



# Illinois Department of Transportation

## Memorandum

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To: Studies & Plans Squads PPM 60-08  
From: Craig Emberton By: Tim Brandenburg  
Subject: Permanent Survey Markers  
Date: June 30, 2003 Revision Date: December 6, 2006

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### PLAN PREPARATION MEMORANDUM 60-08

#### BACKGROUND

This memorandum combines and supercedes Plan Preparation Memorandum 60.3, Permanent Survey Markers; dated May 5, 1997 and Plan Preparation Memorandum 75.58, also titled Permanent Survey Markers; dated April 24, 1975; and supplements the BDE Manual (58-8.02 Permanent Survey Markers) and the Land Acquisition Manual (Chapter 1) for uniformity of District preference in installing and preserving Permanent Survey Markers.

For clarification purposes, references made to Permanent Survey Markers shall be defined as centerline or survey line control points and may include, points of intersection (PI), points of tangency (PT), points on curve (POC) points of curvature (PC) and points on tangent (POT). References made to Land Survey Monuments shall be defined as control corners of a survey and may include section or sub-section corners.

Chapter 1 (1.04-12) of the Land Acquisition Manual and Chapter 58; (58-8.02 & 58-8.03) supplement each other and discuss the uses and placement of Permanent Survey Markers and Permanent Survey Ties. In summary: "Place markers at the PT's and PC's of all horizontal curves and space them along tangents so that two markers are always intervisible."

Chapter 1 of the Land Acquisition Manual and Chapter 58 (58-8.04) supplement each other and discuss the requirements and procedures to be utilized concerning disturbances of Land Survey Monuments.

## PROCEDURES

The following summary of these District CADD Details should clarify under which circumstances each of the different types of Permanent Survey Markers and Land Survey Monuments should be used:

<u>PAY ITEM NO.</u> <u>CADD DETAIL NO.</u>	<u>DESCRIPTION</u>
XZ193300 XZ193AAA	SURVEY MARKER, TYPE 1(SPECIAL) To be installed in flexible pavement or shoulder, bituminous treated surface and turf areas within the right-of-way for preserving Permanent Survey Markers (PI's, PT's, PC's, POC's & POT's)
XZ193400 XZ193AAA	SURVEY MARKER, TYPE 2 (SPECIAL) To be installed in rigid or composite pavement for preserving Permanent Survey Markers (PI's, PT's, PC's, POC's & POT's)
Z0070100 Z0070100	SURVEY MONUMENT COVER ASSEMBLY To be installed in all pavement types for preserving permanent survey markers (PI's, PT's, PC's, POC's & POT's) and Land Survey Monuments (Section or subsection corners)
X0301232 X0301232	SURVEY MARKER VAULT To be installed in rigid or composite pavement for preserving Land Survey Monuments (Section or subsection corners)

<u>PAY ITEM NO.</u> <u>CADD DETAIL NO.</u>	<u>DESCRIPTION</u>
66700110 66700AAA	PERMANENT SURVEY MARKERS TO BE ADJUSTED To be installed for preserving existing cast iron Permanent Survey Markers, Type III
66700505 66700AAA	PERMANENT SURVEY MARKERS, TYPE IV To be installed in pavement or turf areas within the right-of-way for preserving Land Survey Monuments (Section or subsection corners) under direction of the Chief of Surveys.

Designers should also pay particular attention to the third paragraph of BDE Chapter 58-8.04 and Land Acquisition Manual sections 1.04-7 & 1.04-8 which pertain to Land Survey Monuments affected during construction operations. District General Note 667 and/or District Special Provision "Resetting of Section Corners" should be placed in the final plans or Contract Special Provisions when this instance occurs.

TJB:cw

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References:

- i BDE Manual Chapter 58-8
- ii Land Acquisition Manual Chapter 1