SPEC NOTE: This Section specifies the TORXUN Model 3, an electronic, vehicular perimeter security gate, suitable for airports, port authorities, military bases, money-transport companies, Multi-Use commercial/residential properties and other locations requiring strict safety measures.

# 1 General

1 The TORXUN Model 3 is an integrated electrically operated vehicle gate operator tower post with single panel or bi-fold swing gates.

2 All STRUCTURAL columns drive unit, controller, gate panels by TORXUN Vehicle Access Technologies of Tracy, California.

# 3 RELATED SECTIONS

- 1 Section 01 33 13 Submittal Procedures.
- 2 Section 01 74 20 Construction Waste Management and Disposal.
- 3 Section 01 78 00 Closeout Submittals.
- 4 Section [\_\_\_\_]: Fencing.
- 5 Section 03 30 00 Cast-in-Place Concrete: Structural foundations.

SPEC NOTE: Coordinate the following paragraph with electrical sections to ensure electrical supply is provided to suit the gate requirements. Normally the electrical power supply to terminal box in each unit is specified in Division 16. All remaining electrical work is specified in this Section.

- 6 Section [\_\_\_\_]: Electrical service and connections specified in division 16.
- 7 Section [\_\_\_\_]: Paint color and finish specified in division 9.

#### 4 SUBMITTALS

- 1 Shop Drawings:
- .1 Submit final assembly drawings in accordance with Section 01 33 13 Submittal Procedures.
- .2 Indicate electric power requirements, installation details, wiring diagrams.

2 Installation instructions:

- .1 Submit two copies of manufacturer's written UL325 compliant installation instructions.
- .2 Submit reference list of five (5) installations of the specified type within the last 2 years.

3 Test reports:

.1 Drive unit shall bear a label indicating that the gate controller/operator mechanism has been tested certified to current UL 325 standards.

#### 5 CLOSEOUT SUBMITTALS

1 Provide operation and maintenance documentation for gate system for incorporation into manual specified in Section 01 78 00 - Closeout Submittals.

2 Conduct comprehensive demonstration for maintenance staff on operation and care of vehicle gate system.

#### 6 QUALITY ASSURANCE

1 Standards: Comply with standards specified herein as listed in the General and Supplementary Conditions and Division 1 of the specifications

2 Qualifications of the Manufacturer: A company specializing in the manufacture of automated gate systems.

3 Qualifications of the Installer: A minimum of three years' experience installing similar equipment and approved by manufacturer.

# 2 **Products**

# 1 ELECTRONIC SECURITY GATE SYSTEM

- 1 Manufacturers:
- .1 TORXUN Vehicle Access Technologies Model 3 Gate System Contact: TORXUN Vehicle Access Technologies 50 Sloan Court Tracy, CA 95304 (888) 491-4283

#### 2 MATERIALS

1 Steel sheet: A36 hot rolled structural steel. Hot dipped galvanized and Stainless Steel options.

- 2 Welding materials: to ASWD1.1.
- 3 Electrical components: Complete gate system to be UL325 listed.
- 4 Power Supply: 115VAC 20 Amp single phase 60 hertz power supply

#### 3 COMPONENTS

- 1 Model 3 Tower Gate Operator:
- .1 Structural operator tower with 16" square ½" thick, 8-slotted hole base plate anchored to concrete foundation.
- .2 Tower to be 12-3/6" sided with .188" wall thickness.
- .3 Provide 24VDC drive with printed circuit board integrated motor control circuitry for controlling electro-mechanical drive system. Drive system to incorporate current sensing resistors and adaptive monitoring software as inherent entrapment protection.
- .4 All electrical drive components to be enclosed in weather-resistant housing.
- .5 One <sup>1</sup>/<sub>3</sub> HP, 24V DC motor, with planetary gear reduction box packed with grease.

- .6 Integrated battery backup.
- .7 Emergency override: Provide point for manual opening and closing in case of power failure/malfunction.
- .8 LED display for diagnostics and programming.

2 Model 3 Gate System:

- .1 Dimensions: [max 15] ft high x [max 24] ft clear opening
- .2 Panels to be capable of fully opening within 13 seconds to 90 degrees.
- .3 Panels: UniFence Welded Wire infill or alternative.
- .4 Inter panel hinges QuickFold(<sup>™</sup>) 600+ lb capacity, stainless steel, with Zirc fitting barrel hinge.
- .5 Main panel hinges -3 x 1" and 1 x 1-½" two-bolt flange bearing with cold rolled steel shaft with RapidMount(<sup>™</sup>) gate attachment system.
- .6 Fully compliant with ASTM F2200 05, Class I through Class IV.

SPEC NOTE: Safety devices are installed to minimize likelihood of vehicle or pedestrian injury/entrapment. Edit the following paragraphs for safety feature options required for project. Pedestrians are NOT permitted to use the automated gate and must be provided with a separate, clearly marked access point.

MANUFACTURER'S NOTE: Complete gate system to be UL325 listed and comply with local requirements.

#### 3 Safety/Obstruction Devices:

- .1 Through beam photoelectric transmitter and receiver: Equip each column with photocells at 20 inches above the base plate. Additional photoelectric beams as required.
- .2 Provide obstruction loop detectors for integration with obstruction loops as required.
- .3 Two sets of radio frequency, wireless reversing edges for each folding gate system.

#### 4 FINISHES

#### 1 Select from:

- .1 [Powder coated to 80 micron thickness [Black or other standard RAL color- check with manufacturer before specifying color] .
- .2 [Hot dip galvanized finish [0.5] kg/m2 zinc coating to ASTM A653/A653M].

# 5 **PRODUCT OPTIONS**

- 1 [Anti climb top guard]
- 2 [Red / Green traffic lights][For Entrance][For Exit].
- 3 [Fence Mounting Devices: Provide mounting brackets for mounting adjoining

# fence material to operators].

- 4 [Block heater for extreme cold]
- 5 [Top Track QuickFold system]

# 3 Execution

### 1 INSTALLATION

1 Provision of concrete foundations as determined by local engineer.

2 Install Model 3 gate system to manufacturer's written instructions, by contractor certified by TORXUN Vehicle Access Systems.

3 Install Model 3 gate system in full compliance with UL325 and ASTM F2200 standards and local requirements.

4 Submit certificate of installation (included in Installation and Operations Manual) to manufacturer upon completion of installation for warranty validation.

#### 2 CLEANING AND MAINTENANCE

1 Perform cleaning and maintenance procedures in strict accordance with manufacturer's written instructions.

2 Maintain logbook of repairs and maintenance.

#### END OF SECTION