



CITY OF DETROIT

MIKE DUGGAN, MAYOR

SPECIFICATIONS FOR FURNISHING OF

U-Channel Steel Signposts And U-Channel Steel Signpost Anchors

July 17, 2023

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U-Channel Steel Signposts and Anchors

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SECTION 1

GENERAL CONDITIONS AND REQUIREMENTS

1.0 GENERAL CONDITIONS AND REQUIREMENTS

1.1 GENERAL CONDITIONS

1.1.1 Contract Intent

City of Detroit intends to procure the services of qualified vendors to furnish **U-Channel Steel Signposts and Anchors**. The vendor shall furnish U-Channel steel signposts and anchors used for the supporting of traffic parking and control signs within the City. The U-Channel steel signposts and anchors shall be as described in the ensuing sections. All U-Channel steel signposts and anchors shall conform to the standard specifications for hot rolled rail steel commercial quality, ASTM A-499 GR 60. (See Attachment #1). Yield strength of post and anchors shall be 60,000 psi minimum, Tensile strength 90,000 psi minimum. Initially, the services will be for a period of one (1) year.

It is the responsibility of the Bidder to review General Conditions as specified in the ensuing pages. All changes made to the bid form by the way of altering prices, terms, quote and/or conditions **MUST** be crossed out and initialed. Failure to initial any changes may be grounds for rejection of the bid.

Specifications referred to herein are used to indicate desired type, and/or construction, and/or operation. Other products and/or services may be offered if deviations from specifications are minor and if all deviations are properly outlined and stated in the bid document. Failure to outline all deviations may be grounds for rejection of the bid.

The decision of the City of Detroit, acting through the Purchasing Director, shall be final as to what constitutes acceptable deviations from specifications.

1.1.2 SCOPE OF WORK:

City of Detroit intends to provide maintenance and replacement services for its various traffic control and parking control sign supports. With stated ASTM minimum levels for hot rolled rail steel quality requirements. The City of Detroit intends to be compliant by using state-of-the-art hot rolled rail steel for all U-Channel Steel signposts and anchors for improved maintenance and safety. All replacement signpost and anchors are intended to exceed the ASTM minimum specifications levels for strength and longevity. The Vendor shall:

Furnish the following:

- U-Channel Steel Signpost and Anchors

All as indicated within the City of Detroit; including all labor, materials, supplies and use of equipment to fabricate and furnish in accordance with attached specifications. The vendor shall ship the U-Channel steel signposts and anchors to City of Detroit Sign Shop located at 2425 Fenkell, Detroit, Michigan 48238.

The City of Detroit intends to have these supplies for U-Channel Steel Signposts and Anchors for inventory and replacement as required under all categories as described in the bid.

1.1.3 Schedule of Work and Work Plan:

Vendor shall supply the U-Channel steel signposts and/or anchors to the City of Detroit within the prescribed time schedule as defined within each release order.

1.1.4 Duration of Contract:

The duration of the contract is one (1) year from the date of award. The vendor is expected to make several shipments in a planned and timely manner to provide continuous work for the sign shop crew. Phased supply of all materials shall be completed within the specified days (shipped within fourteen (14) days of receipt of order requests. Work stoppage due to lack of finished product will be considered as breach of condition of contract and will be grounds for termination.

Vendor shall be available to provide services during the entire duration of the contract regardless of any accelerated schedule he may propose.

1.1.5 Payment:

Vendor will be paid as orders are placed and received.

A 10% retention of all monies will be in effect till satisfactory completion of outstanding items including rectification of defects.

1.2 AWARD:

The Award shall be made to the overall, responsible low bidder for furnishing U-Channel Steel Signposts and Anchors. Bidders shall be required to provide unit prices for the shipping of materials to the City of Detroit's Sign Shop facility located at 2425 Fenkell St. in full compliance with the requirements of the conditions.

1.3 VENDOR RESPONSIBILITY:

The awarded Vendor shall be responsible for the quality of all materials furnished. Any components that are deemed unacceptable due to defective workmanship, materials, or process shall be returned to the Vendor at No Cost to the City.

It shall be the Vendor's responsibility to ensure that all U-Channel steel signposts and anchors are packaged as specified herein.

1.4 WORK INCLUDED/MATERIALS & WORKMANSHIP:

The work included consists of supplying the U-Channel steel signposts and anchors. The U-Channel steel signposts and anchors shall meet the standard ASTM A-499 GR 60 for posts and anchors. Yield strength of posts and anchors shall be 60,000 psi minimum, with Tensile strength at 90,000 psi minimum. The cross section of the posts and anchors shall be as in attachment 1 drawing No.SG-6a.

The City reserves the right to delete, add or modify quantities required to be furnished. The successful bidder must obtain a written confirmation work order from Traffic Engineering Division prior to actual shipping. Each shipment will be strictly limited to the number of posts and/or anchors ordered by the city in individual release order.

For details and requirements for shipping and handling refer to Section 3.

1.5 WORK SCHEDULE:

Each Bidder shall submit a firm schedule with their Bid. The schedule shall arrange phased supply of the U-Channel steel signposts and anchors as required by Traffic Engineering Division. Failure to provide an acceptable schedule shall be sufficient grounds for rejection of any or all Bids.

SECTION 2

DEFINITION AND REFERENCES

2.1 Definitions

2.2 References

Section 2: Definition and References

2.1 Definitions

2.1.1 ‘City’ means City of Detroit represented by Traffic Engineering Division, Department of Public Works, and its authorized agents.

“Vendor” means the contractor who has entered into legal agreement with the City of Detroit for furnishing materials and/or for providing services per terms and conditions laid down for a fee agreed herein and documented thereof.

2.1.2 “Supports” means U-Channel steel signposts – ASTM A– 499 GR 60.

2.1.3 “Base” means U-Channel steel signpost anchor. -ASTM A - 499 GR 60

2.2 References

2.2.1 U-Channel Steel Signpost. Refer to Attachment – 1 thru 7 for specifications.

2.2.2 U-Channel Steel Signpost Anchor. Refer to Attachment – 1 thru 7 for specifications.

2.2.3 Testing and certification requirements. Refer to Section 3.4.2 for applicable specifications.

2.2.4 Performance Warranty: Refer to Section 3.5 and Attachment - 9

SECTION 3

Description of Materials U-Channel Steel Signpost & U-Channel Steel Signpost Anchor

- 3.1 U-Channel Steel Signposts and Anchor Dimensions
- 3.2 General Components
- 3.3 Material and Fabrication
- 3.4 Submittals and Acceptance Criteria
- 3.5 Warranty
- 3.6 Pre-Bid Conference

City of Detroit Specification for

U-Channel Steel Signposts and Anchors

3.1 U-Channel Steel Signposts and Anchors Dimensions

U-Channel Steel Signposts and Anchors shall be supplied in the specific dimensions as described in attachment 2 thru 5. Any non-compliance shall be returned to Vendor at no cost to City.

3.2 General Components

All U-Channel steel signposts and anchor components shall be compliant with the City of Detroit's specifications for parking and traffic control signposts and base.

3.3 – Material and Fabrication

3.3.1 U-Channel Steel Signposts and Anchors

Steel posts shall conform to the standard specifications for hot rolled rail steel, commercial quality, ASTM A-499 GR 60. Steel anchors shall conform to the standard specifications for hot rolled rail steel, commercial quality, ASTM A-499 GR 60. Yield strength of posts and anchors shall be 60,000 psi minimum. Tensile strength shall be 90,000 psi. The cross section of the posts and anchors shall be as in attachment 1 and 2 drawing NO. SG-6a. All posts and anchors shall be finished with anti-rust, moisture proof, baked-on green enamel, powder coat to meet ASTM 123 specifications as in attachment 7.

Holes shall be (3/8) inches in diameter on one-inch centers starting at (1) inch from the end of post and/or anchor and for the entire length of the post and/or anchor. No knockouts. The length of each post shall be nine (9) feet, and the length of each anchor shall be three (3) feet six (6) inches and have a permissible length tolerance of one (1) inch. The finished posts shall be straight and shall have a smooth uniform finish. It shall be possible to telescope all consecutive sizes of U-Channel posts and anchors freely and for not less than nine (9) ft. of their length without the necessity of matching any face to any other face. All holes and ends shall be free from burrs and ends shall be cut square except at bottom of anchor. Anchors three (3) feet six (6) inch lengths must be tapered on one end as in attachment 4 drawing No. SG-6a.

Signposts shall be carefully cleaned and phosphate. Immediately after phosphating U-Channel must be coated with an acrylic paint by electrodeposition and then thoroughly baked. Color is perma-green per Federal Standard 595-A color number 14109 (Dark Limit V-) as in attachment 7.

Anchors shall be manufactured from hot dipped galvanized steel with 1.25 ounces coating conforming to ASTM A-525, also referred to as G-90.

Installation

The U-Channel end of the post shall not be modified or pointed but shall be capable of being driven into the ground by, the using agency, with the use of an approved driving cap. 3 feet 6-inch anchor post shall be tapered on one end as in drawing NO. SG-6a (see attachment 4).

3.3. 2 Packaging and Shipping

U-Channel steel signposts and/or anchors shall be packed in accordance with commercially accepted standards with manufacturer's recommendations in bundles of fifty (50). Materials shall be protected from moisture or other direct exposure to the element during shipment or storage. An identifier shall be affixed on top of each package describing in full the contents contained in the package.

3.4 – Submittals and Acceptance Criteria

3.4.1 Approval Procedure

A minimum of one (1) sample of the U-Channel steel signpost and anchor shall be submitted for approval prior to shipping. The sampling shall be representative. The approved sample will be kept at the offices of Traffic Engineering Division Sign Shop and shall form the basis for comparison and acceptance of all regular submittals. If required, City will define the exact category of U-Channel steel signpost and/or anchor chosen for representative sampling.

3.4.2 Testing Requirements:

Prior to commencement of the regular submittals, all required test data pertaining to the U-Channel steel signpost and anchor components shall be made available for review. Test data shall be gathered by an independent agency, such as AASHTO's National Transportation Product Evaluation Program (NTPEP). Test data shall cover both the U-Channel steel signpost and the U-Channel steel signpost anchor. Data collection shall have been completed no more than five years prior to the submission. As a minimum requirement, a 36-month outdoor weather test data for the U-Channel steel signpost and the U-Channel steel signpost anchor shall be made available for review.

3.4.2.1 Test Panels and Test Conditions

Unless otherwise specified herein, U-Channel steel signpost and the U-Channel steel signpost anchor shall be supplied to test panels.

3.4.3 Pre-Qualification and Acceptance Criteria

Acceptance criteria of U-Channel steel signpost and the U-Channel steel signpost anchor for permanent signage support shall meet the standards and guidelines laid down by Michigan Department of Transportation (MDOT). Pre-qualification of manufacturer of the U-Channel steel signpost and the U-Channel steel signpost anchor shall be governed by Evaluation criteria laid down in the City of Detroit U-Channel steel signpost and the U-Channel steel signpost anchor specifications, and the proven capability to provide technical support for the product.

3.5 – Warranty

The vendor shall procure and issue to the City a written warranty to ensure continual effectiveness of all installed U-Channel steel signpost and the U-Channel steel signpost anchors during the entire life span of the post and anchor (7 years). The warranty will cover the cost of restoring/replacing the U-Channel steel signpost and/or the U-Channel steel signpost anchor to its original effectiveness at no cost to the City of Detroit for all materials including post, anchor, installation hardware, support structures, labor, and/or reinstallation in the field in the event of failure of the U-Channel steel signpost and/or the U-Channel steel signpost anchor due to defective manufacture. The warranty will be for a period of seven (7) years and will cover comprehensive replacement of U-Channel steel signpost and U-Channel steel signpost anchor to its original form.

PARTICULAR SPECIFICATION FOR

U-CHANNEL STEEL SIGNPOST

U-CHANNEL STEEL SIGNPOST ANCHOR

Attachment 1 – U-Channel Steel Signpost and Anchor - Material
Attachment 2 – U-Channel Steel Signpost and Anchor - Shape
Attachment 3 – U-Channel Steel Signpost and Anchor – Length
Attachment 4 – U-Channel Steel Signpost and Anchor - Tapering
Attachment 5 – U-Channel Steel Signpost and Anchor – Holes
Attachment 6 – U-Channel Steel Signpost and Anchor - Weight
Attachment 7 – U-Channel Steel Signpost and Anchor - Finish
Attachment 8 – U-Channel Steel Signpost and Anchor - Installation
Attachment 9 - U-Channel Steel Signpost and Anchor - Warranty

Attachment 1

U-Channel Steel Signpost U-Channel Steel Signpost Anchor

MATERIAL

Material (Post and Anchor)

Steel posts and anchors shall conform to the standard specifications for hot rolled rail steel, ASTM A-499 GR. 60.

Yield strength of posts and anchors shall be 60,000 psi minimum, Tensile strength 90,000 psi minimum.

Attachment 2

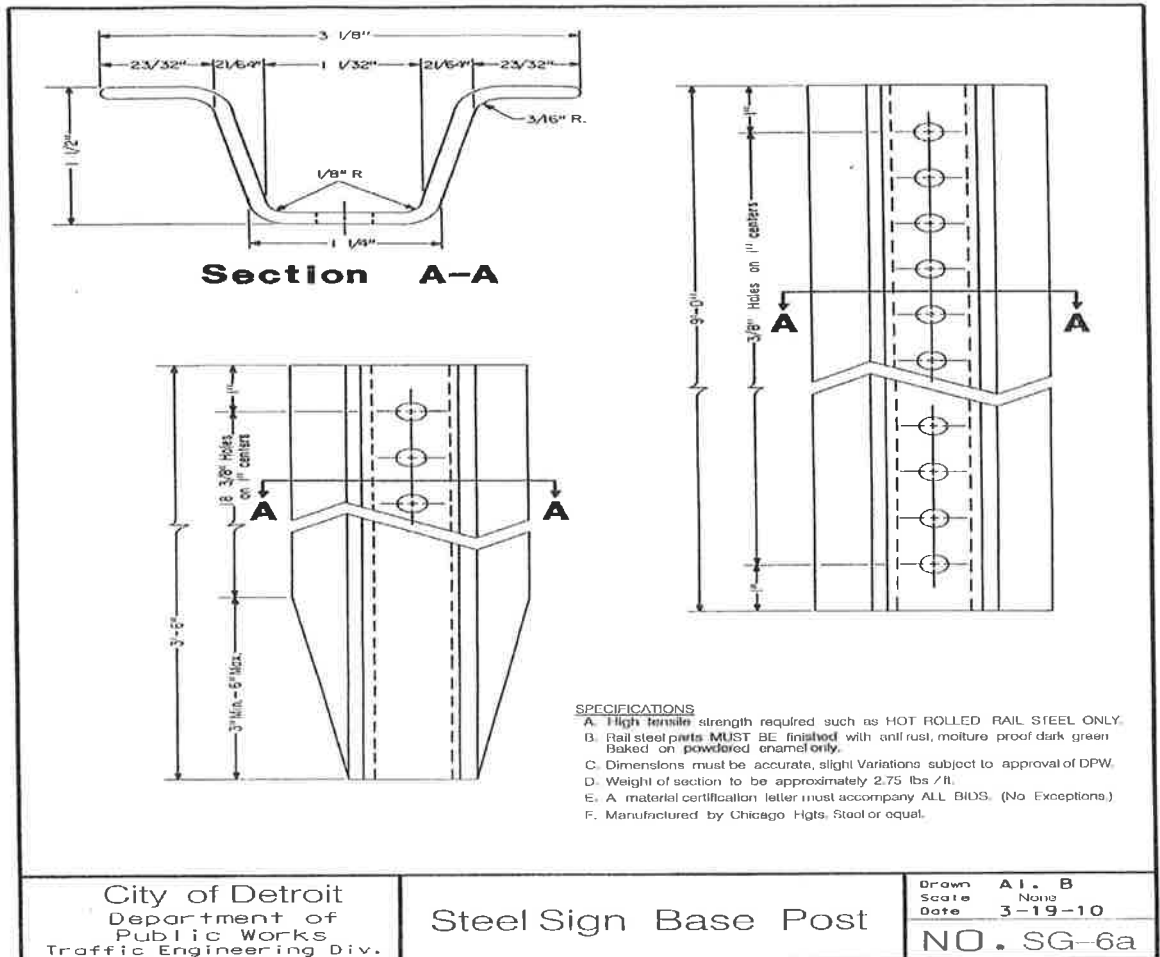
U-Channel Steel Signpost

U-Channel Steel Signpost Anchor

Shape

A. Shape

The cross section of the posts and anchors shall be as in section A-A of drawing NO. SG-6a



Attachment 3

U-Channel Steel Signpost U-Channel Steel Signpost Anchor

LENGTH

Length

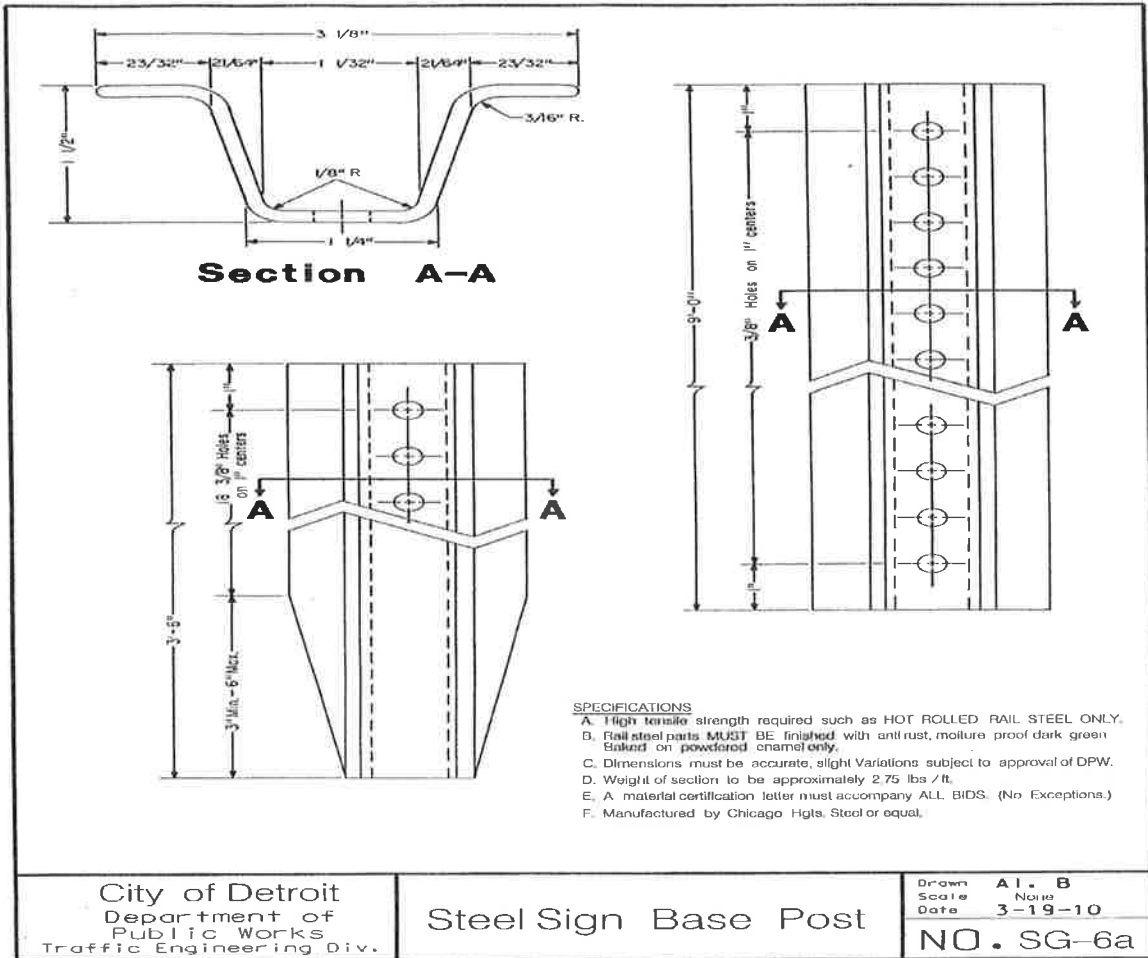
Posts shall be ordered (as needed) in a length of 9'.
Anchors shall be ordered in a length of 3' 6" and
both shall have a permissible length tolerance of 1".

Attachment 4

U-Channel Steel Signpost U-Channel Steel Signpost Anchor Tapering

Tapering

Anchors with (3) ft (6) inches length must be tapered on one end as in the attached drawing (No. SG-6a)



ATTACHMENT 5

U-Channel Steel Signpost U-Channel Steel Signpost Anchor

HOLES

Holes

Holes shall be (3/8) inches in diameter on one-inch centers, starting at (1) inch from the end post and anchor.

Attachment 6

U-Channel Steel Signpost U-Channel Steel Signpost Anchor

WEIGHT

Weight

Weight of all posts and anchors are to be approximately (2.74) lbs.

Attachment 7

U-Channel Steel Signpost U-Channel Steel Signpost Anchor

FINISH

Finish

All posts and anchors shall be finished with anti-rust, moisture proof, baked-on **green** enamel, powder coat; to meet ASTM 123 specifications.

Attachment 8

U-Channel Steel Signpost U-Channel Steel Signpost Anchor

INSTALLATION

Installation

The end of the post shall not be modified or pointed, but shall be capable of being driven into the ground, by the using agency, with the use of an approved driving cap.

Attachment 9

U-Channel Steel Signpost U-Channel Steel Signpost Anchor

WARRANTY

Warranty for U-Channel Steel Signpost U-Channel Steel Signpost Anchor

Components

The vendor shall provide warranties for all U-Channel Steel Signposts and Anchors intended for the support of signage. The Vendor shall replace all defective materials and workmanship upon demand at no cost to the City. City of Detroit reserves the right to collect compensation for liquidated damages arising out of defective U-Channel Steel Signpost and/or Anchor provided by the vendor.

Installed Signpost and Anchor

The vendor shall procure from the manufacturer and issue to the City a written warranty to ensure continual effectiveness of U-Channel Steel Signposts and Anchors intended for the support of signage during the entire life span of the U-Channel Steel Signpost and Anchor (7 years). The warranty will cover the cost of restoring/replacing the U-Channel Steel Signpost and/or Anchor to its original effectiveness at no cost to the City of Detroit for all materials including the post and/or anchor itself, installation hardware, support structure and labor for the reinstallation in the field. In the event of failure of the U-Channel Steel Signpost and/or Anchor due to defective manufacture. The warranty will be for a period of seven (7) years and will cover comprehensive replacement of U-Channel Steel Signpost and/or Anchors to its original form.

Award of the bid will be governed by the demonstrated ability of the bidder to execute the warranty.

Replacements

All materials damaged in transit due to inadequate packaging and/or inadequate U-Channel Steel Signpost and/or Anchor protection afforded, will be the vendor's responsibility. The City will require replacement of all such posts and/or anchors under the conditions of warranty. Failure to respond promptly to such requests for replacements will be grounds for termination of the contract without compensation.