#### **DOCUMENT 00 9111**

# **ADDENDUM NO. TWO** 07/01/2025

COUNTY OF KERN GENERAL SERVICES

# **BVARA RPP**

13601 Ironbark RD., Bakersfield, CA 93311 **Project No. 1650.7087-23.** 

# **Specifications**

- Replace item in section 01 1000, 1.06 item C, with "Due to the previously scheduled events at BVARA, the Site will not be accessible to contractor between the dates of April 15<sup>th</sup>, 2026, to June 15<sup>th</sup>, 2026. All construction to go on hold April 14<sup>th</sup>, 2026, contractor will fence and secure all construction equipment and leave site in a clean condition. Construction is to be resumed on or after June 16<sup>th</sup>, 2026.
- **Item No. 2:** Replace item in section 13 1101, item 1.3A, with "Provide submittals in conformance with requirements of Division 1 of the specifications."
- **Item No. 3:** Replace item in section 13 1102, item 1.3A, with "Provide submittals in conformance with requirements of Division 1 of the specifications."
- **Item No. 4:** Replace item in section 13 1102, item 1.3B, with "Provide submittals in conformance with requirements of Division 1 of the specifications."
- **Item No. 5:** Replace Line item in section 13 1103, item 1.3A, with "Provide submittals in conformance with the requirements of Division 1 of the specifications, and ACI 506.2."
- **Item No. 6:** Replace item in section 13 1106, item 1.3A, with "Provide submittals in conformance with requirements of Division 1 of the specifications."
- **Item No. 7:** Replace item in section 13 1107, item 1.3A, with "Provide submittals in conformance with requirements of Division 1 of the specifications."
- **Item No. 8:** Replace item in section 13 1108, item 1.3A, with "Provide submittals in conformance with requirements of Division 1 of the specifications."
- **Item No. 9:** Replace item in section 22 1116, item 1.3A, with "Provide submittals in conformance with requirements of Division 1 of the specifications."
- **Item No. 10:** Delete Line item in Section 33 1000, Item 1.4D "Section 013323 for "Shop Drawings, Product Data and Samples".

- Item No. 11: Section 13 1200 "Precast Concrete Building": Add the attached specification section 13 1200 to the project manual. Structure Cast has been added as an approved equal for the spray ground mechanical building. Building shall comply with exterior design elements, including but not limited to wall textures, roof, doors, windows, building size, building height, etc., as shown on the bid drawings / specifications. Provide all mounting/anchoring supports, rough-in, block outs and openings as required for complete installation of mechanical, plumbing and electrical systems.
- **Item No. 12:** Section 35 3100, Item 1.7C: The County shall retain a Soil and Compaction Testing Agency for the project.
- Item No. 13: Section 35 3100, Item 3A: Existing slope will need to be cut to 5H:1V. Refer to Section 'A' on drawing C-08. Compaction is not required below the water line, but percussion anchors are required. Refer to Note 1 on Sheet C-08.

# **Drawings**

- Item No. 14: Water will be provided by the County, through an existing fire hydrant, for the following construction activities; Dust control and soil compaction. Contractors shall be responsible for providing water for all other construction activities and will be allowed to install a meter on the existing fire hydrant.
- **Item No. 15:** Refer to drawing LC-13: Pre-engineered spray ground mechanical building is a deferred submittal. Manufacturer's contact is included in specification section 13 3423. Drawings and calculations shall be provided by Contractor complying with the bid documents.
- Item No. 16: Refer to drawing LC-12: Dog drinking station bib will be replaced with an Arrowhead 301SCLF Self-Closing Standard Hose Bib (or equal). Provide all connectors and accessories required for complete installation.
- Refer to drawings C-08 & C-09: No trees to be considered for removal in base bid scope of shoreline removal and no tree removal plan to be issued prior to construction. Removal of trees amount is set to 5 trees (as a part of bid alternate shoreline erosion control scope area) trees located within 3ft of existing top of embankment. Refer to plan callouts. The 5 tree removals as a part of the bid alternate area of shoreline erosion control plans shall be included in bid alternate. County arborists shall inspect and determine if any additional trees are required to be removed during construction.
- Item No. 18: Refer to drawings C-08 & C-09: Revise callout at swale from "RECONSTRUCT EXIST. SWALE PER DETAIL 1 ON SHEET C-09" to read as follows "RECONSTRUCT EXIST. SWALE PER DETAIL 1 ON SHEET C-08".
- Refer to drawing LC-13: Drawing shows plans and details of the deferred submittal preengineered mechanical building. Three alternative options are available for exterior wall foundation construction including a monolithic slab option, concrete stem wall footing option, or CMU stem wall option. A concrete slab is required for all options, and reference details are shown for the slab to wall connections for each type. Contact manufacturer included in specifications for additional information. Refer to Specification 13 34 23, item 1.3.
- Item No. 20: Refer to drawing SG-01: Splashpad floor and footings are CIP concrete. Shotcrete notes have been provided, should the contractor elect to construct the balance tank out of shotcrete. The balance tank may be built as CIP concrete or shotcrete.

BVARA RPP Project No. 1650.7087-23

Item No. 21:		C', concrete abutment for shore ramp is only required ng dock detail shall apply to non-accessible docks.
Item No. 22:	Refer to drawing C-08: On "Typical to extend down to elevation +292.5	Section A ", revise bottom of Flexmat (concrete mat) 0'.
Item No. 23:	Construction surveys shall be the responsibility of the contractor.	
The following A	dalanda wara isawad maadifi isaa tha l	Duning at Manual.
The following A	addenda were issued, modifying the l	Project Manual:
Addendum No.	2, issued on <b>07/01/2025</b>	
		Cesar Juarez, Supervising Engineer Construction Services Division
Contractor		Signature
Date		Name/Title

# **END OF DOCUMENT**

# SECTION 13 1200 PRECAST CONCRETE BUILDING

#### **PART 1 GENERAL**

#### 1.01 SECTION INCLUDES

- A. This section covers the construction and placing of sectional precast concrete buildings. The requirements for design, engineering, fabrication, onsite delivery and installation on a prepared site.
- B. Contractor to furnish a precast concrete transportable building. Building to be delivered and placed on owner's prepared foundation in accordance with manufacturer's requirements. Building to be provided by manufacturer with all necessary openings as specified by contractor in conformance with manufacturer's structural requirements.

#### 1.02 RELATED REQUIREMENTS

2 RELATED REGUINEMING			
	A.	ASTM C33:	Concrete Aggregates
	B.	ASTM C39	Method of Test for Compressive Strength of Cylindrical Concrete Specimens
	C.	ASTM C94	Standard Specification for Ready-Mixed Concrete
	D.	ASTM C143	Method of Test for Slump of Concrete
	E.	ASTM C150	Standard Specification for Portland Cement
	F.	ASTM A185 Concrete	Standard Specification for Steel Welded Wire Reinforcement, Plain, or
	G.	ASTM C192	Method of Making and Curing Test Specimens in the Laboratory

- H. ASTM C231 Standard Test Method for Air Content of Freshly Mixed Concrete by the Pressure Method
- I. ASTM C309 Standard Specifications for Liquid Membrane-Forming Compounds for Curing Concrete
- J. ASTM C494 Standard Specification for Chemical Admixtures for Concrete
- K. ASTM A615 Standard Specification for Deformed and Plain Carbon-Steel Bar for Concrete Reinforcement
- L. ASTM C618 Standard Specification for Coal Fly Ash and Raw or Calcine Natural Pozzolan for Use in Concrete
- M. ASTM C979 Standard Specification for Pigments for Integrally Colored Concrete
- N. ASTM D1557 Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort
- O. ACI 211.1 Standard Practice for Selecting Proportions for Normal, Heavyweight, and Mass Concrete
- P. ACI 306 Cold Weather Concreting
- Q. ACI 318 Building Code Requirements Structural Concrete and Commentary (includes Errata)
- R. PCI MNL 116 Quality Control for Plants and Production of Precast Prestressed Concrete Products
- S. ANSI/ASCE-7-10 "Building Code Requirements for Minimum Design Loads in Buildings and Other Structures".
- T. Concrete Reinforcing Institute, "Manual of Standard Practice".

#### 1.03 PRICE AND PAYMENT PROCEDURES

- A. Alternates:
  - 1. See Section 01 2300 Alternates for product alternates affecting this section.
  - 2. This section includes base bid and alternate item(s).

#### 1.04 SUBMITTALS

- A. See Section 01 3000 Administrative Requirements for submittal procedures.
- B. Deferred Submittals: Provide required deferred submittals for County permit purposes.
  - 1. Shop Drawings to specify types and materials of all structural wall embeds.
  - 2. Engineering calculations and erection drawings that are designed and stamped by a professional engineer registered in the State of California or in the state where the project is located.
  - 3. PCI-Certified Plant Certificate
  - 4. NPCA-Certified Plant Certificate
  - 5. ISO 9001 Certificate
  - 6. 5000 PSI Concrete Mic design with reports.
  - 7. Product data for all plumbing fixtures, electrical fixtures, restroom/shower accessories, doors and door locks.
  - 8. ADA design indicating access layouts, signage and all fixture mounting dimensions to meet all current California Building Code requirements.
  - 9. Concrete color chart for engineering color selection.
  - 10. All optional items chosen by engineer clearly noted on building submittal sheet including welding certificates if applicable.

# 1.05 QUALITY ASSURANCE

- A. Manufacturer must be ISO 9001 certified at the time of bid.
- B. Manufacturing plant must be PCI certified at the time of bid.
- C. Manufacturer must not have defaulted on any contract within the last five (5) years.
- D. Manufacturer must be pre-approved prior to bidding.
- E. Manufacturer must show four (4) examples of precast concrete flush facilities produced, installed and in use as an example of their ability to perform this contract.
- F. Manufacturer shall provide a one (1) year warranty on all concrete components. The warranty is valid only when concrete is used within the specified loadings.
- G. Fabricator must be a certified producer/member of The National Precast Concrete Association (NPCA) at time of bid.
- H. Fabricator must be ISO 9001 certified at time of bid.
- I. Building fabricator must have a minimum of 5 years' experience manufacturing and setting transportable precast concrete buildings.
- J. Fabricator must be a certified producer/member of The Precast/Prestressed Concrete Institute (PCI) at time of bid.

#### 1.06 DESIGN REQUIREMENTS

- The building(s) has been designed to individually meet the following criteria. The design criteria are to ensure that the building(s) not only will withstand the forces of nature listed below, but to provide protection from vandalism and other unforeseen hazards. Building's structural and foundation design will be relevant to the region and properties associated with its final placement. Design will also meet all applicable accessibility and building code requirements. Buildings will also meet various structural loads such as below, but not limited to/or restricted by them.
- B. Live Roof Load
  - 1. The building(s) is designed to withstand 60 PSF live load.
- C. Floor Load
  - The building(s) is designed to withstand 400 PSF floor load. 1.
- D. Wind Load
  - The building(s) will withstand the effects of 130 MPH.
- E. Earthquake
  - The building(s) will withstand the seismic load performance category 'D', Importance Factor 1.
- F. Additional Design Standards
  - The pre-fab building is designed to meet the accessibility requirements put forth by federal, state and local statutes.
  - 2. The pre-fab building is an all concrete design with minimum 5/12 roof pitch.
  - The pre-fab building shall have a minimum 4" wall, 4-1/2" roof, and 5" floor thickness. 3.
  - All wall to floor interior surface seams shall have a minimum 1" radius coving made of high strength grout.
- G. Plumbing shall be designed in accordance with California Plumbing Code 2022 edition or latest applicable code as amended by applicable local ordinances for all construction work.
- H. Electrical system shall be designed in accordance with California Electrical Code 2022 edition or latest applicable code as amended by applicable local ordinances for all construction work.
- Accessibility-Prefabricated flush toilet/shower buildings shall conform to the requirements of the "Uniform Federal Accessibility Standards" (UFAS) and the "Americans with Disabilities Act Accessibility Guidelines" (ADAAG).

#### 1.07 WARRANTY

- A. See Section 01 7800 Closeout Submittals for additional warranty requirements.
- B. Manufacturer Warranty: Provide 1 year manufacturer warranty. Complete forms in Owner's name and register with manufacturer.
- C. Installer Warranty: Provide 1 year warranty commencing on the Date of Notice of Completion. Complete forms in Owner's name and register with installer.

#### **PART 2 PRODUCTS**

# 2.01 MANUFACTURERS

- A. Structure Cast. www.structurecast.com, 661-833-4490
- B. Or Approved Equal

# 2.02 MATERIALS

#### A. Concrete

- 1. The concrete mix design is designed to ACI 211.1 to produce concrete of good workability.
- 2. Steel-reinforced, 5000 psi minimum 28-day compressive strength. Cement is a low alkali type I/II or III conforming to ASTM C-150.
- 3. Coarse aggregates used in the concrete mix design will conform to ASTM C33 with the designated size of coarse aggregate #67.
- 4. Maximum water/cement ratio will not exceed .45.
- 5. Air-entraining admixtures will conform to ASTM C260. Water reducing admixtures will conform to ASTM C494, Type A.
- 6. If Self Compacting Concrete (SCC) is used, it must conform to ASTM C1611.

#### B. Colored Concrete

- 1. Color additives will conform to ASTM C979.
- 2. The same brand and type of color additive are used throughout the manufacturing process.
- 3. All ingredients are weighed and the mixing operation are adequate to endure uniform dispersion of color.

#### C. Concrete Reinforcement

- All reinforcing steel will conform to ASTM A615 Grade 60. All welded wire fabric will conform to ASTM A185.
- 2. All reinforcement is new, free of dirt, oil, paint, grease, loose mill scale and loose or thick rust when placed.
- 3. Steel reinforcement is centered in the cross-sectional area of the walls and will have at least 1-1/4" of cover on the under surface of the floor.
- 4. The maximum allowable variation for center-center spacing of reinforcing steel is 1/2".
- 5. Full lengths of reinforcing steel are used when possible. When splices are necessary on long runs, splices are alternated from opposite sides of the components for adjacent steel bars.
  - a. Lap bars under #4 a minimum of 12" bar diameters.
  - b. Lap bars larger than #4 a minimum of 24" bar diameters.
- 6. Reinforcing bars are bent cold. No bars partially embedded in concrete are field bent unless approved by the customer.

# D. Caulking, Grout, Adhesive and Sealer

- 1. Caulking service temperatures from -40 degrees F +194 degrees F.
- 2. Interior and exterior joints are caulked with a paintable polyurethane sealant.
- 3. Grout is a non-shrink type and are painted to match the color of surrounding concrete as nearly as possible.
- 4. Cement base coating is formulated with a very fine aggregate system and is a built-in bonding agent.

# E. Paint

1. All paints and materials will conform to all federal specifications.

#### F. Steel Doors

- 1. Doors will be flush panel type 1-3/4" thick, minimum 16-gauge galvanized steel.
- 2. Door frames will be welded type, single rabbet, minimum 16-gauge prime coated steel, width to suit wall thickness. Three (3) rubber door silencers will be provided on latch side of frame.

#### G. Lockset

- 1. Lockset will meet ANSI A156.2 Series 4000, Grade 1 cylindrical lockset for exterior door.
- 2. Lever handle both inside and out.
- U.S. 26D finish.

#### H. Dead Bolt

- 1. Certified ANSI/BHMA A156.5-2001 Grade 1.
- 2. Heavy duty, high traffic, tamper

resistant. 3. 2-3/4" basket.

4. U.S. 26D finish.

#### Doorstop

1. Doorstop will be a dome or wall mount stop meeting ANSI 156.16.

#### J. Door Sweep

1. Door sweep will be provided at the bottom of door and will be an adjustable nylon brush type with drip edge.

# K. Wall Vent: As required by manufacturer.

1. Wall vent to be attached to concrete wall with high strength anti-rust tap con fasteners. Vent to come with insect screen. Cover to be recessed a minimum ¾" on exterior walls with a 45-degree bevel. Interior to be flush mounted. Wall vent will not protrude from the wall.

# L. Signs (Where Applicable)

 Signs to be Specific and have raised pictograms, letters, and braille to meet current ADA standards.

## M. Windows (Where Applicable)

- 1. Window frames will be constructed from steel or stainless steel.
- 2. Window glazing will be  ${}^{3}_{16}$ " thick translucent pebble finished mar-resistant Lexan.
- 3. Windows to have 3/4" recess with 45-degree bevel.
- 4. Window frames to have vandal resistant fasteners.

#### N. Shower Section Benches

1. Shower benches to be heavy duty, type 304 satin finish stainless steel with phenolic slats.

#### O. Electrical

- 1. All components are UL listed.
- 2. Provide 200 amp breaker panel-Sized to meet load requirements and mounted to meet most current electrical code.
- 3. Interior lighting--Vandal resistant fixtures with built-in occupancy sensor, energy efficient LED lights, and lifetime warranty.
- 4. Exterior lighting--Vandal resistant fixtures with built-in photoelectric switch, energy efficient LED lights.
- Exhaust fans--All wet location motion activated with speed control in chase area to control CFM.
- 6. Wiring--Conduit, surface mounted in the service area and concealed in the user compartments. All wire will be copper.
- 7. GFI outlets provided per current electrical code requirements.

#### **PART 3 EXECUTION**

#### 3.01 MANUFACTURING

# A. Finishing Concrete

 All exterior building walls and exterior screen walls will be any one of the available textures. Colors to be selected by owner.  All exterior surfaces of the roof panels will be cast to simulate any one of the available textures. The underside of the overhang will have a smooth finish. Colors to be selected by owner

# B. Cracks and Patching

- Cracks in concrete components which are judged to affect the structural integrity of the building will be rejected.
- 2. Small holes, depressions, and air voids will be patched with a suitable material. The patch will match the finish and texture of the surrounding surface.
- 3. Patching will not be allowed on defective areas if the structural integrity of the building is affected.

#### C. Exterior Corners

 All exterior wall corners shall have textured finish wrap around panel edges of exposed corners.

#### 3.02 FINISHING AND FABRICATION

#### A. Structural Joints

- 1. Wall components will be joined together with two (2) welded plate pairs minimum at each joint. Each weld plate will be 6" long and located one (1) pair in the top quarter and one (1) pair in the bottom quarter of the seam. Weld plates will be anchored into the concrete panel and welded together with a continuous weld.
- 2. The inside seams will be a paintable caulk. The outside seams will use a caulk in a coordinating building color or clear.
- 3. Walls and roof will be joined with weld plates, 3" x 6" at each building corner.
- 4. The joint between the floor slab and walls will be joined with a grout mixture on the inside, a matching colored caulk on the outside and two (2) weld plates 6" long per wall minimum.

## B. Painting/Staining

- 1. An appropriate curing time be allowed before paint is applied to concrete.
- Schedule of finishes.
  - Inside concrete surfaces.
    - 1) Inside floors will be one (1) coat of 1-part water based chemical resistant urethane or two (2) part epoxy coating or approved equal.
    - Interior walls and ceilings will be two (2) coats of a modified acrylic, water repellent penetrating stain, followed by one (1) coat of clear sealer.
  - b. Metal surfaces both inside and out.
    - 1) Two (2) coats of DTM ALKYD.
  - c. Exterior concrete surfaces.
    - Exterior walls will be two (2) coats of water repellent penetrating stain in the on the walls or roof followed by one (1) coat of clear acrylic antigraffiti sealer or approved equal.
      - a) Colors: Exterior walls shall have a minimum of two colors and the roof shall have one. Colors will be selected from all available colors by the Owner.

#### 3.03 TESTING

A. The following tests will be performed on concrete used in the manufacture of toilets. Testing will only be performed by qualified individuals who have been certified ACI Technician Grade 1. Sampling will be in accordance with ASTM C172.

- B. The air content of the concrete will be checked per ASTM C231 on the first batch of concrete. The air content will be in the range of 5.0% +/- 2.0%.
- C. The compressive strength of the cylinders will be tested to ASTM C39. Make one (1)cylinder for release, one (1) for seven (7) days and one (1) for 28 days. The release must be a minimum strength of 2500 psi, the 7-day must be a minimum of 4500 psi and the 28-day must be a minimum of 5000 psi.
- D. A copy of all test reports will be available to the customer as soon as 28-day test results are available.

# 3.04 INSTALLATION

- A. Install pre-fab concrete building/s per approved manufacturer instructions.
- B. Contractor to coordinate with manufacture for any roughing, cut outs, and block out for installation of plumbing, electrical and mounting work.
- C. Delivery and Handling
  - 1. Contractor shall coordinate with the building manufacturer for the delivery and placement of the precast concrete building.
    - a. Provide exact location by stakes or other approved method as required by prefab building manufacturer.
    - b. Provide clear and level site free of overhead and/or underground obstructions.
    - c. Provide access to the site for truck delivery and sufficient area for the crane to install.
    - Water, electrical and sewage site connections to be placed per manufacturer provided drawings. Must be placed to easily connect to the building.
- D. Compacting Per building manufacturer's requirements.
- E. Base Per building manufacturer's requirements.

**END OF SECTION 13 1200**