A. SCOPE OF WORK

This contract is designed to cover the purchase, installation, and removal of miscellaneous traffic control devices as may be required by the Commissioner of Transportation & Mobility or their authorized representative. This contract shall be in effect for a period of one year from the date of contract. The contract may be renewed for a second and third year at the sole discretion of the City of Worcester, the option of which will be determined at the end of the current contract.

B. GENERAL

This miscellaneous traffic control devices contract will be awarded to the lowest responsible and eligible bidder. The awardee must be presently and primarily engaged in the business of installing, maintaining, and servicing traffic control and devices OR roadway construction.

The Contractor shall give their personal attention to the faithful prosecution of the work and shall keep the same under their personal control. The Contractor shall not be permitted to assign, or underlet, the contract nor assign either legally of equitable any moneys hereunder, or its claim thereto, without the written consent of the Purchasing Agent of the City. The Contractor shall take all responsibility of the work and take all precautions for preventing injuries to persons and property in or about the working area as outlined in Part 6 of the MUTCD, under Work Zone Safety.

Each bidder shall state in his bid whether they are now or ever has been engaged on any other contract or other work similar to that proposed, giving the year in which it was done and the manner of its execution and shall submit such other information as will tend to show his ability to prosecute vigorously the work required in these specifications. A successful bidder will be required to employ an organization thoroughly experienced and skilled in the type of work to be done. After the opening of bids any bidder may be required to submit satisfactory evidence that the specific organization which they propose to employ on this contract has successfully executed work of the nature and quality indicated herein.

All the work under this contract shall be done to the satisfaction of the Commissioner of Transportation & Mobility or their authorized representative, who shall in all cases determine the amount, quality, acceptability, and fitness of the work performed and the materials applied. The Contracting Officer shall decide all questions which may arise to fulfillment of this contract on the part of the Contractor and the Contracting Officer's determination and decision thereon shall be final and conclusive and such determination and decision in any case, any questions shall arise and be a condition precedent to the right of the Contractor to receive any money hereunder.

Invoices shall be submitted to the City within a reasonable amount of time, but no later than 30 days from completion of the work. At a minimum, invoices shall include the date, location, equipment and material used, description of work, etc. The City of Worcester reserves the right to assign an inspector to the Contractor's operation at any time for the purpose of determining compliance with the specifications and maintenance records, including the time records for service charges. Any work or materials found to be substandard or not in accordance with the City Specifications or

provisions outlined in this contract shall be repaired or replaced to the satisfaction of the Commissioner of Transportation & Mobility or their authorized representative at the sole expense of the Contractor.

All the Contractor's equipment must be clearly marked with the name of the company on the vehicles operating in the City of Worcester. The Contractor shall provide at their own expense, two-way radio or cell phone communication between their office and vehicles used in making repairs. The Contractor shall have 24 hours a day, 7 days per week emergency telephone answering service and repair service available through the terms of this contract. All service calls must be reported to the City before 8:00 am by the next workday.

All prices in this contract shall be complete in place, including any sidewalk restoration or roadway restoration to pre-construction conditions and all work shall conform to the City of Worcester specifications.

The Contractor shall provide the name of the person to be notified for repairs or emergencies as well as a phone number at which this individual can be contacted 24-hours a day. Failure to respond to emergencies will necessitate the actuation of City crews at the Contractor's expense.

The contractor must care for, replace, and restore to good condition to the satisfaction of the the Commissioner of Transportation & Mobility any utilities, fences, sidewalks, posts, poles or other structures damaged by or interfered with by the contractor outside the scope of work. The contractor shall perform any necessary replacement, reparation, or restoration at no additional compensation. Damage resulting from the operation of the contractor to any structure in the street or ground near or within the scope of work (and not required to be changed under the contract) shall be replaced, repaired, or restored by the contractor at no additional compensation. The contractor shall have no grounds for additional compensation because of expenses due to encountering existing pipes, conduits, or structures.

The contractor shall cooperate with all other contractors or other forces within the limits of the work specified. The contractor shall allow the necessary access to the site to other contractors and utility companies and their agents. The contractor shall be responsible for preventing damage by others to the work performed under this contract or for having damage repaired, either by the party responsible or at his own expense.

Prior to commencement of work, the Contractor shall be responsible for obtaining all necessary construction permits. Distinct permits are required for each work location. Permit necessary for the work may include, but are not limited to, Trench Permits and Street Opening Permits. Permits can be obtained from the DPW&P Engineering Division located at 20 East Worcester Street, Worcester, Massachusetts or online at https://worcesterma.portal.opengov.com/categories/1079/record-types/1006407

The City will permit the Contractor to work Monday thru Friday between the hours of 7:00 A.M. and 3:30 P.M., except as otherwise permitted by the Commissioner of Transportation & Mobility or their

authorized representative. All construction work shall be completed or suspended for the winter season by November 15th of each contract year, unless a specific waiver is granted by the Commissioner of Transportation & Mobility or their authorized representative.

The Contractor shall obtain approval for his proposed method and sequence of construction, including procedures for maintaining traffic, from the Commissioner of Transportation & Mobility or their authorized representative, prior to performing the work.

The Contractor shall notify the Commissioner of Transportation & Mobility or their authorized representative in advance of the beginning or resumption of any work within the City. The Contractor shall notify the Commissioner of Transportation & Mobility or their authorized representative in advance of the beginning or resumption of any work previously ordered pertaining to removal, installation, or relocation of traffic control devices.

The City of Worcester will furnish and pay for police when and where the City decides police protection is necessary. The Contractor shall notify the Commissioner of Transportation & Mobility or their authorized representative of the anticipated requirements as the work progresses, so that each day's protection can be scheduled not later than the preceding day.

All surplus excavated, milled, or pulverized material not required or suitable for reuse on the project, or otherwise not wanted by the City, shall become the property of the Contractor and removed and disposed of outside and away from the limits of the project at no additional cost to the City in accordance with all local rules and the approval of local governmental authorities having jurisdiction over the disposal of such materials. Any excess material that the City decides to keep shall be transported to and stored at the City material drop off yard at 1065 Millbury Street by the Contractor, as directed by the Contracting Officer. Loading, transporting, and unloading shall be done by the Contractor without additional compensation. Payment for this work shall be included in the unit price under the applicable item from which the material was obtained.

Where existing bounds are disturbed by the Contractor’s activities, they shall be reset by a Registered Land Surveyor at the Contractor’s expense. A certification by the Registered Land Surveyor performing the work shall be made and submitted to the Commissioner of Transportation & Mobility or their authorized representative for all bounds reset.

An ADA compliant pedestrian walkway must be continuously maintained throughout the construction process. This can be accomplished by excavating one side of the roadway sidewalk, leaving the other side untouched until the excavated sidewalk is complete. If the Contractor wishes to excavate the sidewalks on both sides of the roadway simultaneously, an ADA compliant temporary pedestrian walkway must be constructed. The temporary walkway will include such items as roadway barriers, signage and signals, temporary striping, etc. Access to properties must be continuously maintained at all times during the construction process. No section of sidewalk is to remain unpaved for more than 7 days from date of excavation, unless otherwise directed by the contracting officer in writing. Any sidewalk section open for more than 7 days is to be temporarily paved, at no additional cost to the City. No allowance will be granted for weekends or holidays.

C. PROCEDURES FOR SHOP DRAWING SUBMITTALS

The following procedure shall be followed when making shop drawing submittals for this contract:

1. The Prime Contractor shall submit for approval all shop drawings, including proposed substitutes, for approval by the City before purchasing any materials.
2. The Engineer will send a written reply within seven (7) working days of receipt of the drawings.
3. If the Engineer's reply indicates rejection or advises corrections or additions to the drawings, steps 1 and 2 are repeated until the Engineer indicates that approval will be given.
4. The Contractor shall take care that every separate document in each set of every submittal shall carry the following identifying information:
   Information Required
   a. Project No.
   b. Identifying Item Number from proposal, if applicable
   c. Name of submitting contractor
   d. Personal signature and title of an official of the Prime Contractor authorized to make shop drawings submittals
   e. Date of signature or submittal

The Contractor shall not receive payment for, nor will he be allowed to install any item or materials which require shop drawing approval unless and until he receives shop drawing approval for that item.

Within 15 days after receipt of an approved shop drawing for any item, the Contractor shall provide the Engineer written proof that he has ordered such approved materials required on the subject contract and a written confirmation on such order and delivery schedule from the manufacturer of the item. This delivery schedule shall be appropriate for timely completion of this project.

D. BIDS

All bids will be compared on the total estimate of quantities of work to be done, as shown in the proposal. These quantities are approximate only, being given as a basis for the comparison of bids to determine the approximate amount of the consideration of the contract. The bidder will be required to complete the work specified or as shown on the drawings, within the required performance period, whether the required quantities are more or less than the amounts herein estimated without any change in the contract unit price. The final payment will not be made until the work is so completed.

The unit price bid for each item must allow for all collateral, incidental, or indirect costs connected with it.

Installation of similar work may be needed in other locations and may be included in this Contract by agreement between the City and the Contractor. Any such work is to be paid for on a unit price basis at the prices bid under this Contract. Extra Work Orders will be given to the Contractor for any such work on a unit price basis at the prices bid in the Contract. The purpose of this provision is to permit the inclusion of any emergency or rush projects that may arise.

By submitting a bid, the Contractor has agreed that they will provide any and all service, materials, and labor necessary for the removal or installation of the miscellaneous traffic control devices, to the complete satisfaction of the Commissioner of Transportation & Mobility or their authorized representative.

All invoices attached to a service report must be mailed or emailed within thirty (30) days to:

Attention Todd M. Kirrane
Assistant Director
Department of Transportation & Mobility
76 East Worcester Street
Worcester, MA 01604

kirranet@worcesterma.gov

Certified payroll records are required to be submitted to the awarding authority for any and all work performed under this contract. Contractor shall submit payroll records directly to the Department of Transportation & Mobility designated representative.

E. SPECIFICATIONS

WARNING & REGULATORY SIGNS

GENERAL

All traffic signs must conform to the 2023 Manual of Uniform Traffic Control Devices (for Conventional Roads) and the MassDOT Standard Specifications for Highways and Bridges for type and size. All regulatory and warning signs shall conform to the MUTCD specifications for size and type.

Regulatory and warning signs shall be 0.08” aluminum with high intensity prismatic reflective sheeting.

Parking signs shall be engineer-grade retro-reflective sheeting on 0.08” aluminum.

WRTA bus stop signs, when applicable, will be provided to the Contractor. Signs that have been removed for replacement shall be delivered to the Street Operations Traffic Division at 26 Albany Street.

Special "Private Street Dangerous" and "Not a Thru Street" blades are 6" aluminum extruded with 3" all uppercase letters, with the same materials used for street name blades.

METHOD OF CONSTRUCTION

All hardware for Warning and Regulatory signs shall be aluminum cantilever side mounts or aluminum post caps for top mounts. The Contractor is responsible to provide stainless steel banding, brackets, buckles and bolts for the installation of such materials. All banding material shall be 1/2".

TRAFFIC SIGN POLE

GENERAL

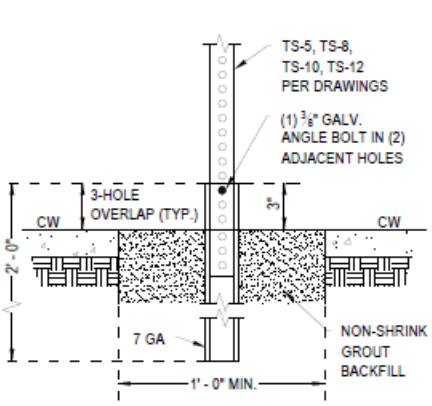
All traffic sign poles shall be 2 inch black (Paint/Powder coat finish) quick punch square galvanized poles. All poles shall be secured to 2 1/4 inch galvanized anchors extending no more than 6 inches above finished grade of sidewalk or tree lawn (Hardware shall consist of 5/16 " zinc plated corner bolt fastened with an acorn nut.) Pole and anchor system shall comply with breakaway requirements in the MUTCD.

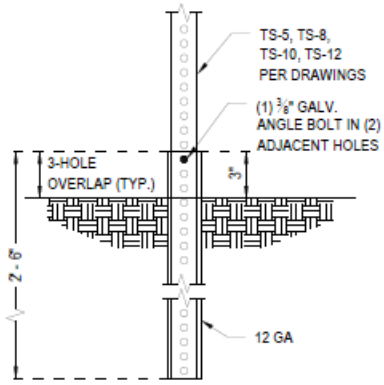
Portions of anchors extruding above the ground surface shall be spray painted black in the field.

All street name signs will be mounted on top of pole with a top mount bracket and or by means of a cantilever bracket. Signs shall be parallel to corresponding street. Signs in excess of 36" long, mounted with a cantilever bracket, shall be mounted with a bracket extension.

All pole assemblies without top mounted signs will be fitted with 2" Rain Caps.

Bottom of lowest sign on pole shall be installed 7’ above sidewalk or ground surface.





LIGHT DUTY ANCHOR

TRAFFIC SIGN POLE SPECIFICATIONS:

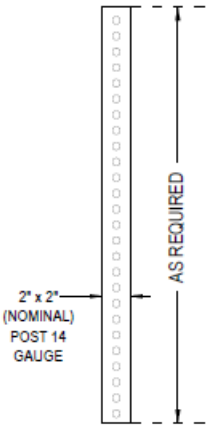
ALL SIGNS SHALL BE MOUNTED ON 2 INCH BLACK (PAINT/POWDER COAT FINISH) QUICK PUNCH SQUARE GALVANIZED POLES. ALL POLES SHALL BE SECURED TO 2 1/4 INCH GALVANIZED ANCHORS EXTENDING NO MORE THAN 6 INCHES ABOVE FINISHED GRADE OF SIDEWALK OR TREE LAWN (HARDWARE SHALL CONSIST OF 5/16" ZINC PLATED CORNER BOLT FASTENED WITH AN ACORN NUT.

PORTIONS OF ANCHORS EXTRUDING ABOVE THE GROUND SURFACE SHALL BE SPRAY PAINTED BLACK IN THE FIELD.

ALL STREET NAME SIGNS WILL BE MOUNTED ON TOP OF POLE WITH A TOP MOUNT BRACKET AND OR BY MEANS OF A CANTILEVER BRACKET. SIGNS SHALL BE PARALLEL TO CORRESPONDING STREET. SIGNS IN EXCESS OF 36" LONG, MOUNTED WITH A CANTILEVER BRACKET, SHALL BE MOUNTED WITH A BRACKET EXTENSION.

ALL POLE ASSEMBLIES WITHOUT TOP MOUNTED SIGNS WILL BE FITTED WITH 2" RAIN CAPS.

ALL SIGNS SHALL BE SECURED TO POLES BY MEANS OF VANDAL PROOF 5/16" RIVETS. ALL SIGNS SHALL BE MARKED ON THE BACK SIDE IN LINE WITH MOUNTING HOLES WITH LOCATION AND DATE OF INSTALLATION. BOTTOM OF LOWEST SIGN ON POLE SHALL BE INSTALLED 7' ABOVE SIDEWALK OR GROUND SURFACE.



TELESPAR STANDARD
SIGN POST

	TRAFFIC SIGN POLE			
	CITY OF WORCESTER STANDARD DETAILS			
	SCALE: N.T.S.	DATE OF ISSUE: -	SPEC. SECTION REF#: -	DRAWING NUMBER -

METHOD OF CONSTRUCTION

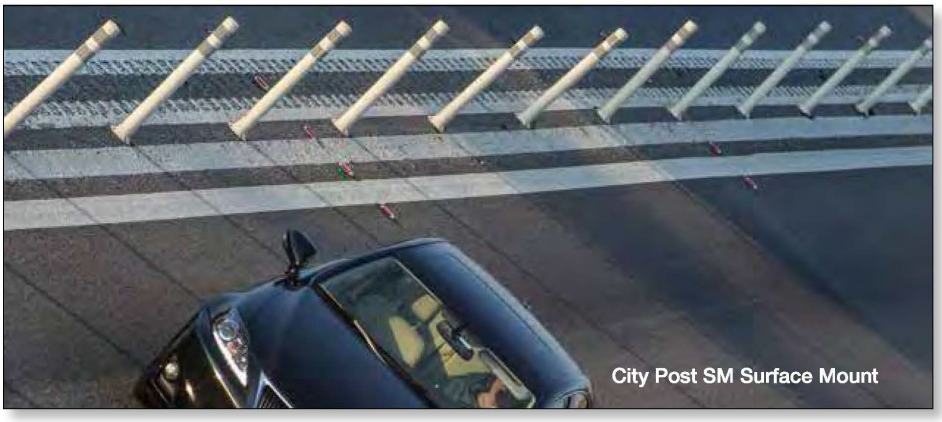
All traffic sign poles shall be installed in a 12" x 12" cement concrete foundation, with a minimum depth of 2 feet. This installation process shall be used for all types of bituminous

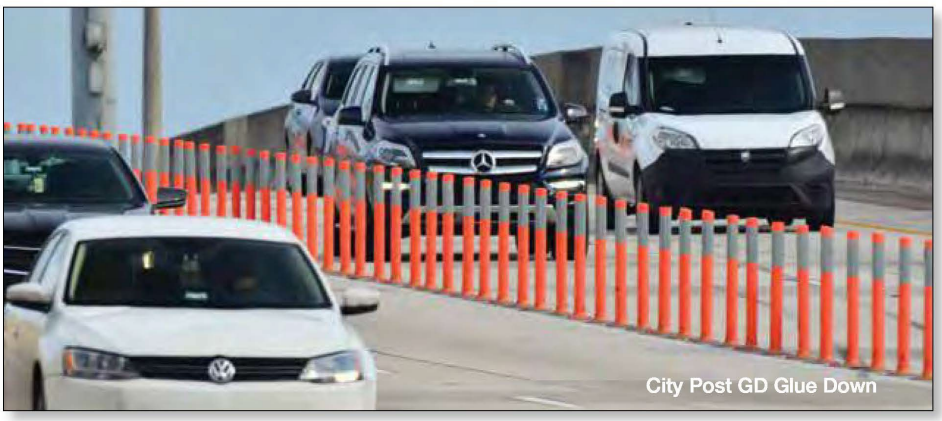
concrete sidewalks or loam borders. In cement concrete sidewalks the Contractor shall install pre-molded bitumastic filler.

The traffic sign pole shall be centered in the foundation with a minimum of 7'-0" distance from the finished surface to the bottom of the sign and not less than 18" from the edge of the curbing. Poles that have been removed for replacement shall be disposed by the Contractor. If warning and regulatory and/or type “B” signs are to be reused on a new pole, under this item, those signs will be reinstalled on the new traffic pole at no cost to the City of Worcester.

CITY POST BY PEXCO (OR APPROVED ALTERNATIVE)
GENERAL

Yellow color, 42” tall, double wrap black reflective tape





CITY POST®

High Performance Channelization Solutions

PEXCO

Davidson Traffic Control Products

The City Post® Story

Durability Redefined!

The City Post may be Pexco's best innovation yet, answering the need for reduced maintenance, improved safety, and significant cost-savings. The City Post builds upon 30 years of Pexco innovation, and has achieved levels of performance never before seen.

Designed for superior durability and quick replacement, this 3-inch round channelizer post sets new standards for ease-of-maintenance and ultra-high durability.

City Posts remain flexible, even at extremely low and high temperatures (-20°F to +160° F), and return to an upright position after more than 100 impacts at 70mph (112 km/h).

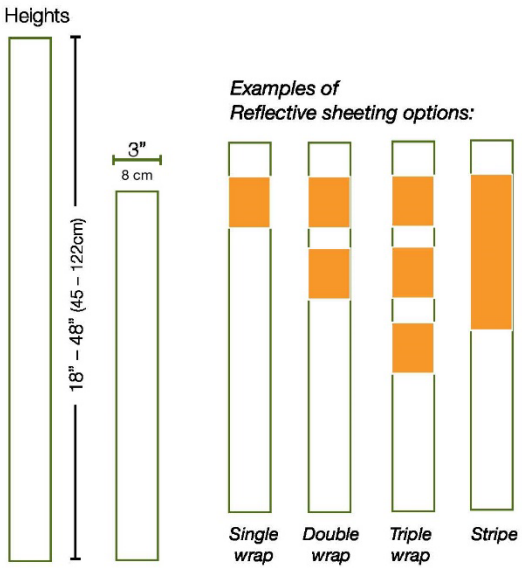
The City Post was created using advanced engineering resins to provide maximum strength and superior durability. The solid, one-piece polyurethane construction absorbs impacts and rebounds instantly.

The City Post family of solutions has grown to include three models to cover all installation requirements:

- **Model EAC - the original, spin-in post model**
- **Model SM - the traditional, bolt-down model**
- **Model GD - glue-down, our newest model**

Applications for the City Post include:

- HOT/Managed Lanes
- Dangerous Curves
- Gore Areas
- Toll Plazas
- Bike Lanes
- Parking Lots
- Airports
- Traffic Circles
- Pedestrian Walkways



Test Data • Proven Performance

The City Post continues to lead the industry as *the* highest-performing channelizer post on the market. Our test results speak for themselves.

All impact testing was conducted independently by an accredited third-party testing facility: **Texas A&M Transportation Institute (TTI).**

City Posts meet MUTCD and NCHRP 350 requirements for channelizing devices.

Real World Impact Testing	Result
Test Vehicle Weight	2,403# (1090 kg)
Test Vehicle Speed	70 mph (112 km/h)
Test Post Heights	36“ (914 mm)
	42” (1067 mm)
Test Vehicle Bumper Impacts	Yes
Test Vehicle Wheel-Over Impacts	Yes
Number of Impacts	100
Maximum Lean >100 Impacts	3° from vertical

City Posts rebound back to their original position, even after more than 100 high-speed hits on the TTI Test Deck

City Post Family of Posts - Model Comparison			
Post Model	SM	GD	EAC
Rating	Best	Best	Best
Standard Colors	White, Yellow, Fluorescent Orange, Black		
Impacts @ 70 mph	100	100	100
1-Year Warranty	Yes	Yes	Yes
Anchoring	Bolts	Epoxy	Anchor cup

Testing and Certificates for all City Post models:

Texas A&M Transportation Institute (TTI)

- 100 impact NTPEP test at 70 mph / 112 km/h
- Less than 3 degrees off vertical – not a single failure
- EN 12767 Passive Safety Certified
- EN 13422 Deformable Delineators Certified
- MUTCD-compliant
- NCHRP 350 accepted

Download the “City Post Durability Study” at www.pexco.com/traffic

City Post® EAC Embedded Anchor Cup

City Post Model EAC - The Original!

Designed for superior durability and quick replacement, the spin-in City Post EAC sets new standards for performance in the field and ease of maintenance.

Features and Benefits:

- 3" Round Channelizer Post
- Thermoplastic Polyurethane for high impact resistance
- Crash friendly design
- 1-piece construction with no mechanical springs to fail
- 360° of visibility with factory-applied reflective sheeting
- Installs in both concrete and asphalt
- Easy "spin-in" installation speeds up maintenance
- Standard colors are white, black, yellow, and fluorescent orange
- Optional colors are red, blue, green, fluorescent green, light gray, and steel gray
- Custom colors are available to match school or logo colors
- UV resistance keeps the City Post looking fresh and new after prolonged exposure to the elements
- Impact tested, MUTCD and NCHRP 350-compliant
- 1-year limited warranty

City Post® EAC Embedded Anchor Cup

City Post EAC with Embedded Anchor Cup - Supplementary Components

2" and 4" aluminum anchor cups and optional pop-in, screw-out anchor cup plug cap for when post is removed

The anchor cup securely installed shown with and without plug cap

Clear shield and rubber gasket factory-applied for a clean installation

City Posts can be tightened and loosened with the City Post wrench

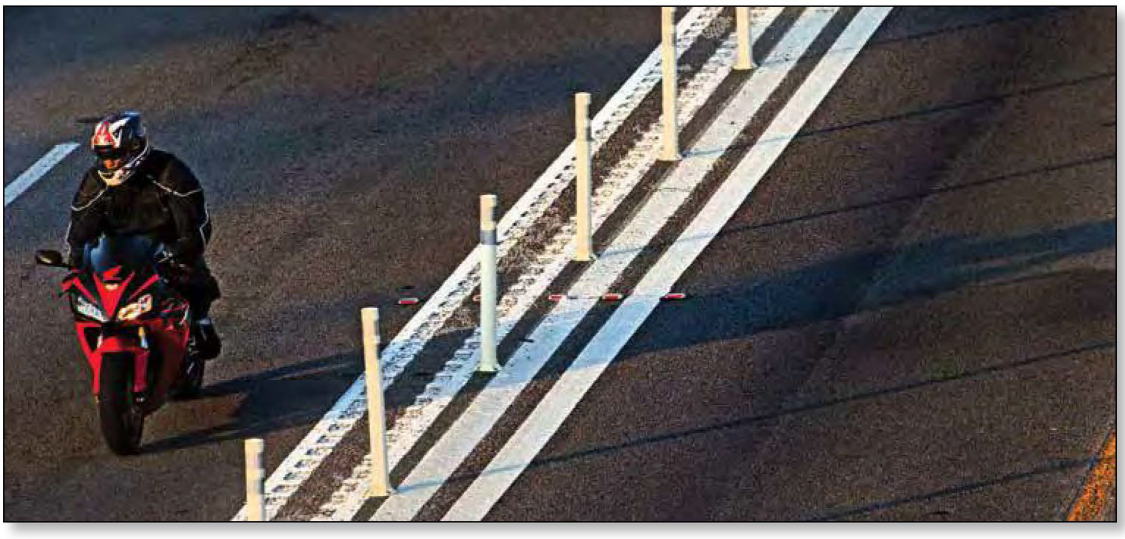
Post installation and replacement is quick and easy!

Making gore points more visible

Delineation in toll plazas

Bike lane and pedestrian walkways

City Post® SM Surface Mount



City Post Model SM

Designed for superior durability in a traditional bolt-down post, the City Post Model SM Surface Mount is a passively safe and crash friendly design that sets new standards for performance in the field and minimizes maintenance events.

Features and Benefits:

- 3" Round Channelizer Post
- Thermoplastic Polyurethane for high impact resistance
- Crash friendly design
- 1-piece construction with no mechanical springs to fail
- 360° of visibility with factory-applied reflective sheeting
- Installs in both concrete and asphalt
- Traditional bolt-down design
- Standard colors are white, black, yellow, and fluorescent orange
- UV resistance keeps the City Post looking fresh and new after prolonged exposure to the elements
- 72 percent reduction in life cycle cost
- 90 percent reduction in worker risk
- Impact tested, MUTCD and NCHRP 350-compliant
- Florida DOT DEV993-specification Approved
- Installs with HCA Anchors
- 1-year limited warranty

REBOUNDABLE IN-STREET PEDESTRIAN CROSSING STANCHIOM W/SURFACE MOUNT
GENERAL

12"x44" Panel (Double Sided) Fluorescent Yellow Green
10"x24" White Hi Intensity insert
Anti-Twist Feature
Fully Impactable
Highly Visible
Fully tested and NCHRP350 approved
Designed to take impacts and re-orient towards traffic
Signs are manufactured with 3M Diamond Grade Fluorescent Yellow Green Sheeting with White Hi Intensity Sheeting Insert
meets MUTCD Section 2B.12 In-Street Pedestrian Crossing Signs (R1-6)

BASE SPECIFICATION

Surface Mount
Quick release feature that allows upright installation and removal in less than 5 seconds.

COLOR LEGEND

BLACK BACKGROUND
YELLOW (RETROREFLECTIVE) YIELD SYMBOL
RED (RETROREFLECTIVE) ON WHITE (RETROREFLECTIVE) PED SYMBOL
BLACK ON WHITE (RETROREFLECTIVE)

Bid #: CR-8188-W4

TRAFFIC CONTROL DEVICES - PURCHASE, INSTALLATION, AND REMOVAL / DTM - PRICING PAGE (1)

For the purpose of determining the low bidder, the City has estimated annual quantities for those items requiring unit prices. The quantities are listed beside each item and the low bidder will be determined by the computations shown on the bid proposal. These quantities are for bid comparison purposes but will also be used during the course of the contract by the City for service, repair, and improvement work. Bid price shall be inclusive of all labor, equipment, and materials needed to perform the task.

WARNING AND REGULATORY SIGNS & POSTS PURCHASED & INSTALLED BY CONTRACTOR (each)

20 @ $_____ = $_____ A

WARNING AND REGULATORY SIGNS & POSTS SUPPLIED BY CITY & INSTALLED BY CONTRACTOR (each)

80 @ $_____ = $_____ B

SOLAR POWERED FLASHING WARNING AND REGULATORY SIGNS SUPPLIED BY CITY & INSTALLED BY CONTRACTOR (each)

80 @ $_____ = $_____ C

CITY POST W/EMBEDDED ANCHOR CUP BY PEXCO PURCHASED & INSTALLED BY CONTRACTOR (each)

100 @ $_____ = $_____ D

CITY POST W/SURFACE MOUNT 5 INCH BOLT BY PEXCO PURCHASED & INSTALLED BY CONTRACTOR (each)

20 @ $_____ = $_____ E

PICK UP AND INSTALLATION OF TEMPORARY TRAFFIC SOLUTIONS SPEED HUMP SUPPLIED BY CITY & INSTALLED BY CONTRACTOR (linear feet)

1000 @ $_____ = $_____ F

PICK UP AND INSTALLATION OF TEMPORARY TRAFFIC SOLUTIONS SPEED CUSHION SUPPLIED BY CITY & INSTALLED BY CONTRACTOR (linear feet)

1000 @ $_____ = $_____ G

***Bidder Name:*_____**

TRAFFIC CONTROL DEVICES – PURCHASE, INSTALLATION & REMOVAL / DTM – PRICING PAGE (2)

REMOVAL AND DELIVERY OF TEMPORARY TRAFFIC SOLUTIONS SPEED HUMP SUPPLIED BY CITY & INSTALLED BY CONTRACTOR (linear feet)

1000 @ $_____ = $_____ H

REMOVAL AND DELIVERY OF TEMPORARY TRAFFIC SOLUTIONS SPEED CUSHION SUPPLIED BY CITY & INSTALLED BY CONTRACTOR (linear feet)

1000 @ $_____ = $_____ I

REBOUNDABLE IN-STREET PEDESTRIAN CROSSING STANCHION (MUTCD R1-6) W/SURFACE MOUNT PURCHASED & INSTALLED BY CONTRACTOR (each)

20 @ $_____ = $_____ J

= $_____*

TOTAL BID PRICE (A THROUGH J)

*Award to be based on this amount

**All materials, supplies, parts, etc. not specifically listed above, and required to be procured by the Contractor for the faithful performance of this contract may be charged to the City of Worcester at a rate not to exceed 10% over the Contractor's net cost. The City may request original copies of the Contractor invoices at any time to confirm said costs.

***Bidder Name:*_____**