

CITY OF MERCED
DEPARTMENT OF ENGINEERING

PROJECT NUMBER 121011

ADA GIVENS POOL BATHROOM REHABILITATION

Matthew Serratto – Mayor

Bertha A. Perez r – Mayor Pro-Tempore

Jesse F. Ornelas – Council Member

Ronnie De Anda – Council Member

Shane Smith – Council Member

Sarah Boyle – Council Member

Fue Xiong – Council Member

Stephanie R. Dietz – City Manager

Travis Lindsey – Interim City Attorney

Michael R. Beltran II, PE – City Engineer

BID DUE DATE: March 10, 2023 at 3:00 PM

TABLE OF CONTENTS

ITEM	PAGE NO.
SERVICES / SCHEDULE.....	1
DIVISION 1 - GENERAL REQUIREMENTS	1
DIVISION 2 - SITEWORK.....	3
DIVISION 3 – CONCRETE.....	3
DIVISION 4 - METALS	4
DIVISION 5 – MASONRY.....	4
DIVISION 6 - WOOD	5
DIVISION 7 - THERMAL AND MOISTURE PROTECTION.....	6
DIVISION 8 - DOORS AND WINDOWS.....	6
DIVISION 9 – FINISHES.....	7
DIVISION 10 – SPECIALTIES.....	8
DIVISION 11 - EQUIPMENT	8
DIVISION 12 – RESTROOM AND SHOWER FURNISHINGS.....	9
DIVISION 13 - SPECIAL CONSTRUCTION	10
DIVISION 14 - CONVEYING SYSTEMS.....	10
DIVISION 15 – MECHANICAL.....	11
DIVISION 16 – ELECTRICAL.....	11
DIVISION 17 - PLUMBING	11
Appendix “A” - LOCATION MAP	13
Appendix “B” – Quantity Schedule	14

SERVICES / SCHEDULE

SPECIAL PROVISIONS FOR PROJECT NUMBER 122011

ADA GIVENS POOL BATHROOM REHABILITATION

DIVISION 1 - GENERAL REQUIREMENTS

01000 GENERAL INFORMATION:

01001 BID SUBMISSION – All bids shall be for the total “lump sum” cost for the entire project described below and submitted on the City’s provided Statement of Services form. Bids are due no later than **March 10, 2023 by 3:00 pm**. Bids can be mailed, emailed or hand delivered (contact info below).

Mailing Address: 678 W. 18th Street Merced, CA 95340 Attn. Paul in Engineering

Email: floresp@cityofmerced.org

Phone: 209-388-8708 (Paul’s Direct Line)

01002 CONTRACTOR LICENSE – Contractor shall possess a valid Class **A or B** California Consultant’s license at the time of bid submission for the duration of the Agreement.

01003 WORKING DAYS - Contractor shall perform and complete all Work under this Contract within **40 working days**, beginning the effective date of the Contract Time. Contractor shall perform its work in strict accordance with any completion schedule, construction schedule or project milestones developed by the City.

01010 SCOPE OF WORK -- The work to be done consists, in general, of the rehabilitating the existing restrooms for the Ada Givens Pool for the addition of ADA accessible stalls, construction of new boys and girls showers and re-construction of portions of the pool deck including the installation of a trench drain. This includes the removal of existing toilets/urinal, partition walls, doors, non- structural cmu walls, plumbing, fencing, and existing concrete deck, and reconfiguring of the existing restroom with new fixtures and new accessible stall. Construction would include new showers, with shingled roof, shower and bathroom fixtures, hot water heaters, entry gates, and concrete deck with trench drain. This also includes the installation of new metal entry doors, metal partition walls, restroom and shower fixtures, and grab bars.

Such other items or details, not mentioned above, that are required by the plans, standard specifications, or these special provisions shall be performed, placed, constructed or installed.

01020 PERFORMANCE -- The Contractor shall furnish all labor, materials, tools, equipment, incidentals, and do all work described in the Plans and these Special Provisions.

01030 COORDINATION/COOPERATION -- The Contractor shall notify the Engineer at (209) 385-6846 at least three (3) working days in advance of the tentative starting date.

Working hours for the restroom rehabilitation shall be coordinated with the City of Merced and Ada Givens school to ensure the least amount of scheduling conflicts is encountered. The Contractor shall establish a schedule of activities in cooperation with the Engineer and City operating staff.

Full compensation for conforming to the requirements of this section shall be considered as included in the price paid for the various contract items of work involved and no additional compensation will be made.

01040 INSPECTION OF SITE – It is recommended that the Contractor schedule a site visit to inspect the work site and note all existing conditions. A site tour may be scheduled upon request but is not required for bid acceptance. Notify Paul Flores, contact info. below, for meeting coordination. No meeting shall be scheduled within one week of bid opening.

Site Location:

2900 Green Street
Merced, CA 95340
Pool Location

City Contact:

Paul Flores
Assistant Engineer
Phone: 209-388-8708
Email: floresp@cityofmerced.org

The contractor shall call in daily to schedule a City Inspection through the City of Merced's Inspection Services. See below for Inspection Service number. All inspections shall be scheduled, by the contractor, at least 24-hours prior to the next days work. If no inspection is scheduled, then work must stop until an inspection can be scheduled. No compensation will be provided. A final inspection is required to be scheduled and approved by the Building Department.

Inspection Service Voice Service: 209-723-2489

01050 PERMITS, BONDS, LICENSES, AND INSURANCE -- The Contractor shall procure all permits, bonds, licenses and insurance, pay all charges and fees, and give all notices necessary and incidental to the prosecution of the work. **There will be a building permit fee required.** The General Contractor and all Subcontractors shall have a valid City of Merced business license prior to the commencement of work.

The Contractor shall call in and coordinate a final inspection through the Merced County Environmental Health Department. The City has obtained approval from the County where the letter of approval and approved plans must be with the contractor during construction. The final inspection from the County shall be just before calling in for a final inspection with the City's Building Department.

The contractor shall also obtain a permit from the San Joaquin Valley Unified Air Pollution

Control District prior to starting any work.

01060 - DEMOLITION

01061 – DEMOLITION AND DISPOSAL

The Contractor shall remove all materials called out for on the plans and specifications or as required to complete the project. This includes the demolition for decking, fencing, finishes (if required), restrooms, utilities and shower foundation.

All material removed by the Contractor in accordance with this project shall become property of the Contractor and shall be removed off-site and disposed of at the Contractor's expense.

01062 – DEMOLITION AND RE-LOCATING

Contractor shall protect all items that are proposed for re-locating. Items shall be stored in a secure location where item may not be damaged by the environment or the public. Damage or stolen items shall be replaced by the Contractor at their own expense.

01070 CLEANUP – The Contractor shall clean the work area to be ready for Public use. This includes cleaning all existing flooring, walls, fixtures and ensure that all existing plumbing to fixtures are in working (no clogs) condition. Restrooms shall be in a clean and sterile condition, ready for Public use, upon project completion. Cleanup shall include all labor and materials required to get all locations ready for use.

01080 RESTORATION -- The Contractor shall restore all areas adjacent to the construction area to their preconstruction condition. This may include repairing walls, base flooring, ceiling, painting, patching (concrete/plaster etc..) and all other items damaged during construction. Full compensation for conforming to the requirements of this section shall be considered as included in the price paid for the various contract items of work involved and no additional compensation will be made.

DIVISION 2 - SITEWORK

Not Used

DIVISION 3 – CONCRETE[FP1]

03010 – DECKING AND CONCRETE FLOOR REPLACEMENT – All concrete removal required shall be by done by saw cutting to provide neat lines.

The concrete shall be a 5-sack, 3,000 psi with minimum thickness of 4-inches ~~Type-II~~ and with ~~maximum~~ **34**-inch slump ± 1 ". The finished concrete shall match the existing adjacent concrete finish and in accordance with the Plans, and these Special Provisions.

Aggregate base shall be class 3 with 4 inches minimum depth and shall conform to the provisions in Section 25 "Aggregate Subbases," of the State Specifications, the Plans, and these Special Provisions

The existing subgrade shall be uniformly moisture condition to at least 3% above the optimum moisture

content to a depth of 12” and compact existing sub-grade to 90%, but not more than 95%.

DIVISION 4 - METALS[FP2]

04010 STRUCTURAL STEEL

All structural steel shall meet appropriate ASTM specifications, for strength required.

Fabrication and erection shall conform to the requirements of the American Institute of Steel Construction, “Specifications for the Design, Fabrication and Erection of Structural Steel Buildings”.

Provide all loose lintels and other miscellaneous related items.

Specify welding to be done only by qualified welders and in conformance with all requirements of the American Welding Society, and shown on the drawing by AWS standard symbols. Require welding certificates of Contractor to be submitted to the City.

Specify shop primer painting of all steel except that to be encased in concrete or where welds are to be made. Field touch up as necessary.

Shop drawings shall include detailed drawings showing size, layout, special connections, hole patterns, accessories, etc. for approval.

04020 GRATED LINE DRAIN

Trench drain and grate shall be per Caltrans Detail D98C, or similar. The maximum grate opening shall be 1/2-inch in the direction of the path of travel for accessibility requirements.

Connect drain into existing storm drain line. Add in a “T” with a 6-inch cleanout with and lid.

04030 GRATED VENT SCREENS

Vent screens on restrooms shall be “steel hogpen” type at 1/4-inch at 4-inch O.C. galvanized, or similar. Painted typical, with 1-1/2-inch long fillet welds at 16-inch O.C. backside and at corners.

04040 SECURITY GATE SCREEN

Install punched metal security screen on new gates to prevent defeat of the panic bar. Punched metal to be McNichols, or similar, with 3/32-inch diameter holes staggered with 1/4-inch, 12.7% O/A

04040 KICKPLATE

Kickplates shall be installed on each new entry gate on the push side. Kick plate shall be a minimum of 10-inch high and be 30-36 -inch long.

Material to be stainless steel at 0.050-inch-thick min.

DIVISION 5 – MASONRY

- A. Reinforcing material: ASTM A615 Grade 40 or Grade 60
- B. Concrete block masonry units: Hollow lightweight aggregate open-end units in accordance with ASTM C90, Grade N, open-end units shall be placed to ensure that the wall will act as a solid unit when grouted. (End shells shall not be placed against each other at head joints, which would leave a 3/8” air gap.)

C. Mortar:

- a. Strength: 1,250 psi at 7-days and 2,500 psi at 28 days.
- b. Composition: ASTM C270: 1 part Portland cement to 1/4 part lime putty or hydrated lime, damp loose sand not less than 2-1/2 and not more than 3 times the sum of the volumes of the cement and lime used, and mortar admixtures in the amount of 6 oz. per sack of cement.
- c. Slump: maintain at 2-1/2 inch to 3-inches
- d. Admixtures: Master builders' "Pozzoloth 300-R" at the rate of 6 ounces per sack or W.R. Grace Co's "WRDA-79" at the rate of 9 ozs.

D. Grout:

- a. Strength: 1,250 psi at 7-days and 2,500 psi at 28 days.
- b. Type: coarse.
- c. Cement content: minimum 6-1/2 sacks of cement per cubic yard.
- d. Mix design: Submit for approval.
- e. Consistency: Grout shall be pumped and shall be of fluid, pourable consistency (approximately 10-inch slump).
- f. Admixtures:
 - i. Master builders' "Pozzoloth 300-R" at the rate of 5 ounces per 100 Lbs. of cement.
 - ii. Sika grout aid, type 2, used in accordance with the manufacturer's recommendations except admixture shall be thoroughly mixed with water prior to introduction into grout, and grout shall be placed within 45 minutes of time water is added to the admixture

- E. Cleanouts: for walls greater than five courses high, provide clean-out openings at the bottom course at each cell that contains reinforcement, do not seal clean-out openings until approved by structural engineer. If clean-outs are sealed with mortar, wait at least 2-days before grouting.
- F. Grouting operation: standard high lift grouting procedure shall be used, including vibration and re-vibrating of all block cells.
- G. Shop drawings: Submit for approval an electronic copy of all shop drawings. No paper copies required.

DIVISION 6 - WOOD

- A. Lumber: all lumber shall have a moisture content not exceeding 19% at the time it is incorporated into the structure (this corresponds to lumber grade-stamped "8-dry"). Unless otherwise shown or noted, all lumber materials shall be as follows:
 - a. Foundation sills, nailers and ledgers embedded in or in direct contact with concrete or masonry and within 6-feet of the ground: pressure treated Hem-Fir, Southern Pine, or Douglas Fir Coastal Region (DFCR); Number 2 grade.

- B. Framing members, including beams, headers, joists, plates, rafters, struts, braces, etc.:
 - a. Number 2 or better Df.
 - b. Fingerjoined lumber meeting NLGA SPS 1-2000, special products standard for fingerjoined “vertical stud use only” lumber or WWPA’S glued products procedures and quality control. C/QC 101.97
- C. Roof Sheathing
 - a. Material: apparated sheathing. Exposure 1, with minimum span rating of 32/16, and thickness of at least 15/32-inches. Plywood and oriented strand board (OSB) are interchangeable.
 - b. Installation: Place sheets with long dimension perpendicular to framing. Attach to supporting framing with 8D hot-dipped galvanized nails spaced at and with nailing at 6-inches to eave blocking.

DIVISION 7 - THERMAL AND MOISTURE PROTECTION

Not Used

DIVISION 8 - DOORS AND WINDOWS

08010 BUILDING DOOR - The restroom doors shall be 2” thick by 6’-0” long and consist of a steel door and frame, 18 gauge, SDI-100, Grade III, Model 3 or NAAMM HMMA 810 Type A and NAAMM HMMA 861, flush steel rib-stiffened, minimum 18-gauge face sheets.

Interior Frames shall be SDI-100 or NAAMM HMMA 861, fully welded frame, minimum 16 gauge, size and shape as indicated on the drawing

Doors shall have an auto closer and shall be adjusted so that from an open position of 90 degrees, the time required to move the door to a position of 12 degrees from the latch is 5 seconds minimum. [§11B-404.2.8.1]

Egress doors shall be readily openable from the egress side without the use of a key or special knowledge or effort. [§1010.1.9]

08020 GATE ENTRY DOOR – The gate door shall match the existing fence type and style. Door shall be premium aluminum alloy material painted black to match surrounding fence. Paint shall be black with a protective gloss enamel finish. Gate shall also be equipped with an auto closer and shall be adjusted so that from an open position of 90 degrees, the time required to move the door to a position of 12 degrees from the latch is 5 seconds minimum. [§11B-404.2.8.1]

Egress doors shall be readily openable from the egress side without the use of a key or special knowledge or effort. [§1010.1.9]

08030 HARDWARE - The Contractor shall furnish and install all door hardware as shown on the drawings or as required to complete the project. All hardware shall be Schlage Commercial hardware. Use lever type doorknobs unless otherwise specified per ADA standard.

Provide commercial doorknobs with locks, door stop, and with kick plate on all interior doors.

Entry gates shall be self-latching with a latching protector, at 42 to 44-inches from the existing deck. Install DETEX D-6006 panic bar alarmed with self latching hardware. D-6100 outside lever, and D-PL mounting plate.

Handles, pulls, latches, locks, and other operable parts on doors and gates shall comply with CBC §11B-309.4. Additional requirements for the new gates:

- a. Gate closers shall be adjusted so that from an open position of 90 degrees, the time required to move the door to a position of 12 degrees from the latch is 5 seconds minimum. [§11B-404.2.8.1]
- b. Force required to operate the swinging gate shall be 5 pounds maximum. [§11B-404.2.9]
- c. Swinging gate surfaces within 10 inches of the finish floor or ground measured vertically shall have a smooth surface on the push side extending the full width of the door or gate. Parts creating horizontal or vertical joints in these surfaces shall be within 1/16 inch of the same plane as the other and be free of sharp or abrasive edges. Cavities created by added kick plates shall be capped. [§11B-404.2.10]

08040 Thresholds – Contractor to install six (6) thresholds under all exterior doors. Thresholds to be aluminum material fastened per manufactures recommendation. Thresholds to be between ¼ inch and ½ inch high and shall be beveled with a slope no greater than 1:2 and shall comply with CBC §11B-404.

DIVISION 9 – FINISHES[FP3]

09010 PAINT - The contractor shall paint the interior of each restroom to match and all new constructed areas to match the existing color and finish. Finished surface should not leave any evidence of construction. The paint shall also be waterproof.

Painted areas also include the new metal gates, and cmu block wall showers. Paint used shall be per manufactures recommendation and shall match existing like surfaces (fencing and restrooms).

All surfaces to be painted shall be properly prepared per manufactures requirements. This may include scraping, sanding, priming, sealing or anything required so that the surface can be properly painted.

09020 MASONRY SEALER

New masonry surfaces (CMU block showers) shall be sealed by approved sealer providing a watertight, weather resistant seal. Painted surface may be an acceptable form for sealer if manufacture specifications state that the paint may be used as an alternative.

Sealer to be non-flammable inert polyester and polyurethane formulation such as Trojan Masonry and Concrete Sealer or approved equal. Apply per manufactures recommendation. Top with either good quality moisture resistant acrylic or oil-based paint over treated area. See manufactures recommendations.

09030 CAULKING

Contractor shall caulk all areas requiring sealing between fixtures, walls, plumbing and any other area required by the construction. Caulking shall be a paintable polyurethane sealant and applied within the range of -40°F to +194°F for interior and exterior use. It shall be for use in the restrooms, showers, and the exterior around new cmu block walls where required.

09040 WALL FINISHES

09041 – Restrooms

Contractor to verify that the existing wall surface is a smooth, hard and a non-absorbent material per current Building Code Requirements. This is required to be placed on all walls and partitions within 2-feet of service sinks, urinals, and water closets. All surfaces shall be placed at a height of 4-feet above the floor. Contractor to also ensure that material proposed for use to be moisture resistant.

09042 – Showers

Contractor to install, in each shower, a smooth, hard and a non-absorbent material at a minimum of 72-inches above the drain inlet, per current Building Code Requirements.

09041 FLOOR FINISHES

09041 – Restrooms

Contractor shall ensure each restroom has a non-slip coating. If required, apply topcoat to floor and add in anti-skid additive approved for restroom/moisture conditions. Surface may also have a troweled finish providing anti-skid in place of additive.

Application shall also be applied to the base of the wall, to a height of at least 5-inches from the finished ground surface, and with a radius of 0.5-inches. See plans for detail. There shall be no seam and must be continues from transition from the floor surface to the cove base trim. Where existing curbs are within the restroom, the 5” height does not apply. Ensure a 0.5-inch cove is maintained at these locations.

09042 – Showers

Contractor to coat each shower with a slip-resistant coating that is rated for use in public showers. Application shall also be applied to the wall, to a height of at least 72-inches above the drain inlet. Transition from floor to wall shall also have a radius of 0.5-inches. There shall be no seam and must be continues from transition from the floor surface to the cove base trim.

Preparation and application shall be per manufacturer recommendation.

For areas in the shower room, but outside the shower, apply coating as stated in *Section 0941 – Restrooms* above.

DIVISION 10 – SPECIALTIES

Not Used

DIVISION 11 - EQUIPMENT

Not Used

DIVISION 12 – RESTROOM AND SHOWER FURNISHINGS

12010 GRAB BARS – Contractor is to install grab bars where shown on the plans. Grab bars shall be stainless steel Moen Model #R8918 as supplied by Lowe's, mounted 1 ½ inch clearance between wall surface and inside of grab bar. The bars shall have a diameter of 1 ½ inch.

12020 COMMERCIAL SOAP DISPENSER – Contractor shall install one automatic soap dispensers, mirror mounted and above both sinks and within showers shown on the plans. Dispensers shall be Purell LTX-12 Touch Free Dispensers or approved equal.

12030 TOILET SEAT DISPENSER – Contractor shall install (4) four stainless steel toilet seat dispensers' type Bobrick B-221 or approved equal.

12040 TOILET TISSUE DISPENSER – Contractor shall install (4) four stainless steel type Bobrick B-2890 or approved equal.

12040 SANITARY NAPKIN DISPOSAL – Contractor shall install (2) two stainless steel Bobrick B-4354 for partition mounted, and Bobrick B-270 for surface mount, or approved equal.

12050 COMMERCIAL TOWEL DISPENSER AND WASTE RECEPTACLE -- The Contractor shall install commercial stainless steel paper towel dispenser and removable waste receptacle per plan.

12040 SHOWER HEADS – Shower heads shall be a hand-held with a 59-inch hose that can be used both in the fixed position or handheld. Shower controls shall require less than 5 Lbs. of force with no grasping. Max flow rate shall be 1.8 GPM at 80 psi. Must meet criteria of US EPA Water Sense Specs, and all ADA requirements such as Kohler Model #99242-CP or like item.

12050 SHOWER SEATS –The shower seat shall be mounted 17-inches to 19-inches from the floor and shall extend the full depth of the stall (3-foot per plan) The seat shall be located next to the opening to the shower and adjacent to the end of the wall containing the shower head and controls. Must meet ADA requirements such as CSI Bathware Wall Shower Mount Chair Model #SEA-WB2621-LH-PH or like item.

12060 PARTITIANS – Partitions, and wing walls, are to be installed per plan at the locations and heights indicated on the plans. Material used shall be a smooth, non-abrasive cleanable surface. Color to match the existing partition. Wing walls at drinking fountains shall match the existing Buildings color. Contractor to ensure placement of walls are per current Building Code requirements for clearances and accessibility. Installation shall be per manufactures recommendation and shall include the respective doors.

12070 MENS/WOMENS RESTROOM SIGNS – Each exterior entry door for both men's and women's restroom shall have two signs each, four total. The signs shall be placed per the plans and specs below:

12071 – Men’s sign: A triangle symbol shall be located at entrances to men's toilet and bathing facilities. The triangle symbol shall be an equilateral triangle 1/4 inch (6.4 mm) thick with edges 12 inches (305 mm) long and a vertex pointing upward. The color of the triangle symbol shall contrast with the color of the door or surface on which the triangle symbol is mounted, either light on a dark background or dark on a light background. Signs shall comply with 11B-703.

12072 - A circle symbol shall be located at entrances to women's toilet and bathing facilities. The circle symbol shall be 1/4 inch (6.4 mm) thick and 12 inches (305 mm) in diameter. The color of the circle symbol shall contrast with the color of the door or surface on which the circle symbol is mounted, either light on a dark background or dark on a light background. Signs shall comply with 11B-703.

12073 – Additional sign to be a rectangle with pictogram complying with section 11B-703. One for men’s and women’s restroom. Brail and wording shall not be placed within the pictogram field and also to comply with section 11B-703. See plans for mounting heights.

12080 DRINKING FOUNTAIN – Contractor to install new Stainless Steel ADA accessible drinking fountain adjacent to the existing one. Connect to existing water supply per manufacturers recommendation. Must meet ADA requirements such as Murdock/Acorn Aqua Model #A151400 or like item.

12090 TOILETS – Contractor to install new wall mounted toilets in both the boys and girls restroom. Toilets shall have 1.28 gallons per flush or less. Flush controls must be on the open side and comply with operable parts section in Building Code. Must meet all current Building, Plumbing, ADA and CA Civil such as American Standard AFWall 1.28 GPF. Model #2856.128.020-B or like item.

12100 URINAL – Contractor to install new wall mounted urinal in the boy’s restroom. Urinal shall have 0.125 gallons per flush or less and mounted at a height of 17-inch max above the finished floor. Must meet all current Building, Plumbing, ADA and CA Civil such as American Standard Washbrook 0.125 GPF. Model #6590.001-B1.020 or like item.

12110 FAUCETS – Contractor to install new faucets in both the boys and girls restroom. Faucets shall have max flow rate of 0.5 gallons per min. at 60psi. Must meet all current Building, Plumbing, ADA and CA Civil such as Delta 0.5 GPM bathroom faucet Model #87T111 or like item.

DIVISION 13 - SPECIAL CONSTRUCTION

13010 WROUGHT IRON FENCE – Where required, contractor is to remove existing wrought iron fence where new showers will be located. Fence removed is to be salvaged for re-use and re-installed after showers are constructed. If required, new wrought iron fencing may be purchased for install. New wrought iron fencing shall meet requirement set forth in Division 4 – Metals and all shall match existing style and color. Install fence per City Standards for fence installs.

DIVISION 14 - CONVEYING SYSTEMS

Not Used

DIVISION 15 – MECHANICAL

15010 PORTABLE ELECTRIC HOT WATER HEATER – A separate portable electric hot water heater shall be installed for use with the boys and girls' restrooms and showers (2 total). The contractor shall size the water heater to ensure the shower and sinks maintain constant hot water at a temperature of 110°F. Contractor to use A.O. Smith Signature Series 240-Volt 18kW-kW 1.6-GPM Tankless Electric Water Heater Model #R2VR-180E. Installation per manufacturers recommendation.

Connect all electrical to existing power supply box located in the mechanical room per manufacturers installation instructions and recommendations.

The contractor shall also provide all plumbing, electrical, valves and any other material required to successfully install the portable electric water heaters. Location of portable hot water heater shall be in a location where the public cannot access such as in the existing mechanical room, as shown on the plans. Location may be adjusted per the contractors request and approved by the City Engineer.

DIVISION 16 – ELECTRICAL

16010 PORTABLE ELECTRIC HOT WATER HEATER ELECTRICAL – All electrical work shall be per current Building and Electrical codes. Per Manufacturers Installation Guide, breaker size (Amps) shall be 40 amps each (2 circuits) with a voltage of 2240-V. 2-Elements required at 9 Wattage (KW) per Element. Current Breaker Amps shall be 37.5 Amps with a recommended wire size of 8 AWG with a single Element Type. Please note, all wiring/conductors must be rated for 194-degree Fahrenheit (90-degree Celsius). Contractor to verify existing electrical panel to ensure proper hot water heater installs.

Not Used

DIVISION 17 - PLUMBING

17010 PLUMBING - The Contractor shall furnish and install plumbing work as shown on the drawings or called for in these specifications.

Note: Contractor is to utilize the existing main service lines within the pump house between both restrooms. Re-located fixtures shall have all new lines from existing service lines to fixture. The contractor shall evaluate all existing plumbing conditions and locations for use for the proposed fixture relocating.

Material standards for materials used in plumbing piping and accessories shall be in accordance with the latest edition of the California Plumbing Code.

Sewer and Water trenching, if required, will be through a concrete slab and sidewalk area.

Trench and concrete shall conform to Division 3 "Concrete". If trenching is required a layout of the trenching shall be proposed by the contractor and accepted by the City.

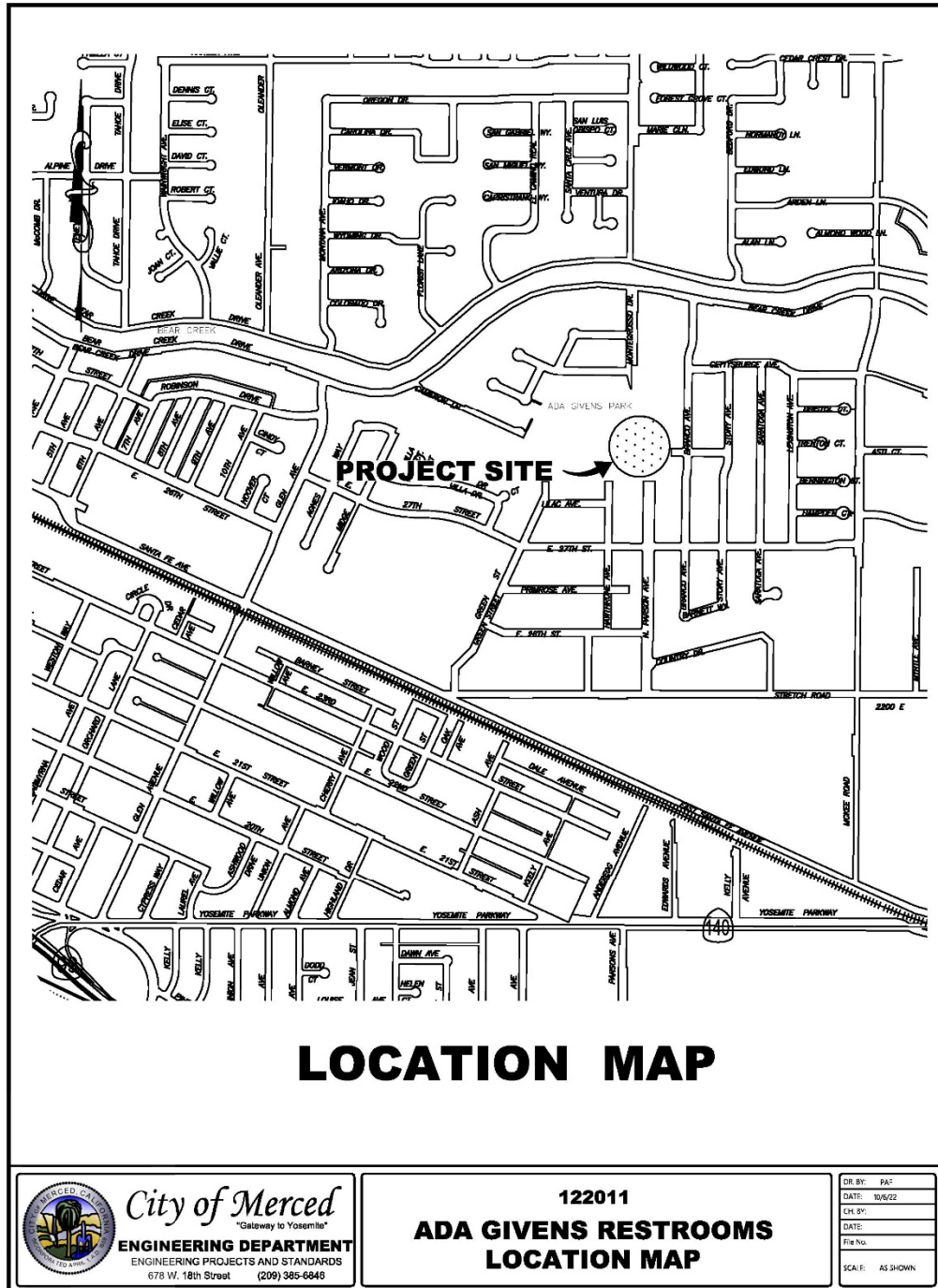
SANITARY SEWER PIPING: Where required, Cast Iron pipe shall be used under the building and within five-feet of the building and shall conform to ASTM A74 Standards. Joints shall be hub and spigot, CISPI HSN compression type with ASTM C564 neoprene gaskets or lead and oakum. Outside the five- feet, sewer material may be PVC, SDR-35, VCP or cement lined, epoxy coated Ductile Iron pipe per City of Merced Standard Drawing S-11. Any bends in the sewer line shall have a clean-out.

WATER SERVICE PIPING: Copper tubing per ASTM B88, Type L. Fittings per ANSI/ASME B16.23, cast brass, or ANSI/ASME B16.29 wrought copper. Joints per AWS A5.8, BCuP silver braze or lead free solder.

Galvanized steel pipe per ASTM A53 or A120, Schedule 40 with cast iron fittings and threaded galvanized malleable joints.

Outside of the building, water pipe may be PVC, Schedule 40 or ASTM D1785, or ASTM D2241, SDR not less than 150 psig pressure rating, PVC joints and solvent welded.

Appendix "A" - LOCATION MAP



Appendix “B” – Quantity Schedule

Item	Description	Unit	Quantity
1	Restroom Demo	LS	1
2	Concrete Demo	SF	1,372
3	Remove Wrought Iron Fence	LF	30
4	Trenching for Drainage Utilities	LF	34
5	New Shower Structure	EA	2
6	New Toilets	EA	4
7	Urinal	EA	1
8	Bathroom Faucet	EA	3
9	Drinking Fountain	EA	1
10	Grab Bars	EA	8
11	Toilet Paper Dispenser	EA	4
12	Toilet Cover Dispenser	EA	4
13	Sanitary Napkin Disposal	EA	2
14	Soap Dispenser	EA	4
15	Paper Towel Dispenser	EA	2
16	Waste Receptacle	EA	2
17	Wall Mount Shower Chair	EA	2
18	Shower Head plus Knobs	EA	2
19	Restroom Partitions	LS	1
20	Men's/Woman's Restroom Sign	EA	2
21	Portable Electric Hot Water Heaters	EA	2
22	Water lines (Hot and Cold)	LF	165
23	Sewer Line	LF	10
24	Drainage Line	LF	34
25	Metal Doors	EA	6
26	Gate Doors	EA	2
27	Door Hardware (knobs, openers, kickplate, etc.)	LS	1
28	Concrete	SF	1,627
29	Drain inlet	EA	2
30	Trench Drain	LF	156
31	Wrought Iron Fence Re-Install	LF	20

Note: The above quantity table is for reference only and bid should be based upon the plans and specifications only. Notify the Engineer of any errors or discrepancies.