Specifications for Iowa DNR Vault Toilet Building

PART 1 – GENERAL

1. SCOPE
   1.1. Construction and onsite placement of a prefabricated precast concrete vault toilet building.
2. MANUFACTURER
   2.1. Manufacturer shall be Huffcutt Concrete or a pre-approved equal.
   2.2. Manufacturer shall be an NPCA Certified Plant or equal with verifiable references demonstrating quality, design and service upon request.
   2.3. Manufacturer will provide a written warranty providing 20 years structural, manufacturer's warranty on all hardware and components not produced at precast concrete manufacturer's plant, and 3 years against defects in paint, caulk, and grout.
3. DESIGN
   3.1. Building will be manufactured using precast concrete including the roof. Building's structural design will be relevant to the region and properties associated with its final placement. Design will also meet ADA and building code requirements.
4. SUBMITTALS
   4.1. Manufacturer shall provide submittals and engineering if requested.

PART 2 – PRODUCTS

1. MATERIALS
   1.1. <u>Doors and Frames</u>
      1.1.1. Doors shall be 18ga galvanized metal, louvered with 16ga frames. Doors and frames shall include one coat of rust inhibitive primer and two finish coats of enamel paint.
   1.2. <u>Door Hardware</u>
      1.2.1. Aluminum drip cap. Reese or equal.
      1.2.2. Door closure with hold open. Cal-Royal or equal.
      1.2.3. Stainless hinges with non-removable pin. Cal-Royal or equal.
      1.2.4. Locksets.
         1.2.4.1. Grade 1 – Brushed Stainless
         1.2.4.2. Restrooms – Lever, Schlage ND73PD Corridor function.
      1.2.5. Brush style sweep. Reese or equal.
      1.2.6. ADA compliant threshold. Reese or equal.
   1.3. <u>Windows</u>
      1.3.1. Vinyl frame, obscure glass, bug screen and security mesh. Parco or equal, color mocha brown.

1.4. Interior Hardware
    1.4.1. Stainless 3 roll toilet paper dispensers.
    1.4.2. ADA toilet stalls shall have (1) 18" stainless vertical grab bar, (1) 36" stainless horizontal grab bar, (1) 42" stainless horizontal grab bar.
    1.4.3. Stainless floor mounted urinal. (urinal both sides (unisex) if double pit)
    1.4.4. Acorn Stainless Toilet Riser, with black molded plastic seat.
1.5. Vent Pipes
    1.5.1. Vent pipes shall be 12" and made of HDPE. Vent pipe shall extend approximately 36" above the roof line.
    1.5.2. Aura solar vent fan.
1.6. Access/Clean Out Hatch
    1.6.1. Access/clean out hatch shall have a 18" x 24" clear opening, made from aluminum and be rated for a 300 psf pedestrian load. Cover shall be hinged with a kickstand to prevent accidental closing. Cover shall include a slam lock with T handle for locking.
1.7. Sealers
    1.7.1. Floor shall be sealed using a deep penetrating, high alkali resistant, low volatility product. TK-290 or equal.
1.8. Caulks and Grout
    1.8.1. All joints between precast panels shall be caulked using a durable, flexible polyurethane sealant. BASF Sonolastic NP-1 or equal.
    1.8.2. Weld plate panel connections shall be grouted flush with interior wall surface. Speed Crete Red Line or equal.
1.9. Vault
    1.9.1. Vault shall be lined with a factory installed membrane. Marflex 5000 or equal.

2. FINISHES
2.1. Interior
    2.1.1. Smooth trowel finish.
2.2. Exterior
    2.2.1. Exterior wall appearance to be approved by owner using an architectural form liner. Board and Batten, Spec Formliners 1214. Horizontal Woodgrain, Dayton 70603.
    2.2.2. Roof shall be cedar shake architectural form liner. Spec Formliners 1231.
2.3. Paint
    2.3.1. Interior
        2.3.1.1. Wall panels shall be primed with a premium quality water based acrylic bonding primer moisture and alkali resistant. Finish coat shall be a high performance concrete stain. H&C Concrete Stain, custom color match "tan".
    2.3.2. Exterior

2.3.2.1. Roof shall be covered with a high performance concrete stain. H & C Concrete Stain, color SW6083 “Sable”.

2.3.2.2. Walls shall be covered with a high performance concrete stain. PPG ColorSeal Concrete Stain, custom color match “Natural Honey”.

2.3.2.3. Doors shall be covered using 2 coats of a high performance 100% acrylic satin enamel. Sherwin Williams DTM Acrylic Coating Semi-Gloss, color SW6083 “Sable”.

Part 3 – Execution

1. PRECAST CONCRETE VAULT TOILET BUILDING
   1.1. Building manufacturer shall construct, assemble, and paint at their plant so that it may be transported to the jobsite as a finished module and placed using a crane.
2. ONSITE
   2.1. Contractor shall provide adequate access and a level pad for the crane and semis to sit side by side under their own power. Working radius shall be 35’ from center pin on crane.
   2.2. Contractor shall provide all excavation, backfilling, and finish grading for vault toilet building. In addition contractor shall provide suitable bedding of sand or granular material for the vault.
   2.3. Manufacturer will install HDPE vent pipes and perform any shipping and handling adjustments and repairs.