



Illinois Department of Transportation

To: Studies & Plans Squads PPM 60-08
From: Craig Emberton By: Scott Neihart
Subject: Permanent Survey Markers
Date: June 30, 2003 Revision Date: April 1, 2016

PLAN PREPARATION MEMORANDUM 60-08

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 2 (2.3.11) 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 2 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.

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>DESCRIPTION</u>
<u>CADD DETAIL NO.</u>	
XZ193300	SURVEY MARKER, TYPE 1(SPECIAL)
XZ193AAA	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 SURVEY MARKER, TYPE 2 (SPECIAL)
XZ193AAA To be installed in rigid or composite
pavement for preserving Permanent Survey
Markers (PI's, PT's, PC's, POC's & POT's)

Z0070100 SURVEY MONUMENT COVER ASSEMBLY
Z0070100 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)

PAY ITEM NO.
CADD DETAIL NO.

DESCRIPTION

Z0070202 SURVEY MARKER VAULT
X0301232 To be installed in rigid or composite
pavement for preserving Land Survey
Monuments (Section or subsection corners)

X6670107 PERMANENT SURVEY MARKERS
66700AAA TO BE ADJUSTED
To be installed for preserving existing cast
iron Permanent Survey Markers, Type III

66700505 PERMANENT SURVEY MARKERS, TYPE IV
66700AAA 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 BDE Chapter 58-8.04 and
Land Acquisition Manual section 2.3.6 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.

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References:

- i BDE Manual Chapter 58-8
- ii Land Acquisition Manual Chapter 2