# CHAPTER 12: TRAFFIC CONTROL AND TRAFFIC REGULATORY SIGNAGE

- 12.00 Introduction and Goals
- Part I: Traffic Signs and Pavement Markings
- 12.01 Administration
- 12.02 Standards

# Part II: Traffic Control During Construction

- 12.03 Administration
- 12.04 Standards
- 12.05 Standard Attachments

## 12.00 INTRODUCTION AND GOALS

The purpose of this chapter is to maintain a consistent and appropriate use of signage along City streets. This chapter will outline the City's requirements and procedures for the installation of signs. The chapter is divided into two parts. Part I will outline the process and requirements for the installation of permanent signs and pavement markings. Part II outlines the City's requirements for traffic control during construction that takes place in the City's right-of-way.

## PART I: TRAFFIC SIGNS AND PAVEMENT MARKINGS

## 12.01 ADMINISTRATION

All requests for the installation of traffic signs will be processed through the Traffic Service Request (TSR) Program in the City's Engineering Division.

#### Α. **New Subdivisions:**

- 1. A Traffic Management Plan is required for all new subdivisions within the City limits and the 1-1/2-mile extra territorial jurisdiction. The Traffic Management Plan shall indicate all proposed signage and pavement markings for the subdivision, and is to be submitted with the subdivision plans. Proposed signage shall conform to the Manual on Uniform Traffic Control Devices (MUTCD), the Illinois Supplement to the MUTCD, pertinent City and Departmental Policies, the Illinois Vehicle Code, the City of Champaign Municipal Code, and the requirements outlined in this Chapter. In the case of a conflict, the Municipal Code will prevail. The Traffic Management Plan should be prepared using the following guidelines:
  - a. The typical Traffic Management Plan shall include 24 in. x 36 in. plan sheets or alternatively 11 in. x 17 in. sheets. These sheets may be included as part of the subdivision plan set.
  - b. The sheets will indicate the type and location of all signage and striping proposed for the subdivision (regulatory signs, warning signs, street name signs, all other signs), details and notes, including the materials proposed for implementing the plan.
  - c. The plans should include a primary approval signature block for the City of Champaign City Engineer and a secondary signature block (or initial block) for any other impacted local units of government (i.e., Township Road Commissioner or County Engineer). An example follows:

	City of Champaign	
Approved By:		
	City Engineer	Date
	Champaign County	
Approved By:		
	County Engineer	Date

- d. The City may require additional signage (such as school related signage) to be installed if those signs are required according to the specifications and conditions outlined in the MUTCD or City Policy.
- e. If the subdivision is developed in phases, the Traffic Management Plan shall include a timeline or sequence for the installation of the signs and pavement markings outlined in the plan.
- 2. The City Engineer will review the Traffic Management Plan and recommend any changes to the proposed plan.
- 3. Once the Traffic Management plan is acceptable to staff, the City Engineer will route a Traffic Control Order, authorizing the installation of the signage, for approval.
- 4. In the case of proposed all-way stops in new subdivisions, the proposed location must satisfy the conditions outlined in the City policy concerning all-way stops.
- 5. After receiving the approved plan sheets, the developer shall transmit copies to any other affected units of government for approval. This may include Champaign County, Champaign Township, and IDOT.
- 6. Once approval has been received from all affected entities, as may be required above, the Traffic Control Order will be issued and the signs shall be installed. The developer shall install all initial signage and pavement markings in accordance with the specifications outlined in this chapter and prior to the occupancy of the subdivision.
- 7. Alternately, the developer can request that the City install the initial signage. The developer is responsible for the cost of fabricating and installing the signage, including labor. Such requests must be submitted to the Development Section of the Engineering Division. The installation must be scheduled with the Traffic & Lighting Section. Standard Attachment 12.09 is a sample request form. Contact the Engineering Division for the most recent unit prices.
- 8. A J.U.L.I.E. locate is required prior to the installation of post mounted signs.
- 9. The approval process for the Traffic Management Plan may be considered separately from the subdivision plan approval process at the City's discretion.

### B. Existing City Streets:

- 1. A request for any change in signage for an existing City street is submitted as a Traffic Service Request.
- 2. City staff collects all necessary background information, which may include traffic data and accident data.
- 3. City staff reviews all pertinent City and Departmental Policies and provides a recommendation, which is then routed for approval.
- 4. If the approved recommendation is for no action, a copy of the background information and recommendation are forwarded to the requestor.

- 5. If a change is recommended in regulatory signage, a Traffic Control Order is prepared and routed for approval. A Traffic Control Order may also be prepared for major changes to other signage and pavement markings.
- 6. The Traffic Control Order must be approved prior to the implementation of regulatory signage.
- 7. A J.U.L.I.E. locate is required prior to the installation of post mounted signs.
- 8. Once implemented, the requestor receives a copy of the Traffic Control Order, the recommendation and background information.

### 12.02 STANDARDS

The following standards apply to the installation of signs:

#### A. Referenced Standards:

The Manual on Uniform Traffic Control Devices (MUTCD), the City of Champaign Municipal Code, the Illinois Vehicle Code, pertinent Public Works Departmental Policies (i.e. Policy for the Restriction of On-Street Parking, Policy Regarding Crosswalks, etc.), City of Champaign sign location and sign material standards.

#### B. Design:

- 1. Traffic signs:
  - a. Regulatory signs: Traffic regulatory signs give notice of traffic laws and regulations. Stop signs, Speed Limit signs and No Parking signs are examples of traffic regulatory signs. All traffic regulatory signs recommended or approved by the Engineering Division must conform to the MUTCD.
    - i. Stop signs: Locations of stop signs must satisfy the criteria of Chapter 33 of the City of Champaign Municipal Code. Chapter 33 grants the City Manager authority to approve the installation of stop signs satisfying the warrants outlined in the MUTCD.
    - ii. Speed Limit signs: Speed limits and the posting of speed limits shall conform to the Council Policy for Establishing Speed Limits for City Streets and Alleys. The speed limit on residential local and collector class streets shall be 30 mph. The 30 mph speed limit is generally not posted. The establishment and signing of school speed zones are conducted in accordance with the Illinois Supplement to the National MUTCD.
    - iii. Parking restrictions: Parking restrictions are posted in conformance with Chapter 33 of the City of Champaign Municipal Code. Requests for parking restrictions in existing residential areas are processed according to Public Works Departmental Policy which requires a neighborhood petition in cases not related to public safety or existing municipal code requirements. The City requires the use of the International No Parking symbol for all new No Parking signs.
  - b. Street name signs: Street name signs are required at all intersections. Street name signs should be mounted on the same post with other regulatory signs

such as stop signs. At signalized intersections, the street name signs shall be mounted on the traffic signal mast arms. When block numbering is required by the City (currently only at major intersections), the block numbering shall be incorporated into the street name signage (see Standard Attachments 12.01 – 12.09).

- c. Other traffic signs: Other types of traffic signs include warning signs (such as school crosswalk signs) and directional guide signs (such as those for the Interstate system). All such signs shall conform to the specifications and conditions of the MUTCD and the Illinois Supplement to the MUTCD.
- d. Prohibited signs: The City of Champaign does not use or authorize the installation of Slow signs (such as for children playing) because these signs have been proven ineffective and create a false sense of security.
- 2. *Pavement markings:* Layout of pavement markings shall conform to the specifications outlined in Part 3 of the MUTCD, as modified by Departmental Policies.
  - a. Crosswalks: In general, crosswalks are provided at signalized intersections for pedestrian movements controlled by pedestrian indications and in the vicinity of schools along school safe-walk route crossings. For more specifics and other applications of crosswalks, consult Public Works Departmental Policy.
  - b. Yellow curb: Yellow curb is reserved for use in high-density areas identified as the three parking meter districts: the Downtown Area District, the Eastside Area District, and the University District.

### C. Construction:

- 1. *Timing:* An approved Traffic Control Order must be received prior to the installation of regulatory signs. For new subdivisions, all initial street name signs and traffic signs shall be installed prior to the occupancy of the subdivision.
- Maintenance: The City maintains all traffic signs in the right-of-way for streets under its jurisdiction. For new subdivisions, the City will not assume maintenance of signs until the subdivision is annexed into the City, is accepted for maintenance and the maintenance bond is released.
- 3. *Construction Care:* Prior to the installation of signposts, a J.U.L.I.E. locate is required.

### D. Materials and Construction Notes:

- 1. *Sign Posts:* The City requires the use of 12-gauge steel posts and sleeves complying with ASTM specifications A653, hot dip galvanized conforming to coating designation 6-90. The use of u-channel posts or round posts is not allowed. For sign post and sleeve details see Attachments 12.01 and 12.05.
- 2. *Stop Signs:* Stop signs shall be a 3M 3990 VIP Diamond Grade, minimum size of 30 in. x 30 in. sheeting on 0.080 aluminum blank. If supplemental 4-way, 3-way, or Allway is used, it must be VIP sheeting as well. See Attachment 12.05.
- 3. *Street Name Signs:* In general, street name signs shall have border and letters 3990 white Diamond Grade VIP under green (E.C. film) 1177 Scotchlite Electrocut film. For intersections of two secondary streets the signs shall be 6 in. x 30 in. For

intersections of a secondary street with an arterial street the arterial street name signs shall be 6 in. x 30 in. and the secondary street name shall be 9 in. x 36 in. unless otherwise approved by the City Engineer. For these configurations see Standard Attachments 12.01 and 12.02. For mast-arm mounted street name signs, the sign shall be 30 in. x 60 in. For other details and configuration, see Standard Attachment 12.03.

- 4. Pavement Markings:
  - a. Asphalt pavement: Pavement striping material and application shall be in accordance with IDOT Standard Specifications for thermoplastic pavement marking.
  - b. PCC pavement: Pavement striping material shall be Type 3M 420 Staymark non-linear adhesive back tape over 3M P-50 contact adhesive for concrete surfaces. Manufacturer's recommended application procedure shall be followed for 3M 420 Staymark.

## PART II: TRAFFIC CONTROL DURING CONSTRUCTION

## 12.03 ADMINISTRATION

- A. City Sponsored Projects: The design engineer shall include traffic control requirements as a part of the plans and specifications for the project. The contractor agrees to adhere to the traffic control requirements outlined in the plans and specifications when they enter into the contract with the City. The Contractor shall furnish the City with the name and phone number of the individual responsible for the implementation and maintenance of traffic control plan for the project (unless otherwise specified in the Contract Documents) to the City Engineer for approval. Any subsequent changes in the traffic control plan also require the approval of the City Engineer prior to the implementation of the proposed changes to traffic control. The requirements for responding to traffic control deficiencies on City sponsored projects are outlined in the City's Standard Contract Documents.
- B. Non-City Projects / Utility Repairs: For non-City projects in the right-of-way, it is necessary to fill out a permit form. The City Engineer will determine if traffic control is required for the project / utility repair. If traffic control is necessary, submittal of a traffic control plan is required as a part of the permit process. The complexity of the traffic control plan depends on the complexity of the situation, as assessed by the City Engineer. Approval of the permit will indicate approval of the proposed traffic control plan. For projects lasting more than one calendar day, the name and phone numbers where the individual responsible for the implementation and maintenance of traffic control can be reached, including after hours, shall be included with the permit application. Deficiencies in traffic control shall be corrected to the satisfaction of the Engineering Division within four hours, as required by the permit.

## 12.04 STANDARDS

### A. Referenced Standards:

1. *Traffic Control:* Part 6 of the Manual on Uniform Traffic Control Devices (MUTCD) – Temporary Traffic Control; IDOT Standard 701501-02: Urban Lane Closure 2-Lane,

2-Way Undivided; IDOT Standard 701601-03: Urban Lane Closure Multi-lane 1-Way or 2-Way with Non-traversable Median; IDOT Standard 701606-03: Urban Lane Closure Multi-lane 2-Way with Mountable Median; IDOT Standard 701701-03: Urban Lane Closure Multi-lane Intersection; IDOT Standard 702001-01: Traffic Control Devices; IDOT Standard 704001: Temporary Concrete Barrier; other applicable IDOT Highway Standards; IDOT Quality Standard for Work Zone Traffic Control Devices, and pertinent future IDOT Manuals.

 Pedestrian Safety: IDOT Standard 701801-03: Lane Closure Multi-lane 1-Way or 2-Way Crosswalk or Sidewalk Closure; Chapter 6D of the MUTCD – Pedestrian and Worker Safety

### B. Design:

- 1. *General:* Traffic control for all work performed in the right-of-way shall conform to the most recent edition of the MUTCD, appropriate IDOT Highway Standards and the Municipal Code. Some commonly used IDOT Highway Standards were listed in the Referenced Standards section. General guidelines are listed below. Refer to the MUTCD for specifics.
  - a. Whenever possible, the work site on a two-lane street or highway shall be confined to one traffic lane leaving the opposite lane open to traffic.
  - b. Work vehicles shall be parked on the same side of the street as the job site.
  - c. Work vehicles may be used, for work operations less than 30 minutes in duration, as an additional barricade with the flasher light lit, but not as a substitute for any work area protection that may be called for.
  - d. Under certain field conditions such as hills, crossroads, curves, driveways, etc. the spacing of work area protection should be adjusted as necessary.
  - e. All employees working on the job site along a roadway shall wear high-visibility vests as required by the OSHA Act.
  - f. Flaggers shall wear high-visibility vests when directing traffic.
  - g. Flaggers shall use the proper traffic control sign when directing traffic.
  - h. When two flaggers are necessary, they shall be in direct communication with each other at all times either by sight or by radio communication.
  - i. When there is not any work in progress and the flagger is not required, the "Flagger Symbol" sign should be removed.
  - j. Remove all signs or traffic control devices that do not apply to existing conditions, i.e. if work is not being performed, the warning signs should either be taken down or covered.
  - k. When openings in or near the sidewalk are necessary, barricades or safety fencing shall be properly placed so that someone passing by would not inadvertently fall into the excavation.
  - I. If barricades will be in place overnight, they shall have a light on them.

- m. Arrowboards are mandatory for work on all collector- and arterial-class streets and may be required at the discretion of the City Engineer for work on local streets.
- n. All excavations that present a hazard or that must be left open overnight shall be properly barricaded for the protection of the public.
- 2. *City Projects:* In addition to the general requirements, traffic control on City construction projects is specified in the City's Standard Contract Documents. For each project, the Technical Specifications section of the Contract Documents may include written specifications for traffic control conforming and / or copies of applicable IDOT Highway Standards regarding traffic control.
- 3. *Non-City Projects:* Non-City projects are subject to the general requirements outlined above. In addition, overhead pedestrian protection may be required at the discretion of the City Engineer for building projects. The pedestrian protection measures must be approved by the City Engineer prior to the start of construction.
- **C. Construction:** In all cases, traffic control must be set up according to the guidelines presented in the traffic control plan (which includes applicable IDOT Highway Standards), Section 700 of the IDOT Standard Specifications for Road and Bridge Construction, and Part 6 of the MUTCD prior to the start of work in the roadway. Temporary traffic control devices shall remain in place only as long as needed and shall be removed as soon as practical when directed by the City Engineer. Placement of any of these devices may be adjusted to satisfy field conditions. Signs that do not apply to current conditions shall be removed or covered.

The contractor shall replace any traffic control device that has become ineffective due to its condition. The City Engineer has the right to require changes in the traffic control related to the acceptability of the placement and maintenance of any traffic control device at any time.

D. Materials and Construction Notes: The materials for work zone traffic control devices shall adhere to the requirements outlined in the traffic control plan, Part 6 of the MUTCD, Section 700 of the IDOT Standard Specifications for Road and Bridge Construction and applicable IDOT Highway Standards. The quality of the devices utilized on all projects taking place in the right-of-way shall conform to the most recent IDOT Quality Standard for Work Zone Traffic Control Devices.

## 12.05 STANDARD ATTACHMENTS

The following items are attached as reinforcement or amendments to policies stated above:

Standard Attachment Number 12.01 – 6 in. Street Name Sign and Stop Sign Configuration

Standard Attachment Number 12.02 – 9 in. Street Name Sign and Stop Sign Configuration

Standard Attachment Number 12.03 – Standard Mast Arm with Mounted Street Name Sign Configuration

Standard Attachment Number 12.04 – Street Name Sign Aluminum Specifications

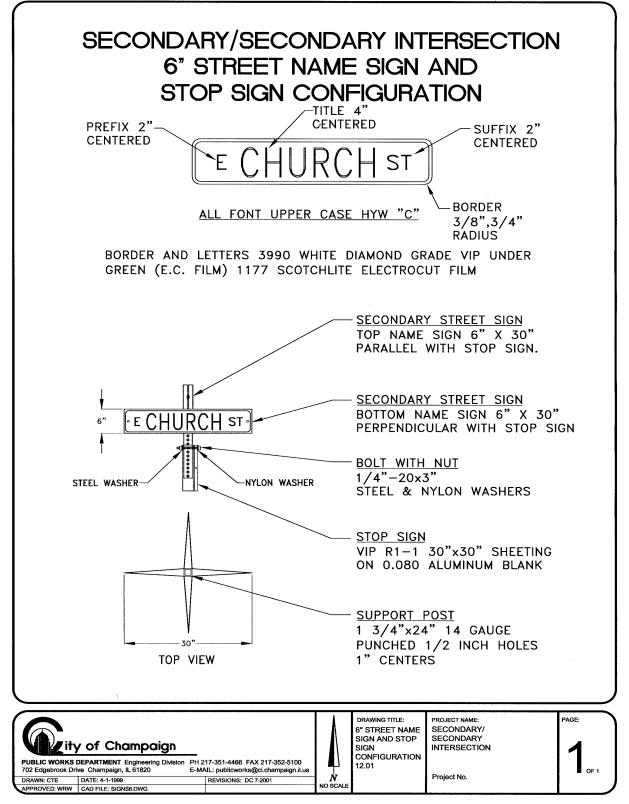
Standard Attachment Number 12.05 – Street Name Sign and Stop Sign Configuration

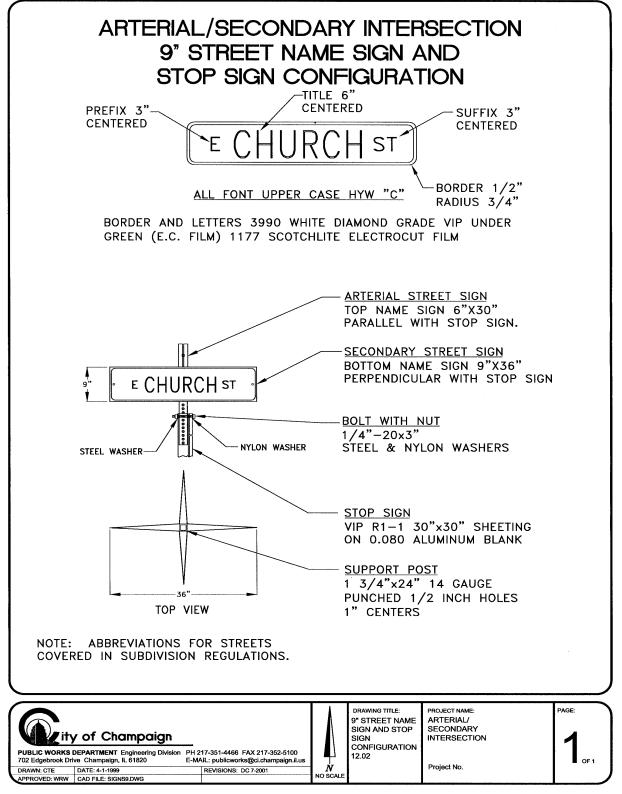
Standard Attachment Number 12.06 – Typical Sign Post Location

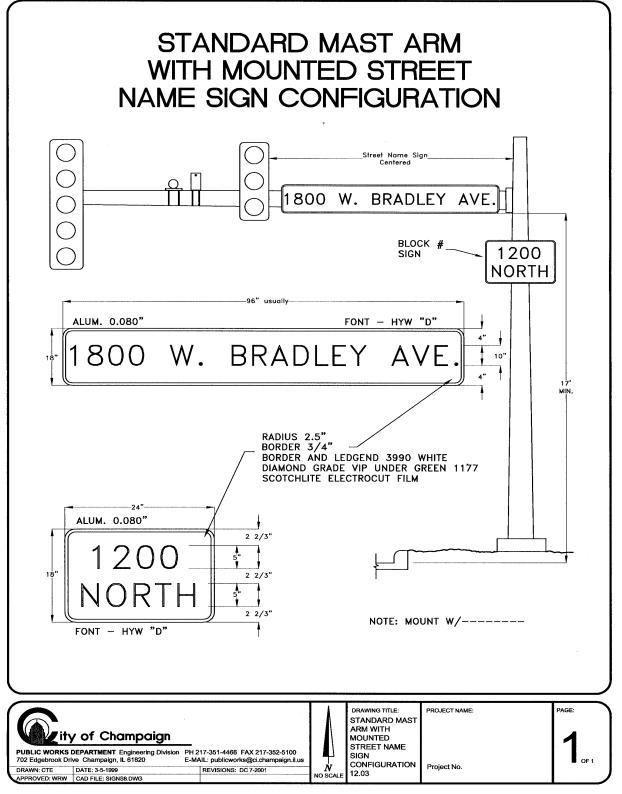
Standard Attachment Number 12.07 – Typical Sign Post Location on Typical Intersections

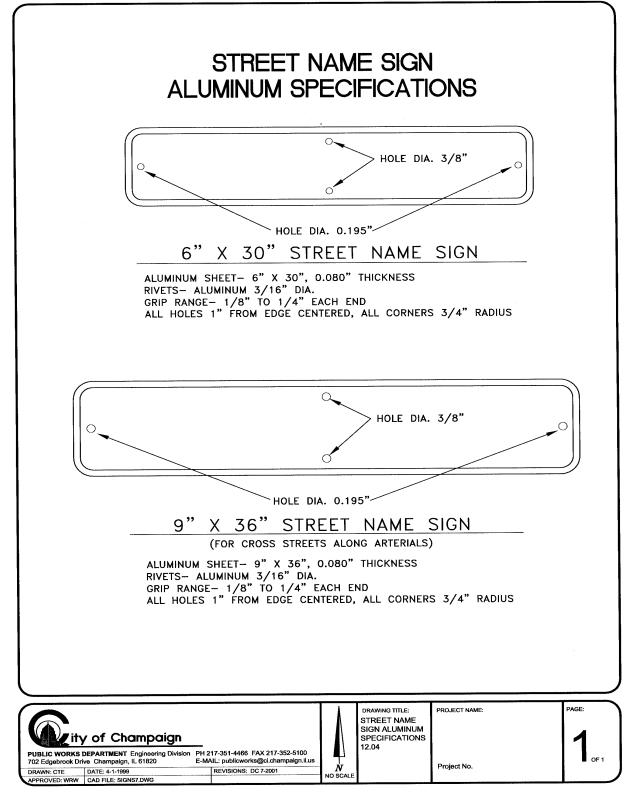
Standard Attachment Number 12.08 – Block Numbering

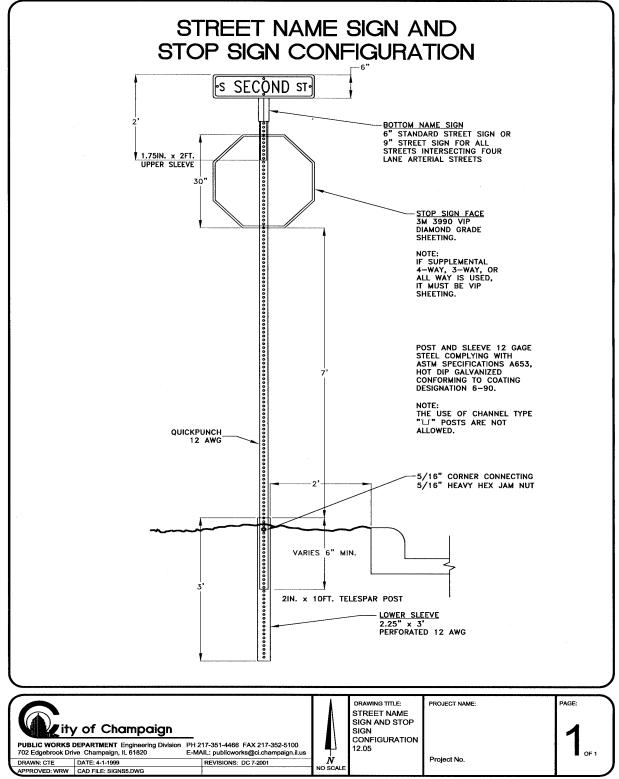
Standard Attachment Number 12.09 – Sample Street Sign Request Form

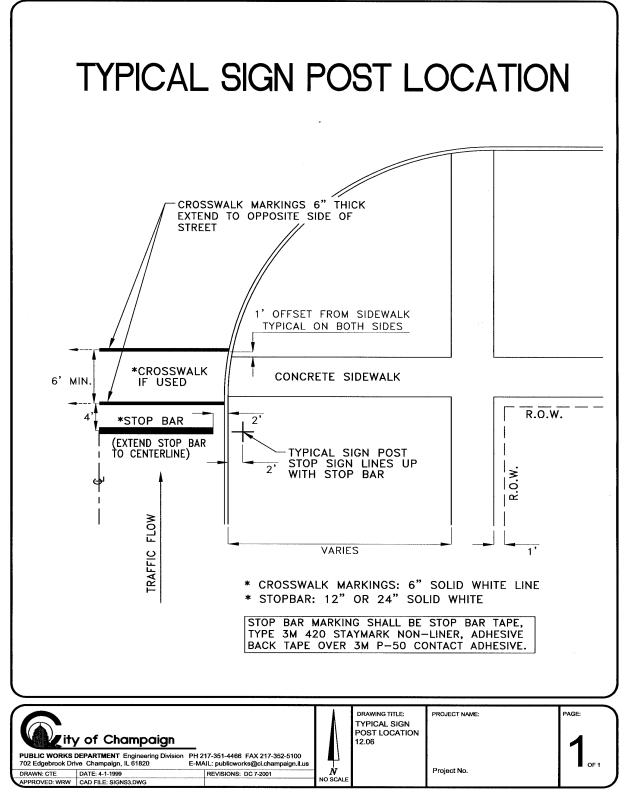


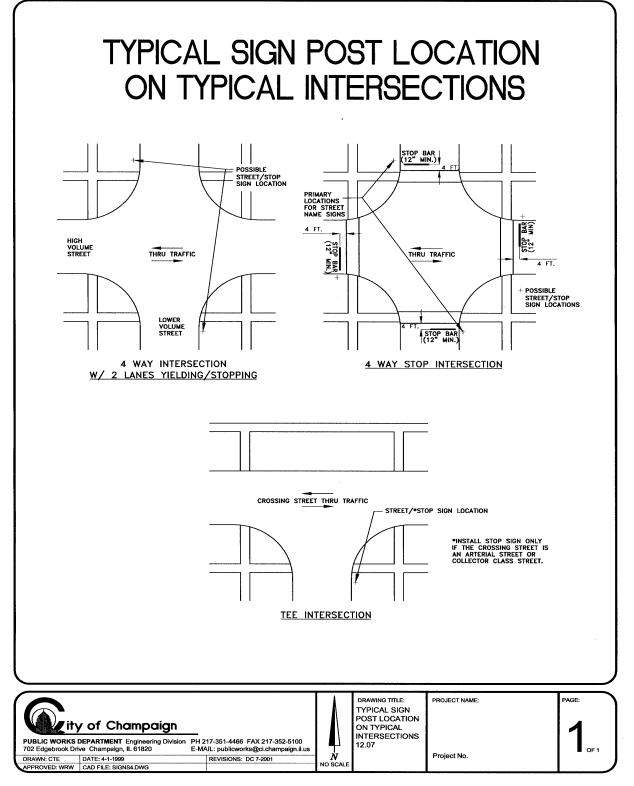


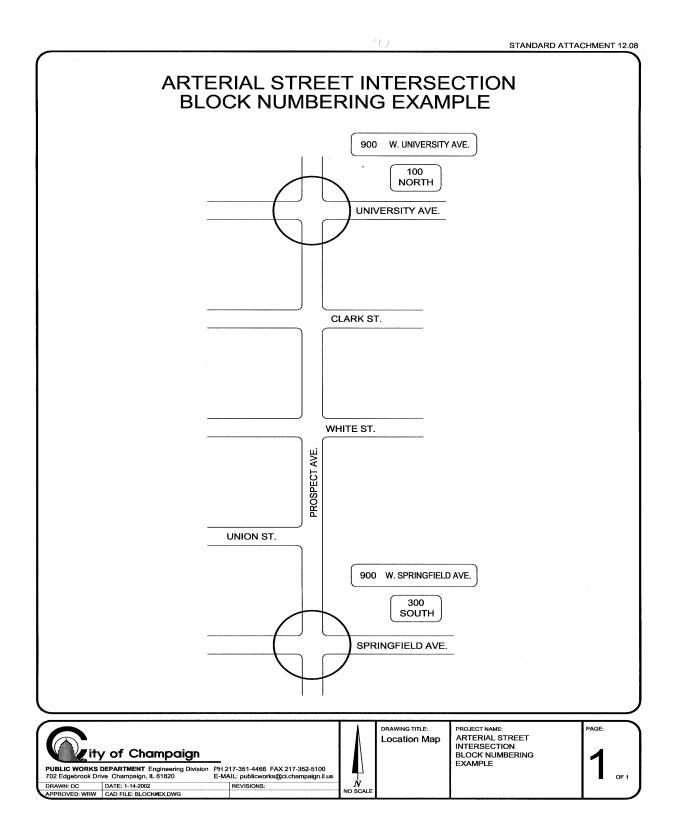


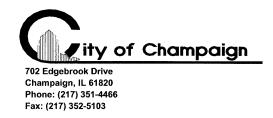














Street Sign Request Form

<b>Developer</b> — Name		· · · · · · · · · · · · · · · · · · ·	$\neg$	Subdivision Name	$\overline{}$
Name Address					
Address		710			
City	State	ZIP			
Phone					

Qty	Description	Unit Price	TOTAL
	Street Name 1:		
	Street Name 2:	\$100.00	
	Street Name 3:		
	Street Name 4:	\$100.00	
	Street Name 5:		
	Street Name 6:	\$100.00	
	Street Name 7:		
	Street Name 8:	\$100.00	,
	Street Name 9:		
	Street Name 10:	\$100.00	
	Pole	\$30.00	
	Stop Signs	\$50.00	
	Installation per sign	\$50.00	
nd Che	vable to : City of Champaign. ck to : City of Champaign Public Works; 702 Edgebrook Drive; n, IL 61820; Attn: Mary Ann Ford.	TOTAL	

Developer's Signature: \_\_\_\_\_

Approved By:

Date:

Note: Please indicate the street sign locations on a copy of the subdivision plat and attach.