



Mn/DOT Name: PERTH MNDT

NGS Name: PERTH

County: BLUE EARTH, MN (Sheet 1)

NGS ACRN: [PQ0094](#) [Get Map](#)
 NGS Quad / Sta Num : 44094232/1022
 USGS Quad: PERTH

		<u>Reference</u>		<u>Reference</u>	<u>Vert</u>	<u>Horz</u>
<u>1/4</u>	<u>Sec</u>	<u>Twp</u>	<u>Rng</u>	<u>Latitude</u>	<u>Longitude</u>	<u>Order</u>
SE	7	107 N	29 W	440447.36	942127.41	2 C

<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>
1972	2024	GOOD	Horz=YES Vert=YES	YES		FLUSH	BAR MAG IN DRILL HOLE

<u>Monument Type</u>	<u>Disk Type</u>	<u>Mon. Agency</u>
CONCRETE MONUMENT (CAST-IN-PLACE)	TRAVERSE STATION DISK	MNDT

Description: (2016) Stamping: PERTH 1972

3.5 MILES NORTHEAST OF MADELIA, 2.7 MILES NORTHEAST ALONG TRUNK HIGHWAY 60 FROM THE JUNCTION OF TRUNK HIGHWAY 15 AND TRUNK HIGHWAY 60 IN MADELIA (THE JUNCTION IS 1.0 MILE NORTHEAST OF MADELIA), AT TRUNK HIGHWAY 60 MILEPOINT 86.75, 210.97 FEET EAST-NORTHEAST OF PERTH MNDT RM 2, 88.5 FEET SOUTHEAST OF EASTBOUND TRUNK HIGHWAY 60, 72.0 FEET NORTHEAST OF DRIVEWAY NUMBER 47593, 48.64 FEET WEST-SOUTHWEST OF PERTH MNDT RM 1, 1.0 FOOT NORTHWEST OF A WITNESS POST.

Station Pair: ROSEN - BLUE EARTH, MN

Leveling-Derived Orthometric Heights (Feet)

<u>NAVD88</u>			<u>Ellipsoid (NAD83)</u>			<u>Determination Method</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>Year</u>	<u>Reference</u>	
1002.209	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938	
1002.206	.016	2/1				VERTICAL CONTROL SURVEY	2017	VJUDS	
1002.206	.016	2/0				VERTICAL ADJUSTMENT	1991	00000025	

<u>NGVD29</u>			<u>Ellipsoid (NAD83)</u>			<u>Determination Method</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>Year</u>	<u>Reference</u>	
1002.006	.016	2/0				UNKNOWN/APPROXIMATE	1992	UNCHECKD	
1002.006	.016	2				VERTICAL CONTROL SURVEY	1973	L22938	
1002.006	.016	2				VERTICAL CONTROL SURVEY	1973	L17 MINN	

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

<u>NAVD88</u>			<u>Ellipsoid (NAD83)</u>			<u>Determination Method</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>Year</u>	<u>Reference</u>	
1002.209			909.972	.008	2011	HORIZONTAL ADJUSTMENT	2025	GPS3800	
1002.242	.262		910.001	.197	2011	GPS - RTRN	2022	RTRN2022	
1002.163	.262		909.896	.197	2011	GPS - RTRN	2016	RTRN2016	
1002.288			909.972	.008	2011	HORIZONTAL ADJUSTMENT	2014	GPS3033	
1002.232	.131		910.156	.066	1996	GPS - STATIC	2014	HMADE	
1002.288			909.978	.008	2011	GPS - STATIC	2014	HMADE	
1002.170	.262		909.903	.197	2011	GPS - RTRN	2014	RTRN2014	
			909.972	.008	2011	HORIZONTAL ADJUSTMENT	2012	GPS2800	
			910.047	.066	2007	HORIZONTAL ADJUSTMENT	2010	GPS2250-B	
			910.047	.010	2007	HORIZONTAL ADJUSTMENT	2007	GPS2300	
1002.196	.131		910.156	.066	1996	HORIZONTAL ADJUSTMENT	2006	GPS2250	
1002.196	.131		910.156	.066	1996	GPS - STATIC	2006	HBRWN	
1002.196	.131		910.156	.066	1996	HORIZONTAL ADJUSTMENT	2004	GPS1986	
1002.196	.131		910.156	.066	1996	GPS - STATIC	2003	HEARTH	
1002.196	.131		910.156	.066	1996	HORIZONTAL ADJUSTMENT	2003	GPS1884	
1002.196	.131		910.156	.066	1996	GPS - STATIC	2002	HWATO	
1000.654	.197		908.738	.131	1996	HORIZONTAL ADJUSTMENT	1999	17648	

Geoid Separations(ft): GEOID18 = -92.241 12B = -92.267 09 = -92.188 03 = -91.958

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Blue Earth County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 04 47.36410	94 21 27.41209	476098.976	184504.919	.007		ADJUSTMENT	2025	GPS3800
44 04 47.36410	94 21 27.41209	476098.976	184504.919	.007	C	GPS - STATIC	2024	H23BLUE1
44 04 47.36387	94 21 27.41325	476098.891	184504.896	.131	3	GPS - RTRN	2022	RTRN2022
44 04 47.36442	94 21 27.41210	476098.975	184504.952	.131	3	GPS - RTRN	2016	RTRN2016
44 04 47.36410	94 21 27.41209	476098.976	184504.919	.007		ADJUSTMENT	2014	GPS3033
44 04 47.36414	94 21 27.41213	476098.973	184504.923	.007	C	GPS - STATIC	2014	HMADE
44 04 47.36445	94 21 27.41271	476098.931	184504.954	.131	3	GPS - RTRN	2014	RTRN2014
44 04 47.36410	94 21 27.41209	476098.976	184504.919	.007		ADJUSTMENT	2012	GPS2800

NAD83(2007)

Geodetic Position		Blue Earth County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 04 47.36405	94 21 27.41297	476098.912	184504.914	.033	C	ADJUSTMENT	2010	GPS2250-B
44 04 47.36405	94 21 27.41297	476098.912	184504.914	.010		ADJUSTMENT	2007	GPS2300

NAD83(1996)

Geodetic Position		Blue Earth County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 04 47.36363	94 21 27.41252	476098.944	184504.871	.066		NCAT	2024	H23BLUE1
44 04 47.36366	94 21 27.41245	476098.949	184504.875	.033	C	GPS - STATIC	2014	HMADE
44 04 47.36366	94 21 27.41245	476098.949	184504.875	.033	C	ADJUSTMENT	2006	GPS2250
44 04 47.36366	94 21 27.41245	476098.949	184504.875	.033	C	GPS - STATIC	2006	HBRWN
44 04 47.36366	94 21 27.41245	476098.949	184504.875	.033	C	ADJUSTMENT	2004	GPS1986
44 04 47.36366	94 21 27.41245	476098.949	184504.875	.033	C	GPS - STATIC	2003	HEARTH
44 04 47.36366	94 21 27.41245	476098.949	184504.875	.033	C	ADJUSTMENT	2003	GPS1884
44 04 47.36366	94 21 27.41245	476098.949	184504.874	.033	C	GPS - STATIC	2002	HWATO
44 04 47.36573	94 21 27.41092	476099.062	184505.084	.066	2	ADJUSTMENT	1999	17648

NAD83(1986)

Geodetic Position		Blue Earth County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 04 47.36105	94 21 27.40523	476099.476	184504.610	.066	2	ADJUSTMENT	1986	17289

NAD27

Geodetic Position		Blue Earth County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 04 47.50103	94 21 26.54854			.100	2	CLASSICAL SURVEY	1977	16059

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15				Project Info		
<u>X</u>	<u>Y</u>	<u>X</u>	<u>Y</u>	<u>Acc</u>	<u>Order</u>	<u>Determination Method</u>	<u>Year</u>	<u>Reference</u>
2530694.221	721926.669	1283790.605	16015829.757	.007		ADJUSTMENT	2025	GPS3800
2530694.221	721926.669	1283790.605	16015829.757	.007	C	GPS - STATIC	2024	H23BLUE1
2530694.137	721926.646	1283790.520	16015829.735	.131	3	GPS - RTRN	2022	RTRN2022
2530694.221	721926.702	1283790.605	16015829.789	.131	3	GPS - RTRN	2016	RTRN2016
2530694.221	721926.669	1283790.605	16015829.757	.007		ADJUSTMENT	2014	GPS3033
2530694.218	721926.673	1283790.602	16015829.761	.007	C	GPS - STATIC	2014	HMADE
2530694.176	721926.705	1283790.561	16015829.793	.131	3	GPS - RTRN	2014	RTRN2014
2530694.221	721926.669	1283790.605	16015829.757	.007		ADJUSTMENT	2012	GPS2800

NAD83(2007)

MN State Plane - South Zone		UTM - Zone 15				Project Info		
<u>X</u>	<u>Y</u>	<u>X</u>	<u>Y</u>	<u>Acc</u>	<u>Order</u>	<u>Determination Method</u>	<u>Year</u>	<u>Reference</u>
2530694.157	721926.665	1283790.541	16015829.753	.033	C	ADJUSTMENT	2010	GPS2250-B
2530694.157	721926.665	1283790.541	16015829.753	.010		ADJUSTMENT	2007	GPS2300

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15				Project Info		
<u>X</u>	<u>Y</u>	<u>X</u>	<u>Y</u>	<u>Acc</u>	<u>Order</u>	<u>Determination Method</u>	<u>Year</u>	<u>Reference</u>
2530694.190	721926.622	1283790.573	16015829.710	.066		NCAT	2024	H23BLUE1
2530694.195	721926.625	1283790.578	16015829.713	.033	C	GPS - STATIC	2014	HMADE
2530694.195	721926.625	1283790.578	16015829.713	.033	C	ADJUSTMENT	2006	GPS2250
2530694.195	721926.625	1283790.578	16015829.713	.033	C	GPS - STATIC	2006	HBRWN
2530694.195	721926.625	1283790.578	16015829.713	.033	C	ADJUSTMENT	2004	GPS1986
2530694.195	721926.625	1283790.578	16015829.713	.033	C	GPS - STATIC	2003	HEARTH
2530694.195	721926.625	1283790.578	16015829.713	.033	C	ADJUSTMENT	2003	GPS1884
2530694.195	721926.625	1283790.578	16015829.713	.033	C	GPS - STATIC	2002	HWATO
2530694.308	721926.834	1283790.693	16015829.920	.066	2	ADJUSTMENT	1999	17648

NAD83(1986)

MN State Plane - South Zone		UTM - Zone 15				Project Info		
<u>X</u>	<u>Y</u>	<u>X</u>	<u>Y</u>	<u>Acc</u>	<u>Order</u>	<u>Determination Method</u>	<u>Year</u>	<u>Reference</u>
2530694.721	721926.358	1283791.101	16015829.440	.066	2	ADJUSTMENT	1986	17289

NAD27

MN State Plane - South Zone						Project Info		
<u>X</u>	<u>Y</u>	<u>X</u>	<u>Y</u>	<u>Acc</u>	<u>Order</u>	<u>Determination Method</u>	<u>Year</u>	<u>Reference</u>
1906087.933	393852.640			.100	2	CLASSICAL SURVEY	1977	16059

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/blue_earth/PERTH-PQ0094-3SE-03MAY2016.jpg	SE	May 3, 2016
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/blue_earth/PERTH-PQ0094-2-03MAY2016.jpg		May 3, 2016
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/blue_earth/PERTH-PQ0094-1-03MAY2016.jpg		May 3, 2016

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