supplemental Conditions, and other requirements of the Contract Documents apply to the WORK as specified in this Section. WORK related to this Section is described throughout the Specifications.

1.03 DIMENSIONS AND DESIGN LOADS

- A. Dimensions:
 - 1. Pump Station Building
 - a. Exterior: 40'-0" x 20'-0" x 11'-4"
- B. Roof (Gray Standing Seam Metal Roof): Roof panel shall slope 1:12 from front to back in long-sided direction. The roof shall extend a minimum of 2 ½" beyond the wall panel on each side and have a turndown design which extends ½" below the top edge of the wall panels to prevent water migration into the building along top of wall panels.
- C. Roof, and wall panels must each be produced as single component monolithic panels. No roof, floor, or vertical wall joints will be allowed, except at corners. Wall panels shall be set on top of floor panel.

1.04 QUALITY ASSURANCE

- A. Codes and Standards: Comply with the requirements of the following codes and standards, except as herein modified:
1. ACI-318-02, "Building Code Requirements for Reinforced Concrete". Concrete Reinforcing Institute, "Manual of Standard Practice".
 2. ANSI/ASCE-7-02 "Building Code Requirements for Minimum Design Loads in Buildings and Other Structures".
 3. Fabricator must be producer member of National Precast Concrete Association (NPCA) and participate in its Plant Certification Program.
 4. Fabricator must be a certified producer/member of The Precast/Prestressed Concrete Institute (PCI), National Precast Concrete Association (NPCA) or equal.
 5. Building fabricator must have a minimum of 5 years' experience manufacturing and setting transportable precast concrete buildings.

2. PRODUCTS

2.01 CONCRETE

- A. Steel-reinforced, Polypropylene Fiber reinforced, 5000 PSI minimum 28-day compressive strength, air entrained (ASTM C260).

2.02 REINFORCING STEEL

- A. ASTM A615, grade 60 unless otherwise indicated.

2.03 REINFORCING FIBER

- A. Polypropylene fiber, Fortafiber @ 1.6 pounds per cubic yard, or equal.

2.04 POST-TENSIONING STRAND

- A. Modules shall be post-tensioned in field after grout keyway is filled and has cured to required PSI strength. Post-tensioning cable shall be 41K polystrand CP50, .50", 270 KSI, 7-wire strand, greased plastic sheath, (ASTM A416). Tendons shall be greased and enclosed within a sheath. There will be a minimum of three post-tensioning cables connecting module roofs together to provide watertight joint.
- B. Post-tensioning Strand: 41K Polystrand CP50, .50, 270 KSI, 7-wire strand, enclosed within a greased plastic sheath, (ASTM A416). Roof and floor each to be post-tensioned

by a single, continuous tendon. Said tendon shall form a substantially rectangular configuration having gently curving corners wherein the positioning of the cable member results in a pattern of one or more loops and a bisecting of the loop(s). The cable member starts from one corner of the concrete building panel, forms a gentle perimeter loop(s) returning to a point where the cable member entered the concrete building panel. The tendon then turns 90° and follows the cable member(s) to a point midway along the “Y” axis of the concrete building panel and then turns 90° along the “X” axis of the concrete building panel. This bisects the concrete building panel and crosses the opposite parallel portion of the cable member and exits from an adjacent side of the concrete building panel.

1. If post-tensioning is not used in the roof panel, the following guidelines must be followed to ensure a watertight roof design.
 - a) The entire precast concrete roof panel surface must be cleaned and primed with a material that prepares the concrete surface for proper adherence to the coating material.
 - b) The entire precast concrete roof panel surface shall be sealed with a .045 EPDM continuous membrane cemented to the concrete with a compound designed for this purpose.

2.05 PANEL CONNECTION

- A. Monolithic structure shall be attached to precast floor slab with 3/8” thick steel brackets. Steel is to be of structural quality, hot-rolled carbon complying with ASTM A283, Grade C and hot dipped galvanized after fabrication. All fasteners to be ½” diameter bolts complying with ASTM A307 for low-carbon steel bolts. Cast-in anchors used for panel connections to be Dayton-Superior #F-63 or equal. All inserts for corner connections must be secured directly to form before casting panels. No floating-in of connection inserts shall be allowed. Wall panels shall be connected to floor slab with 4” expansion anchors by manufacturer.

2.06 DOORS AND FRAMES

- A. All doors and frames shall comply with Steel Door Institute "Recommended Specifications for Standard Steel Doors and Frames" (SDI-100), and as herein specified. The buildings shall be equipped with doors single and/or rolling doors at locations shown on the Drawings. Doors and frames shall be as specified in Division 08.
 1. (1) 3'-0" x 6'-8" Standard single door with standard door hardware - per manufacturer.
 2. (2) 3'-0" x 6'-8" Chem-Pruf fiberglass doors with custom door hardware – per manufacturer.
 3. (1) 8'-0" x 8'-0" Raynor Overhead steel door, non-insulated, jackshaft operated with custom door hardware as recommended per manufacturer.

4. (1) 8'-0" x 8'-0" Chem-Pruf Cornell Cookson rolling steel door non-insulated, electric operated with auxiliary hand chain in case of power failure and custom door hardware as recommended per manufacturer.
- B. Hardware: Stainless steel door hardware as recommended per manufacturer and approved by Owner.

2.07 CAULKING

- A. Joint between building and floor slab shall be caulked on the exterior and interior surface of the joints. Caulking shall be SIKAFLEX-1A elastic sealant or equal. Exterior caulk joint to be 3/8" x 3/8" square so that sides of joint are parallel for correct caulk adhesion. Back of joint to be taped with bond breaking tape to ensure adhesion of caulk to parallel sides of joint and not the back.

2.08 VENTS

- A. Provide number and sizes of openings for exhaust fan, intake louvers, and roof-vents as shown on the Drawings.

2.09 OPENINGS

- A. Provide number and sizes for all openings shown on plans.

2.10 FINISH

- A. A smooth steel form finish shall be provided on all interior surfaces.
- B. Exterior wall surfaces shall have simulated brick imprint finish. Color to be selected by the Owner.

3. EXECUTION

3.01 INSTALLATION

- A. Building to be installed in accordance with manufacturer's written instructions.

END OF SECTION 13500

SECTION 14600 – A-FRAME CRANE

PART 1 - GENERAL

1.01 DESCRIPTION

- A. Provide all labor, materials, equipment, and services necessary, for and incidental to, the complete and satisfactory installation of hoist, trolley and crane equipment as specified herein and as shown on the Contract Drawing. General orientation and capacity shall be as shown on the Contract Drawings.
- B. Provide one complete portable A-frame crane system with 1-ton chain fall manual hoist mounted on the bottom flange of the I beam.

1.02 SHOP DRAWINGS

- A. Shop drawings shall be submitted for all items specified herein as specified under section, SUBMITTALS.

1.03 MANUFACTURER’S CERTIFICATE

- A. The Contractor shall furnish the Engineer with a Manufacturer’s Certificate, as specified under section SUBMITTALS certifying the hoists and cranes have been installed in a complete and satisfactory manner ready for operation.

1.04 STANDARDS

- A. The specifications of the American Institute of Steel Construction, current edition, shall be followed in designing all equipment of structural steel construction. Other parts such as forgings, stampings, and castings, shall be designed with a factor of safety based on the ultimate strength of the material of not less than 5. The standards of the American Welding Society shall be followed in designing supporting steel or equipment which is manufactured by welding operations.

PART 2 - PRODUCTS

2.01 TROLLEY-MOUNT HAND CHAIN HOIST

- A. The hoist shall be chain type, parallel mounted on a trolley with a minimum capacity of 1 ton. The hoist and trolley shall be of same manufacturer as, and compatible with, the a-frame, or packaged for compatibility.
- B. The trolley shall be geared and constructed of welded steel and of suitable load carrying capacity. Trolley wheels shall be drop forged steel or cast iron singled

flanged. The trolley and hoist shall be low profile to maximize the distance between the bottom of the trolley and the floor. Minimum dimensions of the crane shall be 8' wide to span pump motor and piping and adjustable between 6' and 10' in height and must be suitable for use in the booster pump station for installation and removal of pump and motor components.

- C. The unit shall be provided with a mechanical brake capable of stopping the rated load of the hoist while in motion.
- D. The unit shall meet the following specifications: ASME B30.16, ASME HST-2, CSA B167.
- E. The hoist and geared trolley shall be ACCO, Yale, Spanco, Krone or approved equal.

2.02 A-FRAME

- A. The crane shall be an adjustable A-frame gantry crane that can be broken down into three pieces for transport and storage and have a 1-ton capacity.
- B. The vertical clearance shall be adjustable with a height of at least 10-feet from the floor to the bottom of the cross-member beam, and at least a 10-foot span.
- C. Crane shall include a trolley that slides along the beam and has a mounting hole for the hoisting device.
- D. Shall meet specifications of CMAA Specification No. 74.

2.03 ACCESSORIES

- A. Two pairs of 10' hoisting straps shall be provided. Hoisting straps shall be of the same capacity as the hoist.

2.04 PAINTING

- A. Painting shall be in accordance with section 9900 Paint system. Field painting will not be required except where finish is damaged by handling, weather, or other reasons. The damaged portion shall be field-primed and finished with sufficient finished coats to give a smooth, unmarred appearance, with primer and finish being the same type and color as originally used in the factory application.
- B. The maximum lifting capacity of the trolley hoist shall be neatly stenciled in a contrasting color with 6" tall letters on both sides of the monorail beam.

PART 3 - EXECUTION

3.01 INSTALLATION

- A. Install the hoists and cranes in accordance with the manufacturers' recommendations.

3.02 TESTING

- A. After erection and prior to final inspection the hoist and cranes shall be given a full load test to demonstrate their fitness for the service they must perform and to check the performance of all essential points. The test shall consist of loading the units to their respective rated capacities and raising and lowering the hooks the full limit of their travel.
- B. With the full load of the units, hoists and cranes shall be run through all sections of the railing at least three times. The hoist shall be raised and lowered the full length of their travel at any point along the rails that the Engineer requests.
- C. The above tests shall be performed to the satisfaction of the Engineer. In the event the equipment does not satisfactorily meet the specifications, such changes as may be required shall be made and the test repeated until complete satisfaction is obtained at no additional cost to the Owner.
- D. Weights to perform the above tests shall be provided by the contractor.

3.03 USE OF HOISTS

- A. The Contractor may use the new hoists for his purposes. Any damage which may occur by such use, however, shall be corrected by the Contractor prior to final acceptance and at no additional cost to the owner.

END OF SECTION