



Mn/DOT Name: 3108 AZ

NGS Name: 3108 AZ

County: ITASCA, MN (Sheet 1)

NGS ACRN: [DM8118](#) [Get Map](#)
NGS Quad / Sta Num : 47093312/
USGS Quad: COHASSET EAST

<u>1/4</u>	<u>Sec</u>	<u>Twp</u>	<u>Rng</u>	<u>Reference</u> <u>Latitude</u>	<u>Reference</u> <u>Longitude</u>	<u>Vert</u> <u>Order</u>	<u>Horz</u> <u>Order</u>	<u>Year Set</u>	<u>Last Recovery</u>	<u>Condition</u>	<u>Geodetic Usability</u>	<u>Photos</u>	<u>Bridge Num</u>	<u>F/P/R</u>	<u>Magnetic Properties</u>
NE	32	56 N	25 W	471737.87	933200.22	2	C	2009	2021	GOOD	Horz=YES Vert=YES	YES		RECESSED 1 IN.	BAR MAG IN DRILL HOLE

<u>Monument Type</u>	<u>Disk Type</u>	<u>Mon. Agency</u>
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 70 FT)	METAL ROD (WITH REMOVABLE ID DISK)	MNDT

Description: (2009) Stamping: 3108 AZ 2009

4.0 MILES NORTH OF GRAND RAPIDS, 4.2 MILES NORTHERLY ALONG TRUNK HIGHWAY 38 FROM THE JUNCTION OF TRUNK HIGHWAY 38 AND TRUNK HIGHWAY 2 IN GRAND RAPIDS, AT TRUNK HIGHWAY 38 MILEPOINT 4.2, 47.9 FEET NORTHEAST OF TRUNK HIGHWAY 38, 198.2 FEET SOUTHEAST OF PINE RIDGE ROAD, 8.5 FEET NORTHWEST OF A BIKE PATH, 29.5 FEET NORTHWEST OF A BALL FIELD FENCE, 29.0 FEET WEST OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

<u>NAVD88</u>			<u>Ellipsoid (NAD83)</u>			<u>Project Info</u>	
<u>Height</u>	<u>Acc</u>	<u>Order (/Class)</u>	<u>Height</u>	<u>Acc</u>	<u>Adj</u>	<u>Determination Method</u>	<u>Year</u> <u>Reference</u>
1305.932	.016	2/1				VERTICAL ADJUSTMENT	2012 00000723
1305.923	.016	2/1				VERTICAL CONTROL SURVEY	2010 VTH38

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

<u>NAVD88</u>			<u>Ellipsoid (NAD83)</u>			<u>Project Info</u>	
<u>Height</u>	<u>Acc</u>	<u>Order (/Class)</u>	<u>Height</u>	<u>Acc</u>	<u>Adj</u>	<u>Determination Method</u>	<u>Year</u> <u>Reference</u>
1305.946	.262		1209.381	.197	2011	GPS - OPUS	2022 GPSBM
1305.982	.262		1209.417	.197	2011	GPS - RTRN	2021 RTRN2021
			1209.355	.006	2011	HORIZONTAL ADJUSTMENT	2012 GPS2800
1305.936	.131		1209.450	.066	2007	HORIZONTAL ADJUSTMENT	2011 GPS2802
1305.936	.131		1209.450	.066	2007	GPS - STATIC	2010 HASCA
1305.936	.131		1209.499	.066	1996	GPS - STATIC	2010 HASCA

Geoid Separations(ft): GEOID18 = -96.565 12B = -96.542 09 = -96.443 03 = -96.404

Lat/Lon and County Coordinates (Feet)

<u>NAD83(2011)</u>		<u>Itasca County - South Zone</u>		<u>Project Info</u>		
<u>Latitude</u>	<u>Longitude</u>	<u>X</u>	<u>Y</u>	<u>Acc</u>	<u>Order</u>	<u>Determination Method</u>
47 17 37.86986	93 32 00.22135	549619.031	197625.694	.131	3	GPS - OPUS
47 17 37.86938	93 32 00.22055	549619.086	197625.645	.131	3	GPS - RTRN
47 17 37.87016	93 32 00.22100	549619.055	197625.724	.007		ADJUSTMENT
						2012 GPS2800
<u>NAD83(2007)</u>		<u>Itasca County - South Zone</u>		<u>Project Info</u>		
<u>Latitude</u>	<u>Longitude</u>	<u>X</u>	<u>Y</u>	<u>Acc</u>	<u>Order</u>	<u>Determination Method</u>
47 17 37.87003	93 32 00.22189	549618.994	197625.711	.033	C	ADJUSTMENT
47 17 37.87003	93 32 00.22189	549618.994	197625.711	.033	C	GPS - STATIC
						2010 HASCA
<u>NAD83(1996)</u>		<u>Itasca County - South Zone</u>		<u>Project Info</u>		
<u>Latitude</u>	<u>Longitude</u>	<u>X</u>	<u>Y</u>	<u>Acc</u>	<u>Order</u>	<u>Determination Method</u>
47 17 37.87024	93 32 00.22175	549619.003	197625.732	.033	C	GPS - STATIC
						2010 HASCA

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - North Zone		UTM - Zone 15		Acc	Order	Determination Method	Project Info	
<u>X</u>	<u>Y</u>	<u>X</u>	<u>Y</u>				<u>Year</u>	<u>Reference</u>
2517123.523	617936.490	1508104.809	17184866.179	.131	3	GPS - OPUS	2022	GPSBM
2517123.578	617936.441	1508104.864	17184866.130	.131	3	GPS - RTRN	2021	RTRN2021
2517123.548	617936.520	1508104.833	17184866.209	.007		ADJUSTMENT	2012	GPS2800

NAD83(2007)

MN State Plane - North Zone		UTM - Zone 15		Acc	Order	Determination Method	Project Info	
<u>X</u>	<u>Y</u>	<u>X</u>	<u>Y</u>				<u>Year</u>	<u>Reference</u>
2517123.486	617936.507	1508104.772	17184866.196	.033	C	ADJUSTMENT	2011	GPS2802
2517123.486	617936.507	1508104.772	17184866.196	.033	C	GPS - STATIC	2010	HASCA

NAD83(1996)

MN State Plane - North Zone		UTM - Zone 15		Acc	Order	Determination Method	Project Info	
<u>X</u>	<u>Y</u>	<u>X</u>	<u>Y</u>				<u>Year</u>	<u>Reference</u>
2517123.496	617936.528	1508104.782	17184866.218	.033	C	GPS - STATIC	2010	HASCA

Station Photos

<u>Type</u>	<u>File Name</u>	<u>Dir</u>	<u>Date</u>
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/itasca/3108_AZ-DM8118-3E-16NOV2021.jpg	E	Nov 16, 2021
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/itasca/3108_AZ-DM8118-2-16NOV2021.jpg		Nov 16, 2021
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/itasca/3108_AZ-DM8118-1-16NOV2021.jpg		Nov 16, 2021

** All station images can be viewed at: <ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos> **