 Omitted, Addendum 2

~~SECTION 111235 - TOLL ISLAND GATES~~

~~PART 1 - GENERAL~~

~~1.1 RELATED DOCUMENTS~~

~~A. The Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.~~

~~1.2 SCOPE~~

~~A. This Provision includes the furnishing and installation of toll island gates as shown on the Plans and as herein specified. The operators and all hardware specified for gates shall be provided under this Section. Refer to the electrical drawings for electrical service and control wiring.~~

~~B. Finish painting and reflective tape on wood gate arm.~~

~~1.3 SHOP DRAWINGS~~

~~A. Drawings shall be submitted to the Architect/Engineer for review showing large scale details of construction of gates, operators, control, accessories, connections, and other pertinent information. Submit catalog information on operators and other stock items.~~

~~B. Submittals for this section shall be delivered to the Architect/ Engineer as one complete package including all materials specified under this Section.~~

~~1.4 OPERATION AND MAINTENANCE MANUALS~~

~~A. Operation and maintenance manuals, parts list, assembly, and adjustment instructions, etc. shall be provided in a bound manual at the completion of the job~~

~~1.5 WARRANTY~~

~~A. Gate operators shall be warranted for a period of not less than one year against defects in material and workmanship.~~

~~PART 2 - PRODUCTS~~

~~2.1 MATERIALS~~

~~A. Gate: The wood portion of the toll island gates shall be No. 1 select clear Southern Yellow Pine, pressure treated.~~

~~B. Structural support, brackets, and other ferrous metal parts of the gate shall be hot-dip galvanized conforming to ASTM A 153.~~

~~C. Chain for the 3/4 inch diameter removable pin shall have a rated strength of 200 pounds. All of the above metal shall be stainless steel. Bolt chain to posts with stainless steel bolts.~~

~~D. Gate Mounting Post: Entering and shoulder gate mounting post shall be 6 inch diameter extra heavy (Schedule 80) steel pipe with mounting plate as detailed on the drawings. All joints shall be fully welded, ground smooth, and shop primed for field painting.~~

~~E. Gate Tie Posts: Tie posts shall be 1 1/2 inch nominal I.D. standard pipe and shall be complete with cap, lock pin and support and 2 1/2 inch nominal I.D. standard pipe sleeve. The pipe, posts, nipples, sleeves, etc., shall be hot dip galvanized conforming to ASTM A 153. Lock pins shall be stainless steel.~~

~~F. Gate Piv0ots~~

~~1. Gate pivot support assemblies shall be fabricated from A36 steel plate as specified in Section 05100 in accordance with the details shown on the drawings. All pieces shall be assembled, squared and aligned, clamped to prevent dislocation, and all joints fully welded. All welds shall be ground smooth, all pits filled, and each assembled unit shall be hot dip galvanized in accordance with ASTM A 153 to a coating weight of 2.0 ounces per square foot, and primed for field painting.~~

~~2. Gate pivot pins shall be machined from Type 304 stainless steel to dimensions shown on the drawings. A 3 1/6 inch bent plate gate arm shoe shall be fabricated from Type 304 stainless steel sheet, welded to pivot pin and all welds ground smooth. Bronze bearing washer shall be located to prevent pivot pin from protruding beyond bottom of gate pivot support.~~

~~G. Gate Operators shall be equal to OSCO Model MSG A swing gate operator as manufactured by Operator Specialty Company, Inc.~~

~~1. Cabinet: The unit shall be enclosed in a stainless steel weatherproof cabinet with a removable cover. The cabinet shall be large enough to enclose motor, limit switches, control panel, and additional apparatus as specified herein.~~

~~2. Mechanical belt driven precision worm gear reducer. Gears shall consist of a hardened steel machine cut worm and mating bronze gear running in oil. Operator shall be equipped with an adjustable dual friction pad torque limiter.~~

~~3. Electrical: Motor shall be minimum 1/2 HP, 120 volt, 1Ø high starting torque motor. Starter shall be contactor type magnetic reversing with electrical and mechanical interlocks. Starters shall be completely pre wired. Motor overload protection shall be provided. Limit switches shall be adjustable cam activated type to limit travel in the full open and close directions. A 24 volt 3 button (open close stop) control station shall be installed at the location shown on the drawings with the 24 volt transformer installed in the operator cabinet. Interlocks shall be provided in the control panel to control the lane lights in the canopy, red when the gate is closed, green when the gate is open.~~

~~4. Mounting shall be as shown on the drawings.~~

~~5. Control Station: Provide three button control station as manufactured by Square D Company or equal. The station shall be recessed in the Toll Booth wall as shown on the plans. Each station shall be completely assembled at the factory prior to shipment and installation in the toll booth. Station shall consist of the following items:~~

~~a. Green extended guard pushbutton station, Square D, KR2GH13 with legend plate, black with silver letters "Open," Square D, KN309.~~

~~b. Black extended guard pushbutton station, Square D, KR2BH13 with legend plate, black with silver letters "CLOSE," Square D KN308.~~

~~c. Red extended guard pushbutton station, Square D, KR2RH13 with legend plate red with silver letters "STOP" Square D KN302 (1).~~

~~d. Flush mounted stainless steel (Type 304 S.S.) control station, three units, Square D, KZP30 mounted on standard 2" x 3" general purpose 3□" deep switch boxes. Provide liners to maintain electrical clearances.~~

~~H. All items not otherwise specified shall be stainless steel or galvanized.~~

~~PART 3 - EXECUTION~~

~~3.1 EXECUTION AND INSTALLATION~~

~~A. The gate arm shall be readily removable or replaceable. The removable pin and angle support shall not be placed on the concrete pylons or gate posts until the gate arm is in place.~~

~~B. Sequence of operation shall be such that upon activation of push button in booth, for the closing cycle, the canopy light shall immediately change status to red signifying the lane is closed prior to movement of the gate. Upon activation of the push button in the booth for the opening cycle, the canopy light shall remain red until the gate is fully open when it shall change to green indicating that the lane is open.~~

~~3.2 PROTECTION~~

~~A. The wood gate arms shall be sanded all sides with slightly rounded edges and then shall receive one shop coat of white primer paint. Final painting and application of reflectorized tape will be by others.~~

~~B. The gate arms and all hardware shall be stored under cover until installed.~~

~~3.3 FINAL ADJUSTMENTS~~

~~A. At the completion of the work, all gates shall operate smoothly without binding.~~

~~END OF SECTION 111235~~

~~**PAGE INTENTIONALLY LEFT BLANK**~~