Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 0702 AA **NGS Name:** 0702 AA

County: WASECA, MN (Sheet 1)

NGS ACRN: PP3520 Get Map
NGS Quad / Sta Num : 44093331/
USGS Quad: MADISON LAKE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	30	108 N	24 W	440816.40	934604.49	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1988	2022	GOOD	Horz=NO Vert=YES	YES		FLUSH	MARKER W/BAR MAGNET

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 25 FT)

Disk Type
VERTICAL CONTROL DISK

Mon. Agency
MNDT

Description: (1988) **Stamping:** 0702 AA 1988

3.3 MILES NORTHWEST OF JANESVILLE, 4.0 MILES NORTHWEST ALONG TRUNK HIGHWAY 14 FROM THE JUNCTION OF TRUNK HIGHWAY 14 AND COUNTY ROAD 3 IN JANESVILLE, AT TRUNK HIGHWAY 14 MILEPOINT 143.75, 189.0 FEET SOUTHWEST OF EASTBOUND TRUNK HIGHWAY 14, 35.0 FEET EAST OF COUNTY ROAD 37, 4.4 FEET NORTH-NORTHEAST OF RIGHT-OF-WAY MONUMENT STATION 314+81, 1.5 FEET NORTH OF A WITNESS POST.

Station Notes
DUE TO TREE COVER, THIS SURVEY MARK HAS BEEN ABANDONED FOR MNDOT GEODETIC HORIZONTAL SURVEYS.

Leveling-Derived Orthometric Heights (Elevations)

Vertical Datum	Orthometric (Feet) Height	Accuracy	Orthometric (Meters) Height	Accuracy	Survey Order/(Class)	Project Info Year	Reference
NAVD88	1062.065	0.016	323.718	0.005	2/1	2016	00000870
NGVD29	1061.914	0.016	323.672	0.005	2/1	1988	VWASE

Geoid Separations(ft): GEOID18 = -94.465 12B = -94.468 09 = -94.383 03 = -94.226

*** No Horizontal Positions in the Database ***

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/0702_AA-PP3520-3S-03AUG2022.jpg	S	Aug 3, 2022
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/0702_AA-PP3520-2-03AUG2022.jpg		Aug 3, 2022
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/0702_AA-PP3520-1-03AUG2022.jpg		Aug 24, 2022

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33138.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33138.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 104 GJS
NGS Name: 104 GJS

County: WASECA, MN (Sheet 1)

NGS ACRN: DR3029 Get Map
NGS Quad / Sta Num : 44093321/
USGS Quad: WATERVILLE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	29	108 N	22 W	440800.72	933024.13	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1963	2020	GOOD	Horz=YES Vert=YES	YES		RECESSED 4 IN.	BAR MAG IN DRILL HOLE

Monument Type	Disk Type	Mon. Agency
CONCRETE POST (PREFABRICATED)	SURVEY DISK	USGS

Description: (2010) **Stamping:** 104 GJS 1963 1169

3.7 MILES NORTH OF WASECA, 3.75 MILES NORTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND COUNTY ROAD 13, AT TRUNK HIGHWAY 13 MILEPOINT 35.8, 73.6 FEET EAST OF TRUNK HIGHWAY 13, 370.0 FEET SOUTH OF DRIVEWAY NUMBER 39741, 1.0 FOOT WEST OF A WITNESS POST.

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1169.168	0.016	356.363	0.005	2/1	2020	00000949

Geoid Separations(ft): GEOID18 = -93.714 12B = -93.720 09 = -93.642 03 = -93.468

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Geodetic Positions Longitude	County (Feet) X	County (Feet) Y	County (Meters) X	County (Meters) Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Project Info Reference
NAD83(2011)	44 08 00.71601	93 30 24.12891	345077.721	209791.882	105179.900	63944.694	327.809		2020	GPS3368
NAD83(1996)	44 08 00.71592	93 30 24.12919	345077.701	209791.873	105179.894	63944.691	327.866	C	2020	HTH13

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/104_GJS-DR3029-3E-10MAR2020.jpg	E	Mar 10, 2020
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/104_GJS-DR3029-2-10MAR2020.jpg		Mar 10, 2020
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/104_GJS-DR3029-1-10MAR2020.jpg		Mar 10, 2020

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33139.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33139.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 105 GJS
NGS Name: 105 GJS

County: WASECA, MN (Sheet 1)

NGS ACRN: DR3027 Get Map
NGS Quad / Sta Num : 44093321/
USGS Quad: WATERVILLE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	7	108 N	22 W	441003.73	933026.02	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1963	2018	GOOD	Horz=NO Vert=YES	YES		FLUSH	BAR MAG IN DRILL HOLE

Monument Type	Disk Type	Mon. Agency
CONCRETE POST (PREFABRICATED)	SURVEY DISK	USGS

Description: (1974) **Stamping:** 105 GJS 1963 1144

4.5 MILES SOUTHEAST OF WATERVILLE, 4.45 MILES SOUTHEAST ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 60 IN WATERVILLE, AT TRUNK HIGHWAY 13 MILEPOINT 38.1, 75.0 FEET WEST OF TRUNK HIGHWAY 13, 152.0 FEET NORTH OF 420TH AVENUE, 1.0 FOOT EAST OF A WITNESS POST.

Station Notes

DUE TO TREE COVER, THIS SURVEY MARK HAS BEEN ABANDONED FOR MNDOT GEODETIC HORIZONTAL SURVEYS.

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Accuracy	Orthometric (Meters) Height	Accuracy	Survey Order/(Class)	Project Info Year	Reference
NAVD88	1143.928	0.016	348.670	0.005	2/1	2020	00000949

Geoid Separations(ft): GEOID18 = -93.441 12B = -93.448 09 = -93.366 03 = -93.186

*** No Horizontal Positions in the Database ***

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/105_GJS-DR3027-3W-24JUL2018.jpg	W	Jul 24, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/105_GJS-DR3027-2-24JUL2018.jpg		Jul 24, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/105_GJS-DR3027-1-24JUL2018.jpg		Jul 24, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33140.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33140.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 106 GJS **NGS Name:** 106 GJS

County: WASECA, MN (Sheet 1)

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	6	108 N	22 W	441122.00	933046.00		

NGS ACRN: Get Map
NGS Quad / Sta Num : 44093321/
USGS Quad: WATERVILLE

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1963	2016	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	SURVEY DISK	USGS

Description: (1963) **Stamping:** 106 GJS 1963 1079

3.66 MILES SOUTHEAST OF WATERVILLE, 2.9 MILES SOUTHEAST ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 60, 74.0 FEET WEST AND 21.0 FEET SOUTH OF A ROAD AT A DRIVE WEST, 1.0 FOOT EAST OF A NORTH-SOUTH FENCE.

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -93.307 12B = -93.313 09 = -93.225 03 = -93.041

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33141.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33141.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 11 RLG

NGS Name: 11 RLG

County: WASECA, MN (Sheet 1)

NGS ACRN: Get Map
NGS Quad / Sta Num : 44093332/
USGS Quad: ST CLAIR

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	7	107 N	24 W	440457.00	934605.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1949	2009	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	SEE DESCRIPTION	USGS

Description: (1974)

Stamping: 11 RLG 1949

3.75 MILES SOUTHWEST OF JANESVILLE, 2.3 MILES WEST-NORTHWEST ALONG TRUNK HIGHWAY 14 (1ST STREET WEST) FROM THE JUNCTION OF TRUNK HIGHWAY 14 (1ST STREET WEST) AND COUNTY ROAD 3 (MAIN STREET) IN JANESVILLE, THEN 0.9 MILE WEST ON 390TH AVENUE, THEN 2.8 MILES SOUTH ON COUNTY ROAD 37 (WEST COUNTY LINE ROAD), 64.65 FEET EAST OF COUNTY ROAD 37 (WEST COUNTY LINE ROAD), 0.17 MILE NORTH OF STATION SMITHS MILL RM 2.

Station Notes

8-25-2009 THE ROAD WAS REBUILT, THE DITCHES WERE WIDENED. THE MARK WAS GRADED OUT.

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -94.639 12B = -94.642 09 = -94.563 03 = -94.429

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33142.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33142.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 110 GJS

NGS Name: 110 GJS

County: WASECA, MN (Sheet 1)

NGS ACRN: Get Map
NGS Quad / Sta Num : 44093322/
USGS Quad: WASECA

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	31	107 N	22 W	440212.00	933043.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1963	2018	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	SURVEY DISK	USGS

Description: (2010) **Stamping:** 110 GJS 1963 1136

3.10 MILES SOUTH OF WASECA, 3.3 MILES SOUTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 14, THEN 0.7 MILE WEST ON 330TH AVENUE, THEN 79.0 FEET SOUTH ON COUNTY ROAD 4 (128TH STREET), 45.0 FEET WEST AND 19.0 FEET SOUTH OF A TEE-ROAD EAST.

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -94.491 12B = -94.498 09 = -94.419 03 = -94.275

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33143.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33143.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 110 T **NGS Name:** 110 T

County: WASECA, MN (Sheet 1)

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	12	106 N	22 W	440002.00	932515.00		

NGS ACRN: Get Map
NGS Quad / Sta Num : 44093233/
USGS Quad: MERIDEN

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1960	2018	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	SURVEY DISK	USGS

Description: (1960) **Stamping:** 110 T 1960 1207

5.5 MILES SOUTH AND 4.3 MILES EAST OF WASECA, 4.8 MILES SOUTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 14 IN WASECA, THEN 2.0 MILES EAST ON 315TH AVENUE, THEN 0.7 MILE SOUTH ON COUNTY ROAD 5 (155TH STREET), THEN 1.8 MILES EAST ON 305TH AVENUE, 49.0 FEET NORTH AND 643.0 FEET WEST OF A ROAD AT A FENCE NORTH, 32.0 FEET WEST OF A FIELD ROAD NORTH, 24.0 FEET NORTH OF A POWER LINE, AT THE CREST OF A HILL.

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -94.180 12B = -94.180 09 = -94.101 03 = -93.966

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33144.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33144.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 111 GJS

NGS Name: 111 GJS

County: WASECA, MN (Sheet 1)

NGS ACRN: Get Map
NGS Quad / Sta Num : 44093322/
USGS Quad: WASECA

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	1	106 N	23 W	440051.00	933201.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1963	2018	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	SURVEY DISK	USGS

Description: (1963) **Stamping:** 111 GJS 1963 1109

IN WILTON, 112.0 FEET EAST OF THE INTERSECTION OF WILTON BRIDGE ROAD AND COUNTY ROAD 23 (WILTON RIVER ROAD), 26.0 FEET EAST AND 41.0 FEET NORTH OF A TEE-ROAD SOUTH COUNTY ROAD 23 (WILTON RIVER ROAD).

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -94.790 12B = -94.793 09 = -94.714 03 = -94.580

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_73351.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_73351.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 111 T

NGS Name: 111 T

County: WASECA, MN (Sheet 1)

NGS ACRN: Get Map
NGS Quad / Sta Num : 44093233/
USGS Quad: MERIDEN

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	10	106 N	22 W	440001.00	932720.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1960	2018	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	SURVEY DISK	USGS

Description: (2010) **Stamping:** 111 T 1960 1175

5.5 MILES SOUTH AND 2.6 MILES EAST OF WASECA, 4.8 MILES SOUTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 14, THEN 2.0 MILES EAST ON 315TH AVENUE, THEN 0.7 MILE SOUTH ON COUNTY ROAD 5 (155TH STREET), THEN 190.0 FEET EAST ON 305TH AVENUE, 43.0 FEET SOUTH AND 145.0 FEET EAST OF A TEE-ROAD EAST, ON THE SIDE OF A CUT.

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -94.413 12B = -94.419 09 = -94.331 03 = -94.203

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33145.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33145.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 112 GJS **NGS Name:** 112 GJS

County: WASECA, MN (Sheet 1)

NGS ACRN: Get Map
NGS Quad / Sta Num : 44093322/
USGS Quad: WASECA

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	10	106 N	23 W	440028.00	933408.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1963	2018	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	SURVEY DISK	USGS

Description: (1963) **Stamping:** 112 GJS 1963 1090

1.79 MILES WEST-SOUTHWEST OF WILTON, 1.3 MILES WEST ALONG WILTON BRIDGE ROAD FROM THE JUNCTION OF WILTON BRIDGE ROAD AND COUNTY ROAD 23 (WILTON RIVER ROAD WEST), THEN 0.5 MILE WEST ON 310TH AVENUE, 539.89 FEET WEST OF THE INTERSECTION OF 100TH STREET AND 310TH AVENUE, 558.0 FEET WEST AND 45.0 FEET SOUTH OF THE CROSSROADS, 3.0 FEET NORTH OF AN EAST-WEST FENCE.

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -94.987 12B = -94.990 09 = -94.915 03 = -94.783

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33146.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33146.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 113 GJS **NGS Name:** 113 GJS

County: WASECA, MN (Sheet 1)

NGS ACRN: Get Map
NGS Quad / Sta Num : 44093322/
USGS Quad: WASECA

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	4	106 N	23 W	440028.39	933625.08		3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1963	2018	GOOD	Horz=YES Vert=YES	YES		PROJECTS 6 IN.	STEEL ROD IMBED IN MON

Monument Type	Disk Type	Mon. Agency
CONCRETE POST (PREFABRICATED)	SURVEY DISK	USGS

Description: (1963) **Stamping:** 113 GJS 1963 1089

7.0 MILES SOUTHWEST OF WASECA, 0.25 MILE WEST ALONG ELM STREET/OLD TRUNK HIGHWAY 14 FROM THE JUNCTION OF ELM STREET/OLD TRUNK HIGHWAY 14 AND TRUNK HIGHWAY 13 IN WASECA, THEN 0.8 MILE SOUTH ON 4TH STREET, THEN 5.70 MILES SOUTH AND WEST ON COUNTY ROAD 4, 57.7 FEET NORTH OF 310TH AVENUE, 31.8 FEET EAST OF COUNTY ROAD 29, 25.5 FEET SOUTH OF A FIELD ENTRANCE, 15.2 FEET WEST OF THE NORTHWEST CORNER OF A CABLE BOX NUMBER E 42, 2.0 FEET WEST OF A WITNESS POST.

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -95.098 12B = -95.098 09 = -95.019 03 = -94.895

*** No Horizontal Positions in the Database ***

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/113_GJS-3E-31JUL2018.jpg	E	Jul 31, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/113_GJS-2-31JUL2018.jpg		Jul 31, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/113_GJS-1-31JUL2018.jpg		Jul 31, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33147.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33147.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 114 GJS **NGS Name:** 114 GJS

County: WASECA, MN (Sheet 1)

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	28	107 N	23 W	440212.00	933624.00		

NGS ACRN: Get Map
NGS Quad / Sta Num : 44093322/
USGS Quad: WASECA

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1963	2018	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	SURVEY DISK	USGS

Description: (1963) **Stamping:** 114 GJS 1963 1086

5.80 MILES SOUTHWEST OF WASECA, 1.3 MILES WEST ALONG TRUNK HIGHWAY 14 FROM THE JUNCTION OF TRUNK HIGHWAY 14 AND TRUNK HIGHWAY 13 IN WASECA, THEN 0.7 MILE WEST ON COUNTY ROAD 2 (BROWN AVENUE), THEN 2.0 MILES SOUTH ON COUNTY ROAD 27 (110TH STREET), THEN 1.9 MILES WEST ON COUNTY ROAD 9 (340TH AVENUE), THEN 1.0 MILE SOUTH ON COUNTY ROAD 9 (90TH STREET), THEN 1.0 MILE WEST ON COUNTY ROAD 9 UNTIL IT CHANGES TO 330TH AVENUE, 110.48 FEET EAST OF THE CENTER OF THE JUNCTION OF COUNTY ROAD 61 AND 330TH AVENUE, 2.0 FEET NORTH OF A POWER POLE.

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -94.924 12B = -94.928 09 = -94.855 03 = -94. 711

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33148.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33148.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 115 GJS **NGS Name:** 115 GJS

County: WASECA, MN (Sheet 1)

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	17	107 N	23 W	440358.00	933720.00		

NGS ACRN: Get Map
NGS Quad / Sta Num : 44093322/
USGS Quad: WASECA

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1963	2018	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	SURVEY DISK	USGS

Description: (1963) **Stamping:** 115 GJS 1963 1110

5.53 MILES SOUTHEAST OF JANESVILLE, 4.4 MILES EAST ALONG TRUNK HIGHWAY 14 (1ST STREET) FROM THE JUNCTION OF TRUNK HIGHWAY 14 (1ST STREET) AND COUNTY ROAD 3 (MAIN STREET) IN JANESVILLE, THEN 2.6 MILES SOUTH ON COUNTY ROAD 17 (73RD STREET), 0.98 MILE SOUTH OF STATION ST. MARY MNDT, 55.0 FEET NORTH AND 31.0 FEET EAST OF THE CROSSROADS.

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -94.796 12B = -94.800 09 = -94.731 03 = -94.573

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33149.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33149.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 116 GJS
NGS Name: 116 GJS

County: WASECA, MN (Sheet 1)

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	5	107 N	23 W	440613.00	933719.00		

NGS ACRN: Get Map
NGS Quad / Sta Num : 44093322/
USGS Quad: WASECA

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1963	1988	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	SEE DESCRIPTION	USGS

Description: (1988)
Stamping: 116 GJS 1963 1139

4.42 MILES SOUTHEAST OF JANESVILLE, 4.4 MILES EAST ALONG TRUNK HIGHWAY 14 (1ST STREET) FROM THE JUNCTION OF TRUNK HIGHWAY 14 (1ST STREET) AND COUNTY ROAD 3 (MAIN STREET) IN JANESVILLE, 137.64 FEET EAST-SOUTHEAST OF THE CENTER OF THE INTERSECTION OF TRUNK HIGHWAY 14 AND A RAILROAD CROSSING, 11.0 FEET SOUTH OF THE TRACKS.

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -94.593 12B = -94.596 09 = -94.527 03 = -94.353

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33150.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33150.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 117 GJS USGS **NGS Name:** 117 GJS

County: WASECA, MN (Sheet 1)

NGS ACRN: PP2905 Get Map
NGS Quad / Sta Num : 44093323/
USGS Quad: JANESVILLE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	35	108 N	24 W	440641.95	934003.06	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1963	2010	NOT FOUND	Horz=NO Vert=NO	YES		RECESSED 5 IN.	STEEL SPIKE ADJ TO MON

Monument Type
CONCRETE MONUMENT (CAST-IN-PLACE)

Disk Type
BENCH MARK DISK

Mon. Agency
USGS

Description: (2010)

Stamping: 117 GJS 1963 1121

2.05 MILES EAST ALONG TRUNK HIGHWAY 14 FROM THE JUNCTION OF TRUNK HIGHWAY 14 AND COUNTY ROAD 3 (MAIN STREET) IN JANESVILLE, NEAR THE JUNCTION OF TRUNK HIGHWAY 14 AND COUNTY ROAD 33/COUNTY ROAD 68, AT TRUNK HIGHWAY 14 MILEPOINT 149.4, 89.0 FEET SOUTH-SOUTHWEST OF TRUNK HIGHWAY 14, 18.0 FEET WEST OF COUNTY ROAD 33, 47.6 FEET SOUTH-SOUTHEAST OF A UNDERGROUND CABLE MARKER POST NUMBER MN022141, 15.0 FEET NORTH-NORTHEAST OF THE NORTH RAIL OF THE RAILROAD TRACKS, 3.0 FEET NORTH OF A RAILROAD CROSSING SIGN, 0.5 FOOT NORTHWEST OF A WITNESS POST.

Station Notes

THE SURVEY MARK IS ON RAILROAD PROPERTY AND HAS BEEN ABANDONED FOR MNDOT GEODETIC USE.

Leveling-Derived Orthometric Heights (Elevations)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1120.952	0.016	341.667	0.005	2/1	1995	00000135
NGVD29	1120.802	0.016	341.621	0.005	2/1	1988	VWASE

Geoid Separations(ft): GEOID18 = -94.659 12B = -94.665 09 = -94.593 03 = -94.422

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Geodetic Positions Longitude	County (Feet) X	County (Feet) Y	County (Meters) X	County (Meters) Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Project Info Reference
NAD83(2011)	44 06 41.95475	93 40 03.05532	302782.436	202159.410	92288.2710	61618.312	312.798		2012	GPS2800
NAD83(2007)	44 06 41.95474	93 40 03.05609	302782.380	202159.410	92288.2540	61618.311	312.822		2007	GPS2300
NAD83(1996)	44 06 41.95464	93 40 03.05567	302782.410	202159.399	92288.2630	61618.308	312.870	C	2005	GPS2088
NAD83(1986)	44 06 41.95594	93 40 03.04795	302782.975	202159.526	92288.4350	61618.347		3	1986	17289
NAD27	44 06 42.09694	93 40 02.23817						3	1982	16847

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/117_GJS-PP2905-3W-08JUN2004.jpg	W	Jun 8, 2004
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/117_GJS-PP2905-2-08JUN2004.jpg		Jun 8, 2004
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/117_GJS-PP2905-1-08JUN2004.jpg		Jun 8, 2004

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33151.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33151.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 123 GJS **NGS Name:** 123 GJS

County: WASECA, MN (Sheet 1)

NGS ACRN: Get Map
NGS Quad / Sta Num : 44093324/
USGS Quad: ELYSIAN

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	1	108 N	24 W	441138.00	933904.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1963	2016	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	SURVEY DISK	USGS

Description: (1963) **Stamping:** 123 GJS 1963 1034

1.37 MILES EAST-SOUTHEAST OF ELYSIAN, 1.3 MILES EAST ALONG TRUNK HIGHWAY 60 FROM THE JUNCTION OF TRUNK HIGHWAY 60 AND 3RD STREET IN ELYSIAN, THEN 0.3 MILE SOUTH ON COUNTY ROAD 5 (ELYSIAN LAKE ROAD), THEN 200.0 FEET EAST ON COUNTY ROAD 35 (REEDS LAKE ROAD), 236.0 FEET SOUTHEAST AND 48.0 FEET NORTH OF THE JUNCTION OF COUNTY ROAD 35 AND COUNTY ROAD 5, 2.0 FEET SOUTH OF AN EAST-WEST FENCE LINE.

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -94.209 12B = -94.216 09 = -94.140 03 = -93.934

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33152.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33152.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 124 GJS

NGS Name: 124 GJS

County: WASECA, MN (Sheet 1)

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	8	108 N	23 W	441005.00	933739.00		

NGS ACRN: Get Map
NGS Quad / Sta Num : 44093324/
USGS Quad: ELYSIAN

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1963	2018	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	SURVEY DISK	USGS

Description: (2016) **Stamping:** 124 GJS 1963 1046

3.25 MILES SOUTHEAST OF ELYSIAN, 1.3 MILES EAST ALONG TRUNK HIGHWAY 60 FROM THE JUNCTION OF TRUNK HIGHWAY 60 AND 3RD STREET IN ELYSIAN, 0.3 MILE SOUTH ON COUNTY ROAD 5 (ELYSIAN LAKE ROAD), 0.9 MILE EAST ON COUNTY ROAD 35 (REEDS LAKE ROAD), 1.1 MILES SOUTH ON COUNTY ROAD 5, 0.5 MILE SOUTH ON COUNTY ROAD 17, 286.0 FEET NORTH AND 28.0 FEET EAST OF THE CROSSROADS, 2.0 FEET NORTH OF A POWER POLE.

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -94.275 12B = -94.278 09 = -94.206 03 = -94.006

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33153.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33153.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 125 GJS **NGS Name:** 125 GJS

County: WASECA, MN (Sheet 1)

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	30	108 N	23 W	440753.00	933741.00		

NGS ACRN: Get Map
NGS Quad / Sta Num : 44093324/
USGS Quad: ELYSIAN

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1963	2018	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	SURVEY DISK	USGS

Description: (1963) **Stamping:** 125 GJS 1963 1148

4.15 MILES NORTHEAST OF JANESVILLE, 4.4 MILES EAST ALONG TRUNK HIGHWAY 14 (1ST STREET) FROM THE JUNCTION OF TRUNK HIGHWAY 14 (1ST STREET) AND COUNTY ROAD 3 (MAIN STREET) IN JANESVILLE, THEN 1.9 MILES NORTH AND WEST ON COUNTY ROAD 17 (73RD STREET), THEN 0.2 MILE CONTINUED NORTHWEST ON COUNTY ROAD 17, 35.0 FEET WEST AND 26.0 FEET NORTH OF A TEE-ROAD WEST.

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -94.472 12B = -94.475 09 = -94.406 03 = -94.219

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33154.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33154.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 15 KED **NGS Name:** 15 KED

County: WASECA, MN (Sheet 1)

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	20	106 N	23 W	435843.00	933730.00		

NGS ACRN: Get Map
NGS Quad / Sta Num : 43093411/
USGS Quad: OTISCO

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1966	2018	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	SURVEY DISK	USGS

Description: (1966) **Stamping:** 15 KED 1966

3.0 MILES NORTH AND 3.5 MILES EAST OF WALDORF, 454.0 FEET EAST OF A RIGHT ANGLE BEND IN COUNTY ROAD 11 (290TH AVENUE), 33.5 FEET SOUTH AND 8.0 FEET WEST OF A ROAD AT A DRIVEWAY NORTH, 1.5 FEET SOUTH AND 25.5 FEET EAST OF A RIGHT-OF-WAY FENCE CORNER, AT THE NORTHWEST CORNER OF THE TREES.

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -95.292 12B = -95.292 09 = -95.210 03 = -95.102

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33155.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33155.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 16 KED
NGS Name: 16 KED

County: WASECA, MN (Sheet 1)

NGS ACRN: DH3108 Get Map
NGS Quad / Sta Num : 43093414/
USGS Quad: WALDORF

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	31	106 N	23 W	435606.70	933741.30		C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1966	2021	GOOD	Horz=YES Vert=YES	YES		FLUSH	STEEL ROD IMBED IN MON

Monument Type	Disk Type	Mon. Agency
CONCRETE POST (PREFABRICATED)	SURVEY DISK	USGS

Description: (2004) **Stamping:** 16 KED 1966

3.5 MILES EAST OF WALDORF, 0.25 MILE EAST ALONG COUNTY ROAD 4 FROM THE JUNCTION OF TRUNK HIGHWAY 83 AND COUNTY ROAD 4 IN WALDORF, THEN 3.4 MILES EAST ON COUNTY ROAD 74 (260TH AVENUE), 45.4 FEET NORTH OF COUNTY ROAD 74, 261.0 FEET WEST OF COUNTY ROAD 11 (70TH STREET), 5.0 FEET NORTHEAST OF A POWER POLE WITH A GUY WIRE, 2.0 FEET SOUTH OF A WITNESS POST.

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -95.541 12B = -95.531 09 = -95.459 03 = -95.351

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Longitude	County (Feet) X	Y	County (Meters) X	Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Reference
NAD83(2011)	43 56 06.70494	93 37 41.29872	312569.890	137740.259	95271.4930	41983.315	312.222		2012	GPS2800
NAD83(2007)	43 56 06.70498	93 37 41.29949	312569.834	137740.264	95271.4760	41983.316	312.245		2007	GPS2300
NAD83(1996)	43 56 06.70456	93 37 41.29864	312569.896	137740.221	95271.4950	41983.303	312.294	C	2005	GPS2088

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/16_KED-DH3108-3N-19APR2021.jpg	N	Apr 19, 2021
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/16_KED-DH3108-2-19APR2021.jpg		Apr 19, 2021
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/16_KED-DH3108-1-19APR2021.jpg		Apr 19, 2021

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33156.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33156.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 17 KED
NGS Name: 17 KED

County: WASECA, MN (Sheet 1)

NGS ACRN: Get Map
NGS Quad / Sta Num : 43093412/
USGS Quad: FREEBORN

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	29	105 N	23 W	435145.43	933627.77		3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1966	2018	GOOD	Horz=YES Vert=YES	YES		FLUSH	SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
CONCRETE POST (PREFABRICATED)	SURVEY DISK	USGS

Description: (1966) **Stamping:** 17 KED 1966

6.3 MILES WEST-SOUTHWEST OF NEW RICHLAND, 6.0 MILES WEST ALONG TRUNK HIGHWAY 30 FROM THE JUNCTION OF TRUNK HIGHWAY 30 AND TRUNK HIGHWAY 13 IN NEW RICHLAND TO TRUNK HIGHWAY MILEPOINT 162.45, THEN 2.0 MILES SOUTH ON 80TH STREET, 38.5 FEET WEST OF 80TH STREET, 23.5 FEET SOUTH OF A FIELD ENTRANCE, 3.4 FEET WEST-NORTHWEST OF A WOODEN POST, 0.5 FOOT EAST OF A WITNESS POST.

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -95.925 12B = -95.909 09 = -95.856 03 = -95.718

*** No Horizontal Positions in the Database ***

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/17_KED-3W-25JUL2018.jpg	W	Jul 25, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/17_KED-2-25JUL2018.jpg		Jul 25, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/17_KED-1-25JUL2018.jpg		Jul 25, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33157.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33157.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 39 KED

NGS Name: 39 KED

County: WASECA, MN (Sheet 1)

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	8	105 N	22 W	435514.00	933022.00		

NGS ACRN: Get Map
NGS Quad / Sta Num : 43093411/
USGS Quad: OTISCO

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1966	2018	NOT FOUND	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	SURVEY DISK	USGS

Description: (1966) **Stamping:** 39 KED 1966

1.9 MILES NORTH AND 0.5 MILE WEST OF NEW RICHLAND, 0.5 MILE NORTH ON BROADWAY AVENUE FROM THE JUNCTION OF BROADWAY AVENUE AND TRUNK HIGHWAY 30 (2ND STREET) IN NEW RICHLAND, THEN 0.1 MILE WEST ON 5TH STREET, THEN 0.5 MILE NORTH ON COUNTY ROAD 12 (BIRCH AVENUE), THEN 0.4 MILE CONTINUED WEST ON COUNTY ROAD 12 (240TH AVENUE), THEN 1.0 MILE NORTH ON COUNTY ROAD 51 (130TH STREET), 27.0 FEET SOUTH AND 32.5 FEET EAST OF A ROAD AT AN EAST-WEST FENCE, 3.0 FEET SOUTH OF A POWER POLE, 1.7 FEET WEST OF A RIGHT-OF-WAY FENCE.

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -95.367 12B = -95.361 09 = -95.298 03 = -95.161

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33158.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33158.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 40 KED

NGS Name: 40 KED

County: WASECA, MN (Sheet 1)

NGS ACRN: Get Map
NGS Quad / Sta Num : 43093411/
USGS Quad: OTISCO

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	31	106 N	22 W	435658.00	933040.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1966	2018	DESTROYED	Horz=NO Vert=NO	NO	5086		SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
BRIDGE ABUTMENT	SURVEY DISK	USGS

Description: (1966)

Stamping: 40 KED 1966

3.9 MILES NORTH AND 0.7 MILE WEST OF NEW RICHLAND, IN THE SOUTHWEST CORNER OF COUNTY ROAD 51 BRIDGE NUMBER 5086 OVER THE LE SUEUR RIVER, 3.0 MILES NORTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 30, THEN 1.2 MILES WEST ON 260TH AVENUE, THEN 1.0 MILE NORTH ON COUNTY ROAD 51 (128TH STREET), 12.0 FEET WEST OF A ROAD.

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -95.167 12B = -95.164 09 = -95.092 03 = -94.964

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33159.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33159.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 4006 J

NGS Name: 4006 J

County: WASECA, MN (Sheet 1)

NGS ACRN: DQ6335 Get Map
NGS Quad / Sta Num : 44093321/
USGS Quad: WATERVILLE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	4	108 N	23 W	441144.72	933544.18	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1964	2024	GOOD	Horz=NO Vert=YES	YES		RECESSED 14 IN.	STEEL ROD IMBED IN MON

Monument Type	Disk Type	Mon. Agency
CONCRETE POST (PREFABRICATED)	BENCH MARK DISK	MNDT

Description: (2016) **Stamping:** 4006 J 1964

3.6 MILES EAST OF ELYSIAN, 3.6 MILES EAST ALONG TRUNK HIGHWAY 60 FROM THE JUNCTION OF TRUNK HIGHWAY 60 AND COUNTY ROAD 50 IN ELYSIAN, AT TRUNK HIGHWAY 60 MILEPOINT 130.35, 68.0 FEET SOUTH OF TRUNK HIGHWAY 60, 82.0 FEET WEST OF A POWER POLE, 60.0 FEET WEST OF DRIVEWAY NUMBER 8680, 15.0 FEET EAST OF AN OLD TELEPHONE PEDESTAL, 0.5 FOOT NORTH OF A WITNESS POST.

Station Notes

DUE TO TREE COVER, THIS SURVEY MARK HAS BEEN ABANDONED FOR MNDOT GEODETIC HORIZONTAL SURVEYS.

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Accuracy	Orthometric (Meters) Height	Accuracy	Survey Order/(Class)	Project Info Year	Reference
NAVD88	1086.704	0.016	331.228	0.005	2/1	2019	00000938

Geoid Separations(ft): GEOID18 = -93.920 12B = -93.920 09 = -93.848 03 = -93.645

*** No Horizontal Positions in the Database ***

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/4006_J-DQ6335-3S-16APR2024.jpg	S	Apr 16, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/4006_J-DQ6335-2-16APR2024.jpg		Apr 16, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/4006_J-DQ6335-1-16APR2024.jpg		Apr 16, 2024

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_17407.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_17407.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 4006 N **NGS Name:** 4006 N

County: WASECA, MN (Sheet 1)

NGS ACRN: DQ6334 Get Map
NGS Quad / Sta Num : 44093321/
USGS Quad: WATERVILLE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	4	108 N	23 W	441144.71	933556.42	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2016	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 2 IN.	BAR MAG IN DRILL HOLE

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 32 FT)

Disk Type
METAL ROD (WITH REMOVABLE ID DISK)

Mon. Agency
MNDT

Description: (2016) **Stamping:** 4006 N 2016

2.0 MILES SOUTHWEST OF WATERVILLE, 2.5 MILES SOUTHWEST AND WEST ALONG TRUNK HIGHWAY 60 FROM THE JUNCTION OF TRUNK HIGHWAY 60 AND TRUNK HIGHWAY 13 IN WATERVILLE, AT TRUNK HIGHWAY 60 MILEPOINT 130.15, 69.5 FEET SOUTH OF TRUNK HIGHWAY 60, 67.4 FEET EAST OF DRIVEWAY NUMBER 8393 EXTENDED, 1.5 FEET NORTH OF A WITNESS POST.

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1071.573	0.016	326.616	0.005	2/1	2019	00000938

Geoid Separations(ft): GEOID18 = -93.943 12B = -93.943 09 = -93.871 03 = -93.668

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Geodetic Positions Longitude	County (Feet) X	County (Feet) Y	County (Meters) X	County (Meters) Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Project Info Reference
NAD83(2011)	44 11 44.70814	93 35 56.42426	321030.124	232661.720	97850.1780	70915.434	297.984	3	2021	GPSBM

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/4006_N-DQ6334-3S-16APR2024.jpg	S	Apr 16, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/4006_N-DQ6334-2-16APR2024.jpg		Apr 16, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/4006_N-DQ6334-1-16APR2024.jpg		Apr 16, 2024

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_105702.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_105702.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8101 A **NGS Name:** 8101 A

County: WASECA, MN (Sheet 1)

NGS ACRN: DE8723 Get Map
NGS Quad / Sta Num : 43093144/
USGS Quad: NEW RICHLAND

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	8	105 N	22 W	435513.98	932912.90	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1966	2018	DESTROYED	Horz=NO Vert=NO	YES		FLUSH	STEEL SPIKE ADJ TO MON

Monument Type
CONCRETE MONUMENT (CAST-IN-PLACE)

Disk Type
BENCH MARK DISK

Mon. Agency
MNDT

Description: (2002) **Stamping:** 8101 A 1966

2.0 MILES NORTH OF THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 30 IN NEW RICHLAND, AT TRUNK HIGHWAY 13 MILEPOINT 20.45, 74.0 FEET WEST OF TRUNK HIGHWAY 13, 41.0 FEET SOUTH OF A DRIVEWAY, 0.7 FOOT SOUTHEAST OF A WITNESS POST.

Station Notes
THE DISK WAS TURNED IN TO THE OFFICE. FOUND THE CONCRETE BROKEN WITH THE DISK ON THE GROUND.

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Accuracy	Orthometric (Meters) Height	Accuracy	Survey Order/(Class)	Project Info Year	Reference
NAVD88	1154.732	0.016	351.963	0.005	2/1	2011	00000681

Geoid Separations(ft): GEOID18 = -95.275 12B = -95.272 09 = -95.210 03 = -95.062

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Longitude	County (Feet) X	Y	County (Meters) X	Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Reference
NAD83(2011)	43 55 13.98226	93 29 12.90187	349735.650	132112.297	106599.639	40267.909	322.926		2012	GPS2800
NAD83(2007)	43 55 13.98235	93 29 12.90267	349735.592	132112.306	106599.622	40267.912	322.952		2007	GPS2300
NAD83(1996)	43 55 13.98205	93 29 12.90168	349735.664	132112.275	106599.644	40267.902	323.010	C	2002	GPS1772

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8101_A-DE8723-3W-29MAY2009.jpg	W	May 29, 2009
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8101_A-DE8723-2-29MAY2009.jpg		May 29, 2009
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8101_A-DE8723-1-29MAY2009.jpg		May 29, 2009

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33160.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33160.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8101 A 1 **NGS Name:** 8101 A 1

County: WASECA, MN (Sheet 1)

NGS ACRN: OO0761 Get Map
NGS Quad / Sta Num : 43093144/
USGS Quad: NEW RICHLAND

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	16	105 N	22 W	435339.53	932911.00	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1978	2018	GOOD	Horz=NO Vert=NO	YES		FLUSH	NO MAG MATERIAL

Monument Type	Disk Type	Mon. Agency
CULVERT - ANY SIZE, ANY TYPE	BENCH MARK DISK	MNDT

Description: (2010) **Stamping:** 8101 A 1 1978

IN NEW RICHLAND, IN THE SOUTHEAST HEADWALL OF A TRUNK HIGHWAY 13 BOX CULVERT, 0.2 MILE NORTH OF THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 30, AT TRUNK HIGHWAY 13 MILEPOINT 18.65, 31.3 FEET EAST OF TRUNK HIGHWAY 13.

Station Notes

THE SURVEY MARK HAS BEEN DEEMED UNSAFE DUE TO FALL RISK AND HAS BEEN ABANDONED FOR MNDOT GEODETIC USE.

Leveling-Derived Orthometric Heights (Elevations)

Vertical Datum	Orthometric (Feet) Height	Accuracy	Orthometric (Meters) Height	Accuracy	Survey Order/(Class)	Project Info Year	Reference
NAVD88	1176.868	0.016	358.710	0.005	2/1	2020	00000949
NGVD29	1176.851	0.016	358.705	0.005	2/1	1992	UNCHECKD

Geoid Separations(ft): GEOID18 = -95.472 12B = -95.466 09 = -95.407 03 = -95.259

*** No Horizontal Positions in the Database ***

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8101_A_1-OO0761-3E-30JUL2018.jpg	E	Jul 30, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8101_A_1-OO0761-2-30JUL2018.jpg		Jul 30, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8101_A_1-OO0761-1-30JUL2018.jpg		Jul 30, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33161.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33161.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8101 AA **NGS Name:** 8101 AA

County: WASECA, MN (Sheet 1)

NGS ACRN: DL5467 Get Map
NGS Quad / Sta Num : 43093143/
USGS Quad: HARTLAND

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	33	105 N	22 W	435145.16	932910.73	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2008	2025	GOOD	Horz=YES Vert=YES	YES		FLUSH	BAR MAG IN DRILL HOLE

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 30 FT)

Disk Type
METAL ROD (WITH REMOVABLE ID DISK)

Mon. Agency
MNDT

Description: (2008)

Stamping: 8101 AA 2008

2.0 MILES SOUTH OF NEW RICHLAND, 2.0 MILES SOUTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 30 IN NEW RICHLAND, AT TRUNK HIGHWAY 13 MILEPOINT 16.60, 77.2 FEET WEST-SOUTHWEST OF TRUNK HIGHWAY 13, 32.8 FEET SOUTH OF 210TH AVENUE, 1.6 FEET EAST OF A WITNESS POST.

Station Pair: WILLIAM - WASECA, MN

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1210.545	0.016	368.975	0.005	2/1	2020	00000949

Geoid Separations(ft): GEOID18 = -95.689 12B = -95.682 09 = -95.633 03 = -95.469

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Geodetic Positions Longitude	County (Feet) X	County (Feet) Y	County (Meters) X	County (Meters) Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Project Info Reference
NAD83(2011)	43 51 45.16121	93 29 10.73499	349748.188	110965.477	106603.461	33822.345	339.807		2012	GPS2800
NAD83(2007)	43 51 45.16153	93 29 10.73586	349748.125	110965.509	106603.442	33822.355	339.832	C	2009	GPS2574
NAD83(1996)	43 51 45.16101	93 29 10.73515	349748.176	110965.457	106603.457	33822.339	339.896	C	2008	HMANC

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8101_AA-DL5467-3W-17SEP2025.jpg	W	Sep 17, 2025
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8101_AA-DL5467-2-17SEP2025.jpg		Sep 17, 2025
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8101_AA-DL5467-1-17SEP2025.jpg		Sep 17, 2025

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_80869.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_80869.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8101 AB **NGS Name:** 8101 AB

County: WASECA, MN (Sheet 1)

NGS ACRN: DL5468 Get Map
NGS Quad / Sta Num : 43093143/
USGS Quad: HARTLAND

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	33	105 N	22 W	435053.43	932900.60	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2008	2023	GOOD	Horz=YES Vert=YES	YES		RECESSED 3 IN.	BAR MAG IN DRILL HOLE

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 30 FT)

Disk Type
METAL ROD (WITH REMOVABLE ID DISK)

Mon. Agency
MNDT

Description: (2008) **Stamping:** 8101 AB 2008

3.0 MILES SOUTH OF NEW RICHLAND, 3.0 MILES SOUTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 30 IN NEW RICHLAND, AT TRUNK HIGHWAY 13 MILEPOINT 15.60, 66.6 FEET SOUTHWEST OF TRUNK HIGHWAY 13, 48.4 FEET NORTH OF COUNTY ROAD 70 (200TH AVENUE), 11.1 FEET NORTH OF CABLE PEDESTAL NUMBER 5000-11, 2.0 FEET EAST OF A WITNESS POST.

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Accuracy	Orthometric (Meters) Height	Accuracy	Survey Order/(Class)	Project Info Year	Reference
NAVD88	1216.310	0.016	370.732	0.005	2/1	2020	00000949

Geoid Separations(ft): GEOID18 = -95.771 12B = -95.764 09 = -95.712 03 = -95.541

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Longitude	County (Feet) X	Y	County (Meters) X	Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Reference
NAD83(2011)	43 50 53.43211	93 29 00.59994	350454.739	105722.171	106818.818	32224.182	341.543		2012	GPS2800
NAD83(2007)	43 50 53.43242	93 29 00.60079	350454.677	105722.203	106818.799	32224.192	341.568	C	2009	GPS2574
NAD83(1996)	43 50 53.43190	93 29 00.60008	350454.729	105722.150	106818.815	32224.176	341.632	C	2008	HMANC

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8101_AB-DL5468-3SW-24APR2023.jpg	SW	Apr 24, 2023
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8101_AB-DL5468-2-24APR2023.jpg		Apr 24, 2023
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8101_AB-DL5468-1-24APR2023.jpg		Apr 24, 2023

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_80870.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_80870.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8101 AC **NGS Name:** 8101 AC

County: WASECA, MN (Sheet 1)

NGS ACRN: DR3043 Get Map
NGS Quad / Sta Num : 43093144/
USGS Quad: NEW RICHLAND

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	17	105 N	22 W	435331.30	932911.78	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2018	2025	GOOD	Horz=YES Vert=YES	YES		RECESSED 3 IN.	BAR MAG IN DRILL HOLE

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 32 FT)

Disk Type
METAL ROD (WITH REMOVABLE ID DISK)

Mon. Agency
MNDT

Description: (2018) **Stamping:** 8101 AC 2018

IN NEW RICHLAND, AT THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 30 IN NEW RICHLAND, AT TRUNK HIGHWAY 13 MILEPOINT 18.5, 43.38 FEET WEST OF TRUNK HIGHWAY 13, 108.4 FEET NORTH OF TRUNK HIGHWAY 30, 68.4 FEET NORTHEAST OF A GAS STATION SIGN, 64.5 FEET NORTH-NORTHEAST OF A FIRE HYDRANT, 56.6 FEET EAST OF A LIGHT POLE, 1.0 FOOT EAST OF A WITNESS POST.

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1182.816	0.016	360.523	0.005	2/1	2020	00000949

Geoid Separations(ft): GEOID18 = -95.489 12B = -95.482 09 = -95.423 03 = -95.275

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Geodetic Positions Longitude	County (Feet) X	County (Feet) Y	County (Meters) X	County (Meters) Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Project Info Reference
NAD83(2011)	43 53 31.30262	93 29 11.78270	349745.708	121714.121	106602.705	37098.538	331.414	C	2020	HTH30
NAD83(1996)	43 53 31.30246	93 29 11.78290	349745.694	121714.105	106602.701	37098.533	331.476	C	2020	HTH30

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8101_AC-DR3043-3W-17SEP2025.jpg	W	Sep 17, 2025
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8101_AC-DR3043-2-17SEP2025.jpg		Sep 17, 2025
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8101_AC-DR3043-1-17SEP2025.jpg		Sep 17, 2025

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_109123.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_109123.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8101 AD **NGS Name:** 8101 AD

County: WASECA, MN (Sheet 1)

NGS ACRN: DR3038 Get Map
NGS Quad / Sta Num : 43093144/
USGS Quad: NEW RICHLAND

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	29	106 N	22 W	435726.24	932930.63	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2018	2021	GOOD	Horz=YES Vert=YES	YES		RECESSED 3 IN.	BAR MAG IN DRILL HOLE

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 40 FT)

Disk Type
METAL ROD (WITH REMOVABLE ID DISK)

Mon. Agency
MNDT

Description: (2018) **Stamping:** 8101 AD 2018

8.9 MILES SOUTH OF WASECA. 7.2 MILES SOUTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 14 IN WASECA, AT TRUNK HIGHWAY 13 MILEPOINT 23.1, 74.3 FEET WEST OF TRUNK HIGHWAY 13, 156.4 FEET NORTH OF COUNTY ROAD 20 (275TH AVENUE), 2.7 FEET SOUTH OF A RIGHT-OF-WAY POST, 1.0 FOOT EAST OF A WITNESS POST.

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Accuracy	Orthometric (Meters) Height	Accuracy	Survey Order/(Class)	Project Info Year	Reference
NAVD88	1152.740	0.016	351.356	0.005	2/1	2020	00000949

Geoid Separations(ft): GEOID18 = -95.006 12B = -95.003 09 = -94.931 03 = -94.796

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Longitude	County (Feet) X	Y	County (Meters) X	Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Reference
NAD83(2011)	43 57 26.23795	93 29 30.62782	348531.610	145513.925	106232.647	44352.733	322.390	3	2021	GPSBM

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8101_AD-DR3038-3W-14APR2021.jpg	W	Apr 14, 2021
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8101_AD-DR3038-2-14APR2021.jpg		Apr 14, 2021
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8101_AD-DR3038-1-14APR2021.jpg		Apr 14, 2021

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_109139.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_109139.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8101 AE
NGS Name: 8101 AE

County: WASECA, MN (Sheet 1)

NGS ACRN: DR3035 Get Map
NGS Quad / Sta Num : 44093233/
USGS Quad: MERIDEN

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	5	106 N	22 W	440051.21	932948.81	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2018	2018	GOOD	Horz=YES Vert=YES	YES		RECESSED 3 IN.	BAR MAG IN DRILL HOLE

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 32 FT)

Disk Type
METAL ROD (WITH REMOVABLE ID DISK)

Mon. Agency
MNDT

Description: (2018)

Stamping: 8101 AE 2018

4.6 MILES SOUTH OF WASECA, 3.2 MILES SOUTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 14 IN WASECA, AT TRUNK HIGHWAY 13 MILEPOINT 27.05, 67.2 FEET WEST OF TRUNK HIGHWAY 13, 75.7 FEET NORTH OF 315TH AVENUE, 44.7 FEET NORTH OF A POWER POLE WITH GUY WIRE, 1.0 FOOT EAST OF A WITNESS POST.

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1130.401	0.016	344.547	0.005	2/1	2020	00000949

Geoid Separations(ft): GEOID18 = -94.573 12B = -94.577 09 = -94.491 03 = -94.363

*** No Horizontal Positions in the Database ***

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8101_AE-DR3035-3W-08AUG2018.jpg	W	Aug 8, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8101_AE-DR3035-2-08AUG2018.jpg		Aug 8, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8101_AE-DR3035-1-08AUG2018.jpg		Aug 8, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_109124.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_109124.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8101 AF **NGS Name:** 8101 AF

County: WASECA, MN (Sheet 1)

NGS ACRN: DR3032 Get Map
NGS Quad / Sta Num : 44093322/
USGS Quad: WASECA

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	17	107 N	22 W	440423.01	933029.31	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2018	2020	GOOD	Horz=YES Vert=YES	YES		RECESSED 3 IN.	BAR MAG IN DRILL HOLE

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 39 FT)

Disk Type
METAL ROD (WITH REMOVABLE ID DISK)

Mon. Agency
MNDT

Description: (2018) **Stamping:** 8101 AF 2018

IN WASECA, 1.35 MILES NORTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 14 IN WASECA, AT TRUNK HIGHWAY 13 MILEPOINT 31.55, 30.6 FEET EAST OF TRUNK HIGHWAY 13, 42.4 FEET SOUTH OF 7TH AVENUE SOUTHEAST, 4.6 FEET EAST OF A SIDEWALK, 2.8 FEET WEST OF THE BACK OF A CURB, 13.6 FEET SOUTH OF A WITNESS POST.

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Accuracy	Orthometric (Meters) Height	Accuracy	Survey Order/(Class)	Project Info Year	Reference
NAVD88	1153.820	0.016	351.685	0.005	2/1	2020	00000949

Geoid Separations(ft): GEOID18 = -94.189 12B = -94.196 09 = -94.117 03 = -93.966

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Longitude	County (Feet) X	Y	County (Meters) X	Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Reference
NAD83(2011)	44 04 23.01152	93 30 29.31268	344541.531	187748.544	105016.469	57225.871	322.979		2020	GPS3368
NAD83(1996)	44 04 23.01146	93 30 29.31292	344541.513	187748.538	105016.463	57225.869	323.037	C	2020	HTH13

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8101_AF-DR3032-3E-10MAR2020.jpg	E	Mar 10, 2020
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8101_AF-DR3032-2-10MAR2020.jpg		Mar 10, 2020
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8101_AF-DR3032-1-10MAR2020.jpg		Mar 10, 2020

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_109125.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_109125.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8101 B **NGS Name:** 8101 B

County: WASECA, MN (Sheet 1)

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	5	105 N	22 W	435606.01	932919.06	2	C

NGS ACRN: DE8724 Get Map
NGS Quad / Sta Num : 43093144/
USGS Quad: NEW RICHLAND

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1966	2023	GOOD	Horz=YES Vert=YES	YES		PROJECTS 3 IN.	STEEL ROD IMBED IN MON

Monument Type
CONCRETE POST (PREFABRICATED)

Disk Type
BENCH MARK DISK

Mon. Agency
MNDT

Description: (2010) **Stamping:** 8101 B 1966

2.8 MILES NORTH OF NEW RICHLAND, 3.0 MILES NORTH OF THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 30 IN NEW RICHLAND, 75.0 FEET WEST OF TRUNK HIGHWAY 13, AT TRUNK HIGHWAY 13 MILEPOINT 21.45, 53.0 FEET SOUTH OF 260TH AVENUE, 23.8 FEET SOUTH-SOUTHEAST OF A POWER POLE NUMBER 252, 1.2 FEET NORTH OF A RIGHT-OF-WAY POST, 0.6 FOOT EAST OF A WITNESS POST.

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1160.076	0.016	353.592	0.005	2/1	2020	00000949

Geoid Separations(ft): GEOID18 = -95.167 12B = -95.167 09 = -95.098 03 = -94.960

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Geodetic Positions Longitude	County (Feet) X	County (Feet) Y	County (Meters) X	County (Meters) Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Project Info Reference
NAD83(2011)	43 56 06.01362	93 29 19.06498	349321.085	137384.269	106473.280	41874.809	324.583		2012	GPS2800
NAD83(2007)	43 56 06.01371	93 29 19.06579	349321.026	137384.278	106473.262	41874.812	324.608		2007	GPS2300
NAD83(1996)	43 56 06.01353	93 29 19.06468	349321.107	137384.259	106473.286	41874.806	324.661	C	2005	GPS2088

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8101_B-DE8724-3W-24APR2023.jpg	W	Apr 24, 2023
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8101_B-DE8724-2-24APR2023.jpg		Apr 24, 2023
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8101_B-DE8724-1-24APR2023.jpg		Apr 24, 2023

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33162.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33162.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8101 C **NGS Name:** 8101 C

County: WASECA, MN (Sheet 1)

NGS ACRN: DF5890 Get Map
NGS Quad / Sta Num : 43093144/
USGS Quad: NEW RICHLAND

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	32	106 N	22 W	435645.39	932929.25	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1966	2018	GOOD	Horz=NO Vert=NO	YES	81002	FLUSH	NO MAG MATERIAL

Monument Type	Disk Type	Mon. Agency
BRIDGE ABUTMENT	BENCH MARK DISK	MNDT

Description: (2010) **Stamping:** 8101 C 1966

3.6 MILES NORTH OF NEW RICHLAND, IN THE SOUTHEAST CORNER OF TRUNK HIGHWAY 13 BRIDGE NUMBER 81002 OVER THE LE SUEUR RIVER, 3.75 MILES NORTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 30 IN NEW RICHLAND, AT TRUNK HIGHWAY 13 MILEPOINT 22.25, 23.0 FEET EAST OF TRUNK HIGHWAY 13.

Station Notes

THE SURVEY MARK HAS BEEN DEEMED UNSAFE DUE TO FALL RISK AND HAS BEEN ABANDONED FOR MNDOT GEODETIC USE.

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1134.932	0.016	345.928	0.005	2/1	2020	00000949

Geoid Separations(ft): GEOID18 = -95.095 12B = -95.095 09 = -95.023 03 = -94.888

*** No Horizontal Positions in the Database ***

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8101_C-DF5890-3E-01AUG2018.jpg	E	Aug 1, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8101_C-DF5890-2-01AUG2018.jpg		Aug 1, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8101_C-DF5890-1-01AUG2018.jpg		Aug 1, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33163.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33163.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8101 D **NGS Name:** 8101 D

County: WASECA, MN (Sheet 1)

NGS ACRN: DE8725 Get Map
NGS Quad / Sta Num : 43093144/
USGS Quad: NEW RICHLAND

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	29	106 N	22 W	435725.34	932928.57	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1966	2018	DESTROYED	Horz=NO Vert=NO	NO		PROJECTS 2 IN.	STEEL ROD IMBED IN MON

Monument Type
CONCRETE MONUMENT (CAST-IN-PLACE)

Disk Type
BENCH MARK DISK

Mon. Agency
MNDT

Description: (2010) **Stamping:** 8101 D 1966

4.4 MILES NORTH OF NEW RICHLAND, 4.5 MILES NORTH OF THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 30 IN NEW RICHLAND, AT TRUNK HIGHWAY 13 MILEPOINT 23.1, 75.0 FEET EAST OF TRUNK HIGHWAY 13, 65.1 FEET NORTH OF COUNTY ROAD 20, 1.9 FEET SOUTH OF A RAILROAD POST, 0.7 FOOT WEST OF A WITNESS POST.

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1156.500	0.016	352.502	0.005	2/1	2004	00000449

Geoid Separations(ft): GEOID18 = -95.003 12B = -95.003 09 = -94.931 03 = -94.796

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Geodetic Positions Longitude	County (Feet) X	County (Feet) Y	County (Meters) X	County (Meters) Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Project Info Reference
NAD83(2011)	43 57 25.33898	93 29 28.56962	348681.532	145421.842	106278.344	44324.666	323.548		2012	GPS2800
NAD83(2007)	43 57 25.33906	93 29 28.57043	348681.473	145421.851	106278.326	44324.669	323.573		2007	GPS2300
NAD83(1996)	43 57 25.33888	93 29 28.56930	348681.556	145421.832	106278.351	44324.663	323.626	C	2002	GPS1772

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33164.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33164.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8101 F **NGS Name:** 8101 F

County: WASECA, MN (Sheet 1)

NGS ACRN: DE8726 Get Map
NGS Quad / Sta Num : 43093144/
USGS Quad: NEW RICHLAND

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	20	106 N	22 W	435841.95	932937.94	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1966	2021	GOOD	Horz=YES Vert=YES	YES		FLUSH	STEEL ROD IMBED IN MON

Monument Type	Disk Type	Mon. Agency
STEEL ROD (NO SLEEVE)	BENCH MARK DISK	MNDT

Description: (2010) **Stamping:** 8101 F 1966

5.8 MILES NORTH OF NEW RICHLAND, 6.15 MILES NORTH OF THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 30 IN NEW RICHLAND, AT TRUNK HIGHWAY 13 MILEPOINT 24.6, 75.0 FEET WEST-SOUTHWEST OF TRUNK HIGHWAY 13, 153.0 FEET SOUTH OF COUNTY ROAD 15, 28.85 FEET SOUTH OF A FIBER OPTIC POLE NUMBER 337+16, 0.48 FOOT NORTHEAST OF A WITNESS POST.

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1142.921	0.016	348.363	0.005	2/1	2020	00000949

Geoid Separations(ft): GEOID18 = -94.842 12B = -94.846 09 = -94.767 03 = -94.639

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Geodetic Positions Longitude	County (Feet) X	County (Feet) Y	County (Meters) X	County (Meters) Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Project Info Reference
NAD83(2011)	43 58 41.94734	93 29 37.94398	348050.095	153184.263	106085.881	46690.657	319.457		2012	GPS2800
NAD83(2007)	43 58 41.94741	93 29 37.94478	348050.037	153184.271	106085.863	46690.659	319.482		2007	GPS2300
NAD83(1996)	43 58 41.94724	93 29 37.94355	348050.126	153184.253	106085.891	46690.654	319.533	C	2002	GPS1772

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8101_F-DE8726-3W-14APR2021.jpg	W	Apr 14, 2021
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8101_F-DE8726-2-14APR2021.jpg		Apr 14, 2021
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8101_F-DE8726-1-14APR2021.jpg		Apr 14, 2021

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33165.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33165.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8101 G **NGS Name:** 8101 G

County: WASECA, MN (Sheet 1)

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	17	106 N	22 W	435915.95	932946.91	2	C

NGS ACRN: DE8727 Get Map
NGS Quad / Sta Num : 43093144/
USGS Quad: NEW RICHLAND

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1966	2018	GOOD	Horz=NO Vert=YES	YES		PROJECTS 15 IN.	STEEL ROD IMBED IN MON

Monument Type	Disk Type	Mon. Agency
CONCRETE POST (PREFABRICATED)	BENCH MARK DISK	MNDT

Description: (2010) **Stamping:** 8101 G 1966

6.5 MILES NORTH OF NEW RICHLAND, 6.8 MILES NORTH OF THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 30 IN NEW RICHLAND, AT TRUNK HIGHWAY 13 MILEPOINT 25.2, 75.0 FEET EAST OF TRUNK HIGHWAY 13, 33.0 FEET NORTH OF 295TH AVENUE, 71.42 FEET NORTH OF A POWER POLE NUMBER 173, 1.2 FEET NORTH-NORTHWEST OF A CABLE MARKER, 1.2 FEET SOUTHWEST OF A WITNESS POST.

Station Notes

THE SURVEY MARK IS UNSUITABLE FOR MNDOT GEODETIC HORIZONTAL SURVEYS (PROJECTION HEIGHT).

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1153.948	0.016	351.724	0.005	2/1	2020	00000949

Geoid Separations(ft): GEOID18 = -94.783 12B = -94.783 09 = -94.701 03 = -94.577

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Geodetic Positions Longitude	County (Feet) X	County (Feet) Y	County (Meters) X	County (Meters) Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Project Info Reference
NAD83(2011)	43 59 15.94595	93 29 46.90591	347418.965	156631.687	105893.512	47741.434	322.687		2012	GPS2800
NAD83(2007)	43 59 15.94602	93 29 46.90672	347418.906	156631.694	105893.494	47741.436	322.712		2007	GPS2300
NAD83(1996)	43 59 15.94585	93 29 46.90547	347418.997	156631.677	105893.522	47741.431	322.763	C	2002	GPS1772

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8101_G-DE8727-3E-01AUG2018.jpg	E	Aug 1, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8101_G-DE8727-2-01AUG2018.jpg		Aug 1, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8101_G-DE8727-1-01AUG2018.jpg		Aug 1, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33166.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33166.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8101 H **NGS Name:** 8101 H

County: WASECA, MN (Sheet 1)

NGS ACRN: DF5889 Get Map
NGS Quad / Sta Num : 43093144/
USGS Quad: NEW RICHLAND

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	8	106 N	22 W	435955.71	932947.52	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1966	2018	GOOD	Horz=NO Vert=NO	YES	81001	FLUSH	NO MAG MATERIAL

Monument Type	Disk Type	Mon. Agency
BRIDGE ABUTMENT	BENCH MARK DISK	MNDT

Description: (2010) **Stamping:** 8101 H 1966

7.25 MILES NORTH OF NEW RICHLAND, IN THE SOUTHEAST ABUTMENT OF TRUNK HIGHWAY 13 BRIDGE NUMBER 81001 OVER THE LITTLE LE SUEUR RIVER, 7.25 MILES NORTH OF THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 30 IN NEW RICHLAND, AT TRUNK HIGHWAY 13 MILEPOINT 26.0, 23.0 FEET EAST OF TRUNK HIGHWAY 13.

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1100.395	0.016	335.401	0.005	2/1	2020	00000949

Geoid Separations(ft): GEOID18 = -94.698 12B = -94.701 09 = -94.613 03 = -94.488

*** No Horizontal Positions in the Database ***

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8101_H-DF5889-3E-01AUG2018.jpg	E	Aug 1, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8101_H-DF5889-2-01AUG2018.jpg		Aug 1, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8101_H-DF5889-1-01AUG2018.jpg		Aug 1, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33167.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33167.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8101 I **NGS Name:** 8101 I

County: WASECA, MN (Sheet 1)

NGS ACRN: PP3195 Get Map
NGS Quad / Sta Num : 44093233/
USGS Quad: MERIDEN

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	5	106 N	22 W	440050.02	932948.88	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1966	2018	GOOD	Horz=NO Vert=YES	YES		PROJECTS 6 IN.	STEEL ROD IMBED IN MON

Monument Type
CONCRETE POST (PREFABRICATED)

Disk Type
BENCH MARK DISK

Mon. Agency
MNDT

Description: (2010) **Stamping:** 8101 I 1966

8.6 MILES NORTH OF NEW RICHLAND, 8.6 MILES NORTH OF THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 30 IN NEW RICHLAND, 4.85 MILES SOUTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 14 IN WASECA, AT TRUNK HIGHWAY 13 MILEPOINT 27.05, 75.0 FEET WEST OF TRUNK HIGHWAY 13, 42.0 FEET SOUTH OF 315TH AVENUE, 5.9 FEET NORTH OF AN UNDERGROUND CABLE BOX NUMBER E104, 0.6 FOOT EAST OF A WITNESS POST.

Station Notes
DUE TO TREE COVER, THIS SURVEY MARK HAS BEEN ABANDONED FOR MNDOT GEODETIC HORIZONTAL SURVEYS.

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1132.176	0.016	345.088	0.005	2/1	2020	00000949

Geoid Separations(ft): GEOID18 = -94.577 12B = -94.580 09 = -94.495 03 = -94.367

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Geodetic Positions Longitude	County (Feet) X	County (Feet) Y	County (Meters) X	County (Meters) Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Project Info Reference
NAD83(2011)	44 00 50.01837	93 29 48.87391	347342.106	166158.854	105870.086	50645.320	316.197		2012	GPS2800
NAD83(2007)	44 00 50.01842	93 29 48.87472	347342.047	166158.859	105870.068	50645.322	316.222		2007	GPS2300
NAD83(1996)	44 00 50.01825	93 29 48.87339	347342.145	166158.841	105870.097	50645.316	316.271	C	2002	GPS1772
NAD83(1986)	44 00 50.00607	93 29 48.87377	347342.108	166157.608	105870.086	50644.940		2	1991	GPS194
NAD27	44 00 50.13954	93 29 48.08531						2	1991	17504

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8101_I-PP3195-3W-01AUG2018.jpg	W	Aug 1, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8101_I-PP3195-2-01AUG2018.jpg		Aug 1, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8101_I-PP3195-1-01AUG2018.jpg		Aug 1, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33168.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33168.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8101 J **NGS Name:** 8101 J

County: WASECA, MN (Sheet 1)

NGS ACRN: DE8728 Get Map
NGS Quad / Sta Num : 44093233/
USGS Quad: MERIDEN

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	32	107 N	22 W	440127.68	932949.39	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1966	2018	GOOD	Horz=YES Vert=YES	YES		FLUSH	STEEL ROD IMBED IN MON

Monument Type	Disk Type	Mon. Agency
CONCRETE POST (PREFABRICATED)	BENCH MARK DISK	MNDT

Description: (2010) **Stamping:** 8101 J 1966

4.2 MILES SOUTH OF WASECA, 2.5 MILES SOUTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 14 IN WASECA, AT TRUNK HIGHWAY 13 MILEPOINT 27.7, 75.0 FEET WEST OF TRUNK HIGHWAY 13, 57.0 FEET SOUTH OF A FIELD ENTRANCE, 1.5 FEET NORTHEAST OF A WITNESS POST.

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1151.805	0.016	351.071	0.005	2/1	2020	00000949

Geoid Separations(ft): GEOID18 = -94.491 12B = -94.498 09 = -94.413 03 = -94.278

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Geodetic Positions Longitude	County (Feet) X	County (Feet) Y	County (Meters) X	County (Meters) Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Project Info Reference
NAD83(2011)	44 01 27.67692	93 29 49.39205	347331.079	169972.590	105866.725	51807.749	322.263		2012	GPS2800
NAD83(2007)	44 01 27.67698	93 29 49.39289	347331.018	169972.596	105866.706	51807.751	322.288		2007	GPS2300
NAD83(1996)	44 01 27.67683	93 29 49.39157	347331.114	169972.581	105866.735	51807.746	322.336	C	2002	GPS1772

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8101_J-DE8728-3W-31JUL2018.jpg	W	Jul 31, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8101_J-DE8728-2-31JUL2018.jpg		Jul 31, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8101_J-DE8728-1-31JUL2018.jpg		Jul 31, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33169.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33169.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8101 K **NGS Name:** 8101 K

County: WASECA, MN (Sheet 1)

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	29	107 N	22 W	440214.00	932947.00		

NGS ACRN: Get Map
NGS Quad / Sta Num : 44093233/
USGS Quad: MERIDEN

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1966	2014	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	SURVEY DISK	MNDT

Description: (2010) **Stamping:** 8101 K

10.0 MILES NORTH OF NEW RICHLAND, 10.0 MILES NORTH OF THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 30 IN NEW RICHLAND, 75.0 FEET EAST OF TRUNK HIGHWAY 13, 43.0 FEET NORTH OF 330TH AVENUE.

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -94.386 12B = -94.393 09 = -94.311 03 = -94.170

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33170.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33170.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8101 L **NGS Name:** 8101 L

County: WASECA, MN (Sheet 1)

NGS ACRN: DE8729 Get Map
NGS Quad / Sta Num : 44093233/
USGS Quad: MERIDEN

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	29	107 N	22 W	440305.06	932948.05	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1966	2018	GOOD	Horz=NO Vert=YES	YES		FLUSH	STEEL ROD IMBED IN MON

Monument Type
CONCRETE POST (PREFABRICATED)

Disk Type
BENCH MARK DISK

Mon. Agency
MNDT

Description: (2010) **Stamping:** 8101 L 1966

0.3 MILE SOUTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 14 IN WASECA TO TRUNK HIGHWAY 13 MILEPOINT 29.95, THEN 0.05 MILE WEST ON 343RD AVENUE, THEN 0.3 MILE SOUTH ON OLD TRUNK HIGHWAY 13, 5.75 FEET EAST OF TRUNK HIGHWAY 13, 5.75 FEET SOUTHEAST OF A FIBER OPTIC WARNING CABLE, 3.25 FEET EAST OF A POWER POLE NUMBER 78, 1.9 FEET SOUTH OF A WITNESS POST.

Station Notes

DUE TO PROXIMITY TO POWER POLE, THIS SURVEY MARK HAS BEEN ABANDONED FOR MNDOT GEODETIC HORIZONTAL SURVEYS.

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1127.344	0.016	343.615	0.005	2/1	2020	00000949

Geoid Separations(ft): GEOID18 = -94.281 12B = -94.288 09 = -94.206 03 = -94.058

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Geodetic Positions Longitude	County (Feet) X	County (Feet) Y	County (Meters) X	County (Meters) Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Project Info Reference
NAD83(2011)	44 03 05.05894	93 29 48.04649	347498.754	179833.262	105917.832	54813.288	314.882		2012	GPS2800
NAD83(2007)	44 03 05.05896	93 29 48.04744	347498.685	179833.265	105917.811	54813.289	314.903		2007	GPS2300
NAD83(1996)	44 03 05.05904	93 29 48.04661	347498.745	179833.272	105917.829	54813.291	314.943	C	2002	GPS1772

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8101_L-DE8729-3E-31JUL2018.jpg	E	Jul 31, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8101_L-DE8729-2-31JUL2018.jpg		Jul 31, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8101_L-DE8729-1-31JUL2018.jpg		Jul 31, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33171.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33171.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8101 M **NGS Name:** 8101 M

County: WASECA, MN (Sheet 1)

NGS ACRN: PP3539 Get Map
NGS Quad / Sta Num : 44093322/
USGS Quad: WASECA

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	18	107 N	22 W	440429.84	933031.06	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1988	2018	GOOD	Horz=NO Vert=YES	YES		FLUSH	NO MAG MATERIAL

Monument Type
STRUCTURE (MASSIVE)

Disk Type
VERTICAL CONTROL DISK

Mon. Agency
MNDT

Description: (2010) **Stamping:** 8101 M 1988

IN WASECA, ONE BLOCK WEST ALONG ELM AVENUE (OLD HIGHWAY 14) FROM THE JUNCTION OF ELM AVENUE (OLD HIGHWAY 14) AND TRUNK HIGHWAY 13 (STATE STREET) IN WASECA, THEN 0.2 MILE SOUTH ON 2ND STREET SOUTHWEST, IN A CITY WATER TANK (WEST 1 OF 2), 43.5 FEET EAST OF 2ND STREET SOUTHWEST, 56.3 FEET SOUTH-SOUTHWEST OF THE SOUTHWEST CORNER OF A CITY WORKS GARAGE, 34.9 FEET NORTH-NORTHEAST OF THE NORTHEAST CORNER OF A PUMP HOUSE, 15.5 FEET WEST-NORTHWEST OF A FIRE HYDRANT.

Station Notes

THE SURVEY MARK IS UNDER A WATER TANK, THIS SURVEY MARK HAS BEEN ABANDONED FOR MNDOT GEODETIC HORIZONTAL SURVEYS.

Leveling-Derived Orthometric Heights (Elevations)

Vertical Datum	Orthometric (Feet) Height	Accuracy	Orthometric (Meters) Height	Accuracy	Survey Order/(Class)	Project Info Year	Reference
NAVD88	1157.025	0.016	352.662	0.005	2/1	2020	00000949
NGVD29	1156.933	0.016	352.634	0.005	2/1	1988	VWASE

Geoid Separations(ft): GEOID18 = -94.180 12B = -94.186 09 = -94.107 03 = -93.953

*** No Horizontal Positions in the Database ***

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8101_M-PP3539-3E-02AUG2018.jpg	E	Aug 2, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8101_M-PP3539-2-02AUG2018.jpg		Aug 2, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8101_M-PP3539-1-02AUG2018.jpg		Aug 2, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33172.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33172.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8101 N **NGS Name:** 8101 N

County: WASECA, MN (Sheet 1)

NGS ACRN: PP3541 Get Map
NGS Quad / Sta Num : 44093322/
USGS Quad: WASECA

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	18	107 N	22 W	440431.00	933029.00	2	

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1988	2005	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type
CONCRETE MAT FOUNDATION (NON-PAVEMENT)

Disk Type
VERTICAL CONTROL DISK

Mon. Agency
MNDT

Description: (2010) **Stamping:** 8101 N 1988

IN WASECA, 0.2 MILE SOUTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 14, IN THE CITY WATER TANK (EAST 1 OF 2), 49.0 FEET WEST OF TRUNK HIGHWAY 13, 43.3 FEET SOUTH-SOUTHWEST OF THE SOUTHEAST CORNER OF THE WASECA CITY HALL, 31.0 FEET EAST-SOUTHEAST OF A FIRE HYDRANT, IN THE SOUTHEAST CORNER OF A CONCRETE BASE OF THE NORTHEAST LEG OF A WATER TANK.

Station Notes
THE FOOTING IS INTACT - THE DISK IS MISSING (5/20/2004).

Leveling-Derived Orthometric Heights (Elevations)

Vertical Datum	Orthometric (Feet) Height	Accuracy	Orthometric (Meters) Height	Accuracy	Survey Order/(Class)	Project Info Year	Reference
NAVD88	1155.972	0.016	352.341	0.005	2/1	1995	00000135
NGVD29	1155.893	0.016	352.317	0.005	2/1	1988	VWASE

Geoid Separations(ft): GEOID18 = -94.173 12B = -94.180 09 = -94.101 03 = -93.947

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33173.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33173.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8101 P **NGS Name:** 8101 P

County: WASECA, MN (Sheet 1)

NGS ACRN: AI6544 Get Map
NGS Quad / Sta Num : 44093233/
USGS Quad: MERIDEN

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	20	107 N	22 W	440346.99	932944.95	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1998	2018	DESTROYED	Horz=NO Vert=NO	YES		FLUSH	MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
UNKNOWN	SURVEY DISK	MNDT

Description: (1998) **Stamping:** 8101 P 1998

0.5 MILE SOUTH OF WASECA, IN THE MINNESOTA DEPARTMENT OF TRANSPORTATION MAINTENANCE YARD, 1.4 MILES SOUTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 14 IN WASECA TO TRUNK HIGHWAY 13 MILEPOINT 30.5, THEN 0.02 MILE NORTH ON ROAD, THEN 0.04 MILE SOUTHEAST INSIDE THE MAINTENANCE YARD, 124.0 FEET NORTHEAST OF THE SOUTHEAST CORNER OF A FENCE AROUND THE MAINTENANCE YARD, 6.5 FEET NORTHWEST OF A FENCE, 5.6 FEET NORTHWEST OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Elevations)

Vertical Datum	Orthometric (Feet) Height	Accuracy	Orthometric (Meters) Height	Accuracy	Survey Order/(Class)	Project Info Year	Reference
NAVD88	1161.435	0.016	354.006	0.005	2/1	2010	00000660
NGVD29	1161.379	0.016	353.989	0.005	2/1	2001	VJANE

Geoid Separations(ft): GEOID18 = -94.183 12B = -94.189 09 = -94.111 03 = -93.960

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Longitude	County (Feet) X	Y	County (Meters) X	Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Reference
NAD83(2011)	44 03 46.99414	93 29 44.95452	347754.396	184078.248	105995.752	56107.162	325.306		2012	GPS2800
NAD83(2007)	44 03 46.99418	93 29 44.95526	347754.343	184078.252	105995.736	56107.163	325.329		2007	GPS2300
NAD83(1996)	44 03 46.99448	93 29 44.95445	347754.402	184078.282	105995.754	56107.173	325.369	C	2005	GPS2088

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8101_P-AI6544-3N-30JUL2018.jpg	N	Jul 30, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8101_P-AI6544-2-30JUL2018.jpg		Jul 30, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8101_P-AI6544-1-30JUL2018.jpg		Jul 30, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_36698.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_36698.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8101 P 1 **NGS Name:** 8101 P 1

County: WASECA, MN (Sheet 1)

NGS ACRN: DE8730 Get Map
NGS Quad / Sta Num : 43093144/
USGS Quad: NEW RICHLAND

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	16	105 N	22 W	435421.83	932910.29	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1999	2018	DESTROYED	Horz=NO Vert=NO	YES		FLUSH	MARKER W/BAR MAGNET

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 30 FT)

Disk Type
VERTICAL CONTROL DISK

Mon. Agency
MNDT

Description: (1999) **Stamping:** 8101 P 1 1999

1.0 MILE NORTH OF NEW RICHLAND, 1.0 MILE NORTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 30 IN NEW RICHLAND, AT TRUNK HIGHWAY 13 MILEPOINT 19.5, 155.0 FEET EAST OF TRUNK HIGHWAY 13, 52.0 FEET SOUTH OF COUNTY ROAD 8 (240TH AVENUE), 30.0 FEET EAST OF A BIKE PATH, 24.25 FEET WEST OF A POWER POLE, 1.0 FOOT WEST OF A WITNESS POST.

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1172.045	0.016	357.240	0.005	2/1	2015	00000851

Geoid Separations(ft): GEOID18 = -95.384 12B = -95.377 09 = -95.318 03 = -95.170

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Geodetic Positions Longitude	County (Feet) X	County (Feet) Y	County (Meters) X	County (Meters) Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Project Info Reference
NAD83(2011)	43 54 21.83174	93 29 10.29098	349890.283	126830.072	106646.772	38657.883	328.161		2012	GPS2800
NAD83(2007)	43 54 21.83187	93 29 10.29177	349890.226	126830.086	106646.754	38657.887	328.187		2007	GPS2300
NAD83(1996)	43 54 21.83129	93 29 10.29090	349890.289	126830.027	106646.773	38657.869	328.240	C	2005	GPS2088

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8101_P_1-DE8730-3S-05JUN2013.jpg	S	Jun 5, 2013
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8101_P_1-DE8730-2-05JUN2013.jpg		Jun 5, 2013
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8101_P_1-DE8730-1-05JUN2013.jpg		Jun 5, 2013

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_39365.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_39365.pdf

8101 P 1 RESET

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8101 P 1 RESET **NGS Name:** 8101 P 1 RESET

County: WASECA, MN (Sheet 1)

NGS ACRN: DR3042 Get Map
NGS Quad / Sta Num : 43093144/
USGS Quad: NEW RICHLAND

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	16	105 N	22 W	435421.83	932910.29	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2018	2025	GOOD	Horz=YES Vert=YES	YES		RECESSED 2 IN.	BAR MAG IN DRILL HOLE

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 30 FT)

Disk Type
METAL ROD (WITH REMOVABLE ID DISK)

Mon. Agency
MNDT

Description: (2018) **Stamping:** 8101 P 1 RESET 2018

1.0 MILE NORTH OF NEW RICHLAND, 1.0 MILE NORTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 30 IN NEW RICHLAND, AT TRUNK HIGHWAY 13 MILEPOINT 19.5, 155.0 FEET EAST OF TRUNK HIGHWAY 13, 52.0 FEET SOUTH OF COUNTY ROAD 8 (240TH AVENUE), 30.0 FEET EAST OF A BIKE PATH, 24.25 FEET WEST OF A POWER POLE, 1.0 FOOT WEST OF A WITNESS POST.

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1171.858	0.016	357.183	0.005	2/1	2020	00000949

Geoid Separations(ft): GEOID18 = -95.384 12B = -95.377 09 = -95.318 03 = -95.170

*** No Horizontal Positions in the Database ***

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8101_P_1_RESET-DR3042-3S-17SEP2025.jpg	S	Sep 17, 2025
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8101_P_1_RESET-DR3042-2-17SEP2025.jpg		Sep 17, 2025
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8101_P_1_RESET-DR3042-1-17SEP2025.jpg		Sep 17, 2025

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_109134.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_109134.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8101 Q **NGS Name:** 8101 Q

County: WASECA, MN (Sheet 1)

NGS ACRN: DE8731 Get Map
NGS Quad / Sta Num : 43093144/
USGS Quad: NEW RICHLAND

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	9	105 N	22 W	435450.17	932911.18	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1989	2018	DESTROYED	Horz=NO Vert=NO	YES		FLUSH	MARKER W/BAR MAGNET

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 30 FT)

Disk Type
VERTICAL CONTROL DISK

Mon. Agency
MNDT

Description: (2002) **Stamping:** 8101 Q 1999

1.5 MILES NORTH OF NEW RICHLAND, 1.5 MILES NORTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 30 IN NEW RICHLAND, AT TRUNK HIGHWAY 13 MILEPOINT 20.0, 69.5 FEET EAST OF TRUNK HIGHWAY 13, 59.6 FEET SOUTH OF A POWER POLE, 37.0 FEET EAST OF MILEPOINT 20, 5.6 FEET WEST OF A FENCE, 1.2 FEET WEST OF A WITNESS POST.

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1160.106	0.016	353.601	0.005	2/1	2011	00000681

Geoid Separations(ft): GEOID18 = -95.325 12B = -95.321 09 = -95.259 03 = -95.111

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Geodetic Positions Longitude	County (Feet) X	County (Feet) Y	County (Meters) X	County (Meters) Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Project Info Reference
NAD83(2011)	43 54 50.16845	93 29 11.17783	349845.180	129699.972	106633.024	39532.631	324.544		2012	GPS2800
NAD83(2007)	43 54 50.16859	93 29 11.17863	349845.122	129699.986	106633.006	39532.635	324.571		2007	GPS2300
NAD83(1996)	43 54 50.16804	93 29 11.17770	349845.189	129699.930	106633.027	39532.618	324.625	C	2002	GPS1772

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8101_Q-DE8731-3E-10JUN2008.jpg	E	Jun 10, 2008
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8101_Q-DE8731-2-10JUN2008.jpg		Jun 10, 2008
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8101_Q-DE8731-1-10JUN2008.jpg		Jun 10, 2008

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_39366.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_39366.pdf

8101 Q RESET

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8101 Q RESET
NGS Name: 8101 Q RESET

County: WASECA, MN (Sheet 1)

NGS ACRN: DR3041 Get Map
NGS Quad / Sta Num : 43093144/
USGS Quad: NEW RICHLAND

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	9	105 N	22 W	435450.17	932911.18	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2018	2025	GOOD	Horz=YES Vert=YES	YES		RECESSED 7 IN.	BAR MAG IN DRILL HOLE

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 30 FT)

Disk Type
METAL ROD (WITH REMOVABLE ID DISK)

Mon. Agency
MNDT

Description: (2018)

Stamping: 8101 Q RESET 2018

1.5 MILES NORTH OF NEW RICHLAND, 1.5 MILES NORTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 30 IN NEW RICHLAND, AT TRUNK HIGHWAY 13 MILEPOINT 20, 69.5 FEET EAST OF TRUNK HIGHWAY 13, 59.6 FEET SOUTH OF A POWER POLE, 37.0 FEET EAST OF MILEPOST 20, 5.6 FEET WEST OF A FENCE, 1.2 FEET WEST OF A WITNESS POST.

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1159.939	0.016	353.550	0.005	2/1	2020	00000949

Geoid Separations(ft): GEOID18 = -95.325 12B = -95.321 09 = -95.259 03 = -95.111

*** No Horizontal Positions in the Database ***

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8101_Q_RESET-DR3041-3E-17SEP2025.jpg	E	Sep 17, 2025
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8101_Q_RESET-DR3041-2-17SEP2025.jpg		Sep 17, 2025
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8101_Q_RESET-DR3041-1-17SEP2025.jpg		Sep 17, 2025

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_109136.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_109136.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8101 R **NGS Name:** 8101 R

County: WASECA, MN (Sheet 1)

NGS ACRN: DE8732 Get Map
NGS Quad / Sta Num : 43093144/
USGS Quad: NEW RICHLAND

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	4	105 N	22 W	435542.71	932911.10	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1999	2025	GOOD	Horz=YES Vert=YES	YES		FLUSH	MARKER W/BAR MAGNET

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 21 FT)

Disk Type
VERTICAL CONTROL DISK

Mon. Agency
MNDT

Description: (2002) **Stamping:** 8101 R 1999

2.55 MILES NORTH OF NEW RICHLAND, 2.55 MILES NORTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 30 IN NEW RICHLAND, AT TRUNK HIGHWAY 13 MILEPOINT 21.0, 65.0 FEET EAST OF TRUNK HIGHWAY 13, 33.3 FEET EAST OF MILEPOST 21, 68.0 FEET NORTH OF A POWER POLE NUMBER 263, 1.6 FEET EAST OF A WITNESS POST.

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1163.971	0.016	354.779	0.005	2/1	2020	00000949

Geoid Separations(ft): GEOID18 = -95.210 12B = -95.207 09 = -95.141 03 = -950000

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Geodetic Positions Longitude	County (Feet) X	County (Feet) Y	County (Meters) X	County (Meters) Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Project Info Reference
NAD83(2011)	43 55 42.70811	93 29 11.09684	349887.866	135020.246	106646.035	41154.253	325.754		2012	GPS2800
NAD83(2007)	43 55 42.70821	93 29 11.09764	349887.807	135020.257	106646.017	41154.257	325.780		2007	GPS2300
NAD83(1996)	43 55 42.70791	93 29 11.09664	349887.881	135020.226	106646.039	41154.247	325.838	C	2002	GPS1772

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8101_R-DE8732-3E-17SEP2025.jpg	E	Sep 17, 2025
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8101_R-DE8732-2-17SEP2025.jpg		Sep 17, 2025
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8101_R-DE8732-1-17SEP2025.jpg		Sep 17, 2025

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_39367.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_39367.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8101 S **NGS Name:** 8101 S

County: WASECA, MN (Sheet 1)

NGS ACRN: DE8733 Get Map
NGS Quad / Sta Num : 43093144/
USGS Quad: NEW RICHLAND

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	20	106 N	22 W	435750.99	932929.02	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1989	2021	GOOD	Horz=YES Vert=YES	YES		FLUSH	MARKER W/BAR MAGNET

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 28 FT)

Disk Type
VERTICAL CONTROL DISK

Mon. Agency
MNDT

Description: (2002) **Stamping:** 8101 S 1999

5.1 MILES NORTH OF NEW RICHLAND, 5.1 MILES NORTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 30 IN NEW RICHLAND, AT TRUNK HIGHWAY 13 MILEPOINT 23.6, 74.0 FEET EAST OF TRUNK HIGHWAY 13, 64.0 FEET NORTH OF A POWER POLE NUMBER 210, 1.5 FEET SOUTHWEST OF A R.P. SIGN POST, 1.0 FOOT SOUTH OF A WITNESS POST.

Station Notes
THE MARK WAS SET IN 1989, THEN STAMPED IN 1999.

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1147.186	0.016	349.663	0.005	2/1	2020	00000949

Geoid Separations(ft): GEOID18 = -94.947 12B = -94.944 09 = -94.872 03 = -94.737

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Geodetic Positions Longitude	County (Feet) X	County (Feet) Y	County (Meters) X	County (Meters) Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Project Info Reference
NAD83(2011)	43 57 50.98501	93 29 29.02110	348666.605	148019.077	106273.794	45116.305	320.731		2012	GPS2800
NAD83(2007)	43 57 50.98508	93 29 29.02190	348666.547	148019.085	106273.776	45116.307	320.756		2007	GPS2300
NAD83(1996)	43 57 50.98491	93 29 29.02070	348666.635	148019.067	106273.803	45116.302	320.808	C	2002	GPS1772

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8101_S-DE8733-3E-14APR2021.jpg	E	Apr 14, 2021
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8101_S-DE8733-2-14APR2021.jpg		Apr 14, 2021
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8101_S-DE8733-1-14APR2021.jpg		Apr 14, 2021

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_39368.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_39368.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8101 T **NGS Name:** 8101 T

County: WASECA, MN (Sheet 1)

NGS ACRN: DE8734 Get Map
NGS Quad / Sta Num : 43093144/
USGS Quad: NEW RICHLAND

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	20	106 N	22 W	435813.83	932929.03	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1999	2018	GOOD	Horz=YES Vert=YES	YES		RECESSED 2 IN.	MARKER W/BAR MAGNET

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 28 FT)

Disk Type
VERTICAL CONTROL DISK

Mon. Agency
MNDT

Description: (2002) **Stamping:** 8101 T 1999

5.55 MILES NORTH OF NEW RICHLAND, 5.55 MILES NORTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 30 IN NEW RICHLAND, AT TRUNK HIGHWAY 13 MILEPOINT 24.0, 71.0 FEET EAST OF TRUNK HIGHWAY 13, 335.0 FEET SOUTH OF A FARM DRIVEWAY GOING EAST, 89.0 FEET NORTH OF A POWER POLE NUMBER 102, 41.6 FEET EAST OF MILEPOST 24, 1.0 FOOT SOUTH OF A WITNESS POST.

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1144.729	0.016	348.914	0.005	2/1	2020	00000949

Geoid Separations(ft): GEOID18 = -94.895 12B = -94.892 09 = -94.819 03 = -94.688

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Geodetic Positions Longitude	County (Feet) X	County (Feet) Y	County (Meters) X	County (Meters) Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Project Info Reference
NAD83(2011)	43 58 13.83089	93 29 29.03059	348682.035	150332.537	106278.497	45821.449	319.988		2012	GPS2800
NAD83(2007)	43 58 13.83096	93 29 29.03140	348681.975	150332.544	106278.479	45821.451	320.013		2007	GPS2300
NAD83(1996)	43 58 13.83080	93 29 29.03019	348682.064	150332.527	106278.506	45821.446	320.065	C	2005	GPS2088

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8101_T-DE8734-3E-01AUG2018.jpg	E	Aug 1, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8101_T-DE8734-2-01AUG2018.jpg		Aug 1, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8101_T-DE8734-1-01AUG2018.jpg		Aug 1, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_39369.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_39369.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8101 U **NGS Name:** 8101 U

County: WASECA, MN (Sheet 1)

NGS ACRN: DE8735 Get Map
NGS Quad / Sta Num : 44093233/
USGS Quad: MERIDEN

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	8	106 N	22 W	440023.46	932948.51	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1999	2021	GOOD	Horz=YES Vert=YES	YES		RECESSED 2 IN.	MARKER W/BAR MAGNET

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 28 FT)

Disk Type
VERTICAL CONTROL DISK

Mon. Agency
MNDT

Description: (2002) **Stamping:** 8101 U 1999

8.1 MILES NORTH OF NEW RICHLAND, 8.1 MILES NORTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 30 IN NEW RICHLAND, 5.35 MILES SOUTH OF WASECA, 5.35 MILES SOUTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 14 IN WASECA, AT TRUNK HIGHWAY 13 MILEPOINT 26.5, 69.0 FEET WEST OF TRUNK HIGHWAY 13, 505.0 FEET SOUTH OF AN ENTRANCE TO A SANITARY LANDFILL, 3.2 FEET EAST OF A FENCE, 0.82 FOOT EAST OF A WITNESS POST.

Station Notes
THE MARK WAS SET IN 1989, THEN STAMPED IN 1999.

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1124.709	0.016	342.812	0.005	2/1	2020	00000949

Geoid Separations(ft): GEOID18 = -94.639 12B = -94.639 09 = -94.554 03 = -94.426

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Geodetic Positions Longitude	County (Feet) X	County (Feet) Y	County (Meters) X	County (Meters) Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Project Info Reference
NAD83(2011)	44 00 23.45642	93 29 48.51192	347349.639	163468.892	105872.382	49825.418	313.970		2012	GPS2800
NAD83(2007)	44 00 23.45648	93 29 48.51273	347349.580	163468.899	105872.364	49825.420	313.995		2007	GPS2300
NAD83(1996)	44 00 23.45630	93 29 48.51140	347349.677	163468.880	105872.393	49825.414	314.045	C	2005	GPS2088

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8101_U-DE8735-3W-14APR2021.jpg	W	Apr 14, 2021
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8101_U-DE8735-2-14APR2021.jpg		Apr 14, 2021
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8101_U-DE8735-1-14APR2021.jpg		Apr 14, 2021

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_39364.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_39364.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8101 V **NGS Name:** 8101 V

County: WASECA, MN (Sheet 1)

NGS ACRN: DE8736 Get Map
NGS Quad / Sta Num : 44093233/
USGS Quad: MERIDEN

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	32	107 N	22 W	440151.35	932947.71	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1989	2018	DESTROYED	Horz=NO Vert=NO	YES		RECESSED 6 IN.	MARKER W/BAR MAGNET

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 30 FT)

Disk Type
VERTICAL CONTROL DISK

Mon. Agency
MNDT

Description: (2010) **Stamping:** 8101 V 1999

3.70 MILES SOUTH OF WASECA, 3.7 MILES SOUTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 14 IN WASECA, 9.8 MILES NORTH OF NEW RICHLAND, AT TRUNK HIGHWAY 13 MILEPOINT 28.2, 61.0 FEET EAST OF TRUNK HIGHWAY 13, 101.0 FEET SOUTH OF AN ENTRANCE TO THE SHOP, 87.53 FEET NORTH OF A POWER POLE NUMBER 109, 0.9 FOOT WEST OF A WITNESS POST.

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1153.974	0.016	351.732	0.005	2/1	2004	00000449

Geoid Separations(ft): GEOID18 = -94.439 12B = -94.442 09 = -94.360 03 = -94.222

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Geodetic Positions Longitude	County (Feet) X	County (Feet) Y	County (Meters) X	County (Meters) Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Project Info Reference
NAD83(2011)	44 01 51.34547	93 29 47.70943	347470.879	172368.510	105909.336	52538.027	322.946		2012	GPS2800
NAD83(2007)	44 01 51.34551	93 29 47.71019	347470.823	172368.514	105909.319	52538.028	322.971		2007	GPS2300
NAD83(1996)	44 01 51.34530	93 29 47.70880	347470.924	172368.492	105909.350	52538.022	323.020	C	2005	GPS2088

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8101_V-DE8736-3E-26MAY2004.jpg	E	May 26, 2004
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8101_V-DE8736-2-26MAY2004.jpg		May 26, 2004
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8101_V-DE8736-1-26MAY2004.jpg		May 26, 2004

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_39362.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_39362.pdf

8101 V RESET

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8101 V RESET

NGS Name: 8101 V RESET

County: WASECA, MN (Sheet 1)

NGS ACRN: DR3034 Get Map
NGS Quad / Sta Num : 44093233/
USGS Quad: MERIDEN

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	32	107 N	22 W	440151.35	932947.71	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2018	2018	GOOD	Horz=YES Vert=YES	YES		RECESSED 10 IN.	BAR MAG IN DRILL HOLE

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 30 FT)

Disk Type
METAL ROD (WITH REMOVABLE ID DISK)

Mon. Agency
MNDT

Description: (2018)

Stamping: 8101 V RESET 2018

3.7 MILES SOUTH OF WASECA, 2.0 MILES SOUTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 14 IN WASECA, AT TRUNK HIGHWAY 13 MILEPOINT 28.2, 61.0 FEET EAST OF TRUNK HIGHWAY 13, 101.0 FEET SOUTH OF ENTRANCE NUMBER 32452 TO THE SHOP, 87.5 FEET NORTH OF A POWER POLE NUMBER 109, 1.0 FOOT WEST OF A WITNESS POST.

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1153.797	0.016	351.678	0.005	2/1	2020	00000949

Geoid Separations(ft): GEOID18 = -94.439 12B = -94.442 09 = -94.360 03 = -94.222

*** No Horizontal Positions in the Database ***

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8101_V_RESET-DR3034-3E-31JUL2018.jpg	E	Jul 31, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8101_V_RESET-DR3034-2-31JUL2018.jpg		Jul 31, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8101_V_RESET-DR3034-1-31JUL2018.jpg		Jul 31, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_109137.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_109137.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8101 W **NGS Name:** 8101 W

County: WASECA, MN (Sheet 1)

NGS ACRN: DE8737 Get Map
NGS Quad / Sta Num : 44093233/
USGS Quad: MERIDEN

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	29	107 N	22 W	440213.36	932947.65	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1999	2018	GOOD	Horz=YES Vert=YES	YES		RECESSED 8 IN.	MARKER W/BAR MAGNET

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 28 FT)

Disk Type
VERTICAL CONTROL DISK

Mon. Agency
MNDT

Description: (2010) **Stamping:** 8101 W 1999

3.25 MILES SOUTH OF WASECA, 3.25 MILES SOUTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND ELM STREET (OLD HIGHWAY 14) IN WASECA, AT TRUNK HIGHWAY 13 MILEPOINT 28.65, 67.0 FEET EAST OF TRUNK HIGHWAY 13, 56.0 FEET NORTH OF 330TH AVENUE, 128.0 FEET SOUTH OF A POWER POLE, 17.35 FEET NORTH OF A FIBER OPTIC WARNING POLE, 1.0 FOOT WEST OF A WITNESS POST.

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1131.500	0.016	344.882	0.005	2/1	2020	00000949

Geoid Separations(ft): GEOID18 = -94.390 12B = -94.396 09 = -94.314 03 = -94.173

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Geodetic Positions Longitude	County (Feet) X	County (Feet) Y	County (Meters) X	County (Meters) Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Project Info Reference
NAD83(2011)	44 02 13.36488	93 29 47.65043	347490.869	174598.268	105915.429	53217.658	316.107		2012	GPS2800
NAD83(2007)	44 02 13.36494	93 29 47.65144	347490.795	174598.274	105915.406	53217.660	316.129		2007	GPS2300
NAD83(1996)	44 02 13.36493	93 29 47.65042	347490.870	174598.273	105915.429	53217.660	316.171	C	2002	GPS1772

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8101_W-DE8737-3E-31JUL2018.jpg	E	Jul 31, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8101_W-DE8737-2-31JUL2018.jpg		Jul 31, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8101_W-DE8737-1-31JUL2018.jpg		Jul 31, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_39363.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_39363.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8101 X **NGS Name:** 8101 X

County: WASECA, MN (Sheet 1)

NGS ACRN: DE8738 Get Map
NGS Quad / Sta Num : 44093233/
USGS Quad: MERIDEN

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	29	107 N	22 W	440238.29	932947.85	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1989	2018	GOOD	Horz=YES Vert=YES	YES		FLUSH	MARKER W/BAR MAGNET

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 28 FT)

Disk Type
VERTICAL CONTROL DISK

Mon. Agency
MNDT

Description: (2010)

Stamping: 8101 X 1999

2.9 MILES SOUTH OF WASECA, 1.2 MILES SOUTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 14 IN WASECA, AT TRUNK HIGHWAY 13 MILEPOINT 29.1, 61.0 FEET EAST OF TRUNK HIGHWAY 13, 92.0 FEET NORTH ON A FIELD ENTRANCE, 58.0 FEET NORTH OF A POWER POLE NUMBER 89, 0.9 FOOT WEST OF A WITNESS POST.

Station Pair: CLEAR - WASECA, MN

Station Notes

THE MARK WAS SET IN 1989, THEN STAMPED IN 1999.

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1129.844	0.016	344.377	0.005	2/1	2020	00000949

Geoid Separations(ft): GEOID18 = -94.337 12B = -94.344 09 = -94.262 03 = -94.117

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Geodetic Positions Longitude	County (Feet) X	County (Feet) Y	County (Meters) X	County (Meters) Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Project Info Reference
NAD83(2011)	44 02 38.28583	93 29 47.85055	347493.997	177121.985	105916.382	53986.889	315.621		2014	GPS3043
NAD83(2007)	44 02 38.28588	93 29 47.85146	347493.931	177121.990	105916.362	53986.891	315.644		2007	GPS2300
NAD83(1996)	44 02 38.28592	93 29 47.85056	347493.997	177121.994	105916.382	53986.892	315.684	C	2014	HNEW14

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8101_X-DE8738-3E-31JUL2018.jpg	E	Jul 31, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8101_X-DE8738-2-31JUL2018.jpg		Jul 31, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8101_X-DE8738-1-31JUL2018.jpg		Jul 31, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_40803.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_40803.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8101 Y
NGS Name: 8101 Y

County: WASECA, MN (Sheet 1)

NGS ACRN: DE8739 Get Map
NGS Quad / Sta Num : 44093233/
USGS Quad: MERIDEN

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	20	107 N	22 W	440331.63	932948.27	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1989	2018	GOOD	Horz=NO Vert=YES	YES		PROJECTS 1 IN.	MARKER W/BAR MAGNET

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 28 FT)

Disk Type
VERTICAL CONTROL DISK

Mon. Agency
MNDT

Description: (2010)

Stamping: 8101 Y 1999

1.5 MILES SOUTH OF WASECA, 0.3 MILE SOUTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 14 IN WASECA TO TRUNK HIGHWAY 13 MILEPOINT 29.95, THEN 0.05 MILE WEST ON 343RD AVENUE, THEN 0.2 MILE NORTH ON OLD TRUNK HIGHWAY 13, 46.0 FEET EAST OF OLD TRUNK HIGHWAY 13, 68.0 FEET NORTH OF AN UNDERGROUND GAS LINE CROSSING SIGN, 0.9 FOOT WEST OF A WITNESS POST.

Station Notes

THE MARK WAS SET IN 1989, THEN STAMPED IN 1999. DUE TO THE PROXIMITY TO A POWER POLE, THIS SURVEY MARK HAS BEEN ABANDONED FOR MNDOT GEODETIC HORIZONTAL SURVEYS.

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1143.817	0.016	348.636	0.005	2/1	2020	00000949

Geoid Separations(ft): GEOID18 = -94.222 12B = -94.229 09 = -94.150 03 = -94.002

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Geodetic Positions Longitude	County (Feet) X	County (Feet) Y	County (Meters) X	County (Meters) Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Project Info Reference
NAD83(2011)	44 03 31.63577	93 29 48.26559	347501.683	182524.679	105918.725	55633.633	319.925		2012	GPS2800
NAD83(2007)	44 03 31.63588	93 29 48.26620	347501.638	182524.690	105918.711	55633.637	319.952		2007	GPS2300
NAD83(1996)	44 03 31.63595	93 29 48.26541	347501.696	182524.697	105918.729	55633.639	319.991	C	2002	GPS1772

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8101_Y-DE8739-3E-31JUL2018.jpg	E	Jul 31, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8101_Y-DE8739-2-31JUL2018.jpg		Jul 31, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8101_Y-DE8739-1-31JUL2018.jpg		Jul 31, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_40804.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_40804.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8101 Z **NGS Name:** 8101 Z

County: WASECA, MN (Sheet 1)

NGS ACRN: DM5201 Get Map
NGS Quad / Sta Num : 43093144/
USGS Quad: NEW RICHLAND

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	20	105 N	22 W	435330.62	932912.30	2	

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2008	2018	DESTROYED	Horz=NO Vert=NO	YES		PROJECTS 24 IN.	NO MAG MATERIAL

Monument Type
CONCRETE FOUNDATION

Disk Type
SURVEY DISK

Mon. Agency
MNDT

Description: (2008) **Stamping:** 8101 Z 2008

IN NEW RICHLAND, IN THE SOUTHEAST CORNER OF A CONCRETE SIGN BASE, AT THE JUNCTION OF TRUNK HIGHWAY 30 AND TRUNK HIGHWAY 13 IN NEW RICHLAND, AT TRUNK HIGHWAY 30 MILEPOINT 168.45, 38.9 FEET NORTH OF TRUNK HIGHWAY 30, 82.6 FEET WEST OF TRUNK HIGHWAY 13, 14.3 FEET SOUTHWEST OF A FIRE HYDRANT, 6.5 FEET WEST OF A CABLE PEDESTAL.

Station Notes
THE DISK WAS SET IN A DRILL HOLE IN A CONCRETE FOOTING.

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1185.053	0.016	361.205	0.005	2/1	2015	00000851

Geoid Separations(ft): GEOID18 = -95.492 12B = -95.485 09 = -95.426 03 = -95.279

*** No Horizontal Positions in the Database ***

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8101_Z-DM5201-3N-17JUN2008.jpg	N	Jun 17, 2008
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8101_Z-DM5201-2-17JUN2008.jpg		Jun 17, 2008
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8101_Z-DM5201-1-17JUN2008.jpg		Jun 17, 2008

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_81106.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_81106.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8102 A **NGS Name:** 8102 A

County: WASECA, MN (Sheet 1)

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	6	108 N	22 W	441146.00	933116.00		

NGS ACRN: Get Map
NGS Quad / Sta Num : 44093321/
USGS Quad: WATERVILLE

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1967	1969	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	SURVEY DISK	MNDT

Description: (2010) **Stamping:** 8102 A 1967

2.3 MILES SOUTHEAST OF THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 60 IN WATERVILLE, IN THE ISLAND NOSE AT THE JUNCTION OF TRUNK HIGHWAY 13 AND 440TH AVENUE, 73.0 FEET NORTH OF TRUNK HIGHWAY 13, AT TRUNK HIGHWAY 13 STATION 196+00.

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -93.323 12B = -93.327 09 = -93.241 03 = -93.054

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33174.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33174.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8102 B **NGS Name:** 8102 B

County: WASECA, MN (Sheet 1)

NGS ACRN: DM3928 Get Map
NGS Quad / Sta Num : 44093321/
USGS Quad: WATERVILLE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	6	108 N	22 W	441107.69	933032.43	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1967	2018	GOOD	Horz=NO Vert=YES	YES		RECESSED 2 IN.	STEEL ROD IMBED IN MON

Monument Type	Disk Type	Mon. Agency
CONCRETE POST (PREFABRICATED)	BENCH MARK DISK	MNDT

Description: (2016) **Stamping:** 8102 B 1967

3.5 MILES SOUTHEAST OF WATERVILLE, 3.3 MILES SOUTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 60 IN WATERVILLE, AT TRUNK HIGHWAY 13 MILEPOINT 39.35, 70.0 FEET NORTHEAST OF TRUNK HIGHWAY 13, 1.0 FOOT SOUTHWEST OF A WITNESS POST.

Station Notes

DUE TO TREE COVER, THIS SURVEY MARK HAS BEEN ABANDONED FOR MNDOT GEODETIC HORIZONTAL SURVEYS.

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Accuracy	Orthometric (Meters) Height	Accuracy	Survey Order/(Class)	Project Info Year	Reference
NAVD88	1102.806	0.016	336.136	0.005	2/1	2019	00000938

Geoid Separations(ft): GEOID18 = -93.307 12B = -93.313 09 = -93.228 03 = -93.044

*** No Horizontal Positions in the Database ***

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8102_B-DM3928-3NE-07JUN2016.jpg	NE	Jun 7, 2016
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8102_B-DM3928-2-07JUN2016.jpg		Jun 7, 2016
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8102_B-DM3928-1-07JUN2016.jpg		Jun 7, 2016

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33175.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33175.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8102 B 1 **NGS Name:** 8102 B 1

County: WASECA, MN (Sheet 1)

NGS ACRN: DM3927 Get Map
NGS Quad / Sta Num : 44093321/
USGS Quad: WATERVILLE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	7	108 N	22 W	441017.10	933026.90	2	

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1969	2016	DESTROYED	Horz=NO Vert=NO	YES		PROJECTS 3 IN.	STEEL SPIKE IMBED IN MON

Monument Type	Disk Type	Mon. Agency
UNKNOWN	BENCH MARK DISK	MNDT

Description: (2004) **Stamping:** 8102 B 1 1969

3.1 MILES SOUTHEAST OF WATERVILLE, 4.1 MILES SOUTHEAST ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 60, AT TRUNK HIGHWAY 13 MILEPOINT 38.45, 75.5 FEET WEST OF TRUNK HIGHWAY 13, 17.2 FEET SOUTH OF A GRAVEL ROAD, 5.3 FEET SOUTH OF A YELLOW CONCRETE POST, 3.7 FEET NORTH OF A CORNER FENCE POST, 0.9 FOOT EAST OF A WITNESS POST.

Station Notes

THE DISK WAS TURNED IN TO THE OFFICE.

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Accuracy	Orthometric (Meters) Height	Accuracy	Survey Order/(Class)	Project Info Year	Reference
NAVD88	1151.034	0.016	350.836	0.005	2/1	2011	00000689

Geoid Separations(ft): GEOID18 = -93.412 12B = -93.418 09 = -93.336 03 = -93.153

*** No Horizontal Positions in the Database ***

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8102_B_1-DM3927-3W-19MAY2004.jpg	W	May 19, 2004
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8102_B_1-DM3927-2-19MAY2004.jpg		May 19, 2004
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8102_B_1-DM3927-1-19MAY2004.jpg		May 19, 2004

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_50711.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_50711.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8102 C **NGS Name:** 8102 C

County: WASECA, MN (Sheet 1)

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	6	108 N	22 W	441018.00	933027.00		

NGS ACRN: Get Map
NGS Quad / Sta Num : 44093321/
USGS Quad: WATERVILLE

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1967	2018	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	SURVEY DISK	MNDT

Description: (2010) **Stamping:** 8102 C 1967

4.4 MILES SOUTHEAST OF WATERVILLE, 4.1 MILES SOUTHEAST OF THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 60 IN WATERVILLE, 70.0 FEET WEST OF TRUNK HIGHWAY 13, 30.0 FEET SOUTH OF A FIELD ENTRANCE.

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -93.409 12B = -93.415 09 = -93.333 03 = -93.153

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33176.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33176.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8102 D
NGS Name: 8102 D

County: WASECA, MN (Sheet 1)

NGS ACRN: DM3924 Get Map
NGS Quad / Sta Num : 44093321/
USGS Quad: WATERVILLE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	30	108 N	22 W	440806.83	933026.90	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1967	2018	GOOD	Horz=NO Vert=YES	YES		PROJECTS 2 IN.	STEEL ROD IMBED IN MON

Monument Type	Disk Type	Mon. Agency
CONCRETE POST (PREFABRICATED)	BENCH MARK DISK	MNDT

Description: (2016) **Stamping:** 8102 D 1967

4.0 MILES NORTH OF WASECA, 4.0 MILES NORTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND COUNTY ROAD 14 (ELM AVENUE), AT TRUNK HIGHWAY 13 MILEPOINT 35.9, 82.0 FEET WEST OF TRUNK HIGHWAY 13, 34.5 FEET SOUTH OF A FIELD ENTRANCE, 0.8 FOOT EAST OF A WITNESS POST.

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Accuracy	Orthometric (Meters) Height	Accuracy	Survey Order/(Class)	Project Info Year	Reference
NAVD88	1182.288	0.016	360.362	0.005	2/1	2020	00000949

Geoid Separations(ft): GEOID18 = -93.707 12B = -93.714 09 = -93.635 03 = -93.461

*** No Horizontal Positions in the Database ***

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8102_D-DM3924-3W-07JUN2016.jpg	W	Jun 7, 2016
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8102_D-DM3924-2-07JUN2016.jpg		Jun 7, 2016
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8102_D-DM3924-1-07JUN2016.jpg		Jun 7, 2016

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33177.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33177.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8102 E
NGS Name: 8102 E

County: WASECA, MN (Sheet 1)

NGS ACRN: DM3923 Get Map
NGS Quad / Sta Num : 44093322/
USGS Quad: WASECA

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	31	108 N	22 W	440659.59	933026.47	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1967	2018	GOOD	Horz=NO Vert=YES	YES		RECESSED 3 IN.	STEEL SPIKE ADJ TO MON

Monument Type	Disk Type	Mon. Agency
CONCRETE POST (PREFABRICATED)	BENCH MARK DISK	MNDT

Description: (2004) **Stamping:** 8102 E 1967

0.7 MILE NORTH OF WASECA, 2.3 MILES NORTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND COUNTY ROAD 13 IN WASECA, AT TRUNK HIGHWAY 13 MILEPOINT 34.6, AT THE SOUTH EDGE OF A FARMSTEAD, 73.0 FEET WEST OF TRUNK HIGHWAY 13, 38.73 FEET SOUTHEAST OF THE TOP OF THE SOUTH END OF THE ENTRANCE CULVERT, 15.0 FEET NORTH OF DRIVEWAY ENTRANCE NUMBER 38495. NO WITNESS POST.

Station Notes

DUE TO TREE COVER, THIS SURVEY MARK HAS BEEN ABANDONED FOR MNDOT GEODETIC HORIZONTAL SURVEYS.

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Accuracy	Orthometric (Meters) Height	Accuracy	Survey Order/(Class)	Project Info Year	Reference
NAVD88	1175.418	0.016	358.268	0.005	2/1	2020	00000949

Geoid Separations(ft): GEOID18 = -93.855 12B = -93.861 09 = -93.776 03 = -93.612

*** No Horizontal Positions in the Database ***

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8102_E-DM3923-3W-24JUL2018.jpg	W	Jul 24, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8102_E-DM3923-2-24JUL2018.jpg		Jul 24, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8102_E-DM3923-1-24JUL2018.jpg		Jul 24, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33178.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33178.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8102 F **NGS Name:** 8102 F

County: WASECA, MN (Sheet 1)

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	6	107 N	22 W	440607.00	933027.00		

NGS ACRN: Get Map
NGS Quad / Sta Num : 44093322/
USGS Quad: WASECA

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1967	2004	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	SURVEY DISK	MNDT

Description: (2010) **Stamping:** 8102 F 1967

1.6 MILES NORTH OF WASECA, 1.6 MILES NORTH OF THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 14 IN WASECA, AT THE TOP OF A HILL, 71.0 FEET WEST OF TRUNK HIGHWAY 13, AT TRUNK HIGHWAY 13 MILEPOINT 33.5, 12.4 FEET NORTH OF A MINNESOTA DEPARTMENT OF TRANSPORTATION NAIL AND DISK IN A TELEPHONE POLE, 33.3 FEET NORTHWEST OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION NAIL AND DISK IN AN 18.0 INCH DIAMETER OAK TREE, 1.0 FOOT EAST OF A WITNESS POST.

Station Notes

THE MONUMENT REMAINS INTACT - THE DISK IS MISSING (5/19/2004).

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -93.966 12B = -93.976 09 = -93.891 03 = -93.730

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33179.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33179.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8102 G **NGS Name:** 8102 G

County: WASECA, MN (Sheet 1)

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	7	107 N	22 W	440516.00	933024.00		

NGS ACRN: Get Map
NGS Quad / Sta Num : 44093322/
USGS Quad: WASECA

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1967	2004	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	SURVEY DISK	MNDT

Description: (2010) **Stamping:** 8102 G 1967

0.7 MILE NORTH OF WASECA, 0.7 MILE NORTH OF THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 14 IN WASECA, 97.0 FEET EAST OF TRUNK HIGHWAY 13, AT TRUNK HIGHWAY 13 MILEPOINT 32.6, 20.0 FEET NORTH OF AN ENTRANCE TO 10TH AVENUE NORTHWEST, 2.2 FEET SOUTHEAST OF A MINNESOTA DEPARTMENT OF TRANSPORTATION NAIL AND DISK IN A FENCE POST, 10.75 FEET NORTHEAST OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION NAIL AND DISK IN A FENCE POST, 0.7 FOOT WEST OF A WITNESS POST.

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -94.068 12B = -94.078 09 = -93.996 03 = -93.838

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33180.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33180.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8102 H **NGS Name:** 8102 H

County: WASECA, MN (Sheet 1)

NGS ACRN: DM3925 Get Map
NGS Quad / Sta Num : 44093321/
USGS Quad: WATERVILLE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	20	108 N	22 W	440847.99	933025.06	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2004	2020	GOOD	Horz=YES Vert=YES	YES		RECESSED 2 IN.	MARKER W/BAR MAGNET

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 15 FT)

Disk Type
SURVEY DISK

Mon. Agency
MNDT

Description: (2016) **Stamping:** 8102 H 2004

4.6 MILES NORTH OF WASECA, 4.85 MILES NORTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND COUNTY ROAD 14 (ELM AVENUE) IN WASECA, AT TRUNK HIGHWAY 13 MILEPOINT 36.7, 70.1 FEET EAST OF TRUNK HIGHWAY 13, 45.2 FEET SOUTH OF A FIELD ENTRANCE, 12.7 FEET SOUTH OF A POWER POLE, 1.4 FEET WEST OF A WITNESS POST.

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1132.222	0.016	345.102	0.005	2/1	2020	00000949

Geoid Separations(ft): GEOID18 = -93.612 12B = -93.619 09 = -93.540 03 = -93.363

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Geodetic Positions Longitude	County (Feet) X	County (Feet) Y	County (Meters) X	County (Meters) Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Project Info Reference
NAD83(2011)	44 08 47.99431	93 30 25.06222	345043.922	214580.087	105169.598	65404.141	316.589		2020	GPS3368
NAD83(1996)	44 08 47.99421	93 30 25.06250	345043.902	214580.077	105169.592	65404.138	316.647	C	2020	HTH13

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8102_H-DM3925-3E-10MAR2020.jpg	E	Mar 10, 2020
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8102_H-DM3925-2-10MAR2020.jpg		Mar 10, 2020
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8102_H-DM3925-1-10MAR2020.jpg		Mar 10, 2020

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_50703.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_50703.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8102 HP **NGS Name:** 8102 HP

County: WASECA, MN (Sheet 1)

NGS ACRN: DM3926 Get Map
NGS Quad / Sta Num : 44093321/
USGS Quad: WATERVILLE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	14	108 N	22 W	440923.84	933027.53	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2004	2020	GOOD	Horz=YES Vert=YES	YES		RECESSED 2 IN.	MARKER W/BAR MAGNET

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 20 FT)

Disk Type
SURVEY DISK

Mon. Agency
MNDT

Description: (2004) **Stamping:** 8102 HP 2004

5.1 MILES NORTH OF WASECA, 5.1 MILES NORTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND COUNTY ROAD 13 IN WASECA, AT TRUNK HIGHWAY 13 MILEPOINT 37.35, 65.7 FEET EAST OF TRUNK HIGHWAY 13, 79.4 FEET NORTH OF DRIVEWAY NUMBER 41253, 15.6 FEET NORTH-NORTHEAST OF A TELEPHONE PEDESTAL NUMBER LP 6, 1.8 FEET NORTH OF A WITNESS POST.

Station Pair: FUSS - WASECA, MN

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1151.864	0.016	351.089	0.005	2/1	2020	00000949

Geoid Separations(ft): GEOID18 = -93.537 12B = -93.543 09 = -93.461 03 = -93.284

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Geodetic Positions Longitude	County (Feet) X	County (Feet) Y	County (Meters) X	County (Meters) Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Project Info Reference
NAD83(2011)	44 09 23.84200	93 30 27.53138	344889.893	218211.564	105122.650	66511.018	322.597		2020	GPS3368
NAD83(1996)	44 09 23.84190	93 30 27.53166	344889.873	218211.553	105122.643	66511.015	322.655	C	2020	HTH13

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8102_HP-DM3926-3W-10MAR2020.jpg	W	Mar 10, 2020
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8102_HP-DM3926-2-10MAR2020.jpg		Mar 10, 2020
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8102_HP-DM3926-1-10MAR2020.jpg		Mar 10, 2020

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_50702.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_50702.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8102 J **NGS Name:** 8102 J

County: WASECA, MN (Sheet 1)

NGS ACRN: DK4208 Get Map
NGS Quad / Sta Num : 44093321/
USGS Quad: WATERVILLE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	6	108 N	22 W	441145.62	933113.46	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2004	2020	GOOD	Horz=YES Vert=YES	YES		RECESSED 2 IN.	MARKER W/BAR MAGNET

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 25 FT)

Disk Type
SURVEY DISK

Mon. Agency
MNDT

Description: (2016) **Stamping:** 8102 J 2004

1.4 MILES SOUTHEAST OF WATERVILLE, 2.4 MILES SOUTHEAST ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 60 IN WATERVILLE, AT TRUNK HIGHWAY 13 MILEPOINT 40.25, 89.9 FEET NORTH-NORTHEAST OF TRUNK HIGHWAY 13, 58.1 FEET SOUTH OF 440TH AVENUE, 65.2 FEET WEST-NORTHWEST OF A CENTER POINT ENERGY SIGN, 1.0 FOOT WEST-NORTHWEST OF A WITNESS POST.

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1098.564	0.016	334.843	0.005	2/1	2019	00000938

Geoid Separations(ft): GEOID18 = -93.317 12B = -93.323 09 = -93.238 03 = -93.048

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Geodetic Positions Longitude	County (Feet) X	County (Feet) Y	County (Meters) X	County (Meters) Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Project Info Reference
NAD83(2011)	44 11 45.62313	93 31 13.46171	341646.463	232593.627	104134.050	70894.679	306.408		2020	GPS3368
NAD83(2007)	44 11 45.62301	93 31 13.46250	341646.405	232593.615	104134.033	70894.676	306.424	C	2009	GPS2437
NAD83(1996)	44 11 45.62254	93 31 13.46195	341646.445	232593.567	104134.045	70894.661	306.482	C	2020	HTH13

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8102_J-DK4208-3N-10MAR2020.jpg	N	Mar 10, 2020
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8102_J-DK4208-2-10MAR2020.jpg		Mar 10, 2020
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8102_J-DK4208-1-10MAR2020.jpg		Mar 10, 2020

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_50701.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_50701.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8102 K **NGS Name:** 8102 K

County: WASECA, MN (Sheet 1)

NGS ACRN: DM3922 Get Map
NGS Quad / Sta Num : 44093322/
USGS Quad: WASECA

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	6	107 N	22 W	440612.07	933026.97	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2004	2020	GOOD	Horz=YES Vert=YES	YES		RECESSED 2 IN.	MARKER W/BAR MAGNET

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 30 FT)

Disk Type
SURVEY DISK

Mon. Agency
MNDT

Description: (2004) **Stamping:** 8102 K 2004

AT THE NORTH END OF WASECA, 1.3 MILES NORTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND COUNTY ROAD 13 IN WASECA, AT TRUNK HIGHWAY 13 MILEPOINT 33.7, 38.0 FEET WEST OF TRUNK HIGHWAY 13, 2.2 FEET SOUTH OF A WITNESS POST.

Station Pair: BLOOM - WASECA, MN

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1138.498	0.016	347.015	0.005	2/1	2020	00000949

Geoid Separations(ft): GEOID18 = -93.957 12B = -93.966 09 = -93.881 03 = -93.720

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Geodetic Positions Longitude	County (Feet) X	County (Feet) Y	County (Meters) X	County (Meters) Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Project Info Reference
NAD83(2011)	44 06 12.06581	93 30 26.97144	344791.579	198790.769	105092.683	60591.548	318.385		2020	GPS3368
NAD83(1996)	44 06 12.06576	93 30 26.97171	344791.559	198790.764	105092.677	60591.546	318.441	C	2020	HTH13

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8102_K-DM3922-3W-10MAR2020.jpg	W	Mar 10, 2020
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8102_K-DM3922-2-10MAR2020.jpg		Mar 10, 2020
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8102_K-DM3922-1-10MAR2020.jpg		Mar 10, 2020

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_50700.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_50700.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8102 L

NGS Name: 8102 L

County: WASECA, MN (Sheet 1)

NGS ACRN: DM3921 Get Map
NGS Quad / Sta Num : 44093322/
USGS Quad: WASECA

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	8	107 N	22 W	440517.40	933025.40	2	

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2004	2018	DESTROYED	Horz=NO Vert=NO	YES		FLUSH	MARKER W/BAR MAGNET

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 20 FT)

Disk Type
SURVEY DISK

Mon. Agency
MNDT

Description: (2004)

Stamping: 8102 L 2004

IN WASECA, 0.7 MILE NORTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 14 IN WASECA, AT TRUNK HIGHWAY 13 MILEPOINT 32.7, 23.5 EAST OF NORTHBOUND TRUNK HIGHWAY 13, 78.2 FEET NORTH OF 11TH AVENUE NORTHEAST, 17.6 FEET NORTH-NORTHEAST OF A LIGHT POLE, 3.7 FEET EAST-SOUTHEAST OF THE BACK OF A CURB, 1.2 FEET WEST-NORTHWEST OF A SIDE WALK, 2.5 FEET NORTH-NORTHEAST OF A WITNESS POST.

Station Notes
THE DISK WAS TURNED IN TO THE OFFICE. FOUND WITH THE CAP LOOSE.

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Accuracy	Orthometric (Meters) Height	Accuracy	Survey Order/(Class)	Project Info Year	Reference
NAVD88	1138.078	0.016	346.887	0.005	2/1	2019	00000938

Geoid Separations(ft): GEOID18 = -94.068 12B = -94.078 09 = -93.996 03 = -93.838

*** No Horizontal Positions in the Database ***

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8102_L-DM3921-3E-15JUN2004.jpg	E	Jun 15, 2004
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8102_L-DM3921-2-15JUN2004.jpg		Jun 15, 2004
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8102_L-DM3921-1-15JUN2004.jpg		Jun 15, 2004

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_50699.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_50699.pdf

8102 L RESET

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8102 L RESET **NGS Name:** 8102 L RESET

County: WASECA, MN (Sheet 1)

NGS ACRN: DR3031 Get Map
NGS Quad / Sta Num : 44093322/
USGS Quad: WASECA

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	8	107 N	22 W	440516.54	933025.39	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2018	2020	GOOD	Horz=YES Vert=YES	YES		RECESSED 4 IN.	BAR MAG IN DRILL HOLE

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 20 FT)

Disk Type
METAL ROD (WITH REMOVABLE ID DISK)

Mon. Agency
MNDT

Description: (2018)

Stamping: 8102 L RESET 2018

IN WASECA, 2.4 MILES NORTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 14 IN WASECA, AT TRUNK HIGHWAY 13 MILEPOINT 32.7, 23.5 FEET EAST OF NORTHBOUND TRUNK HIGHWAY 13, 78.2 FEET NORTH OF 11TH AVENUE NORTHEAST, 17.6 FEET NORTH-NORTHEAST OF A LIGHT POLE, 3.7 FEET EAST-SOUTHEAST OF THE BACK OF A CURB, 1.2 FEET WEST-NORTHWEST OF A SIDE WALK.

Station Notes
NO WITNESS POST, THE SURVEY MARK IS IN A MOWED AREA.

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Accuracy	Orthometric (Meters) Height	Accuracy	Survey Order/(Class)	Project Info Year	Reference
NAVD88	1137.872	0.016	346.824	0.005	2/1	2020	00000949

Geoid Separations(ft): GEOID18 = -94.071 12B = -94.078 09 = -93.996 03 = -93.842

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Longitude	County (Feet) X	Y	County (Meters) X	Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Reference
NAD83(2011)	44 05 16.53660	93 30 25.39420	344866.413	193166.736	105115.493	58877.339	318.164		2020	GPS3368
NAD83(1996)	44 05 16.53654	93 30 25.39445	344866.395	193166.730	105115.488	58877.337	318.222	C	2020	HTH13

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8102_L_RESET-DR3031-3E-10MAR2020.jpg	E	Mar 10, 2020
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8102_L_RESET-DR3031-2-10MAR2020.jpg		Mar 10, 2020
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8102_L_RESET-DR3031-1-10MAR2020.jpg		Mar 10, 2020

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_109138.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_109138.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8102 M **NGS Name:** 8102 M

County: WASECA, MN (Sheet 1)

NGS ACRN: DQ6348 Get Map
NGS Quad / Sta Num : 44093321/
USGS Quad: WATERVILLE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	8	108 N	22 W	441016.60	933025.01	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2016	2020	GOOD	Horz=YES Vert=YES	YES		RECESSED 2 IN.	BAR MAG IN DRILL HOLE

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 24 FT)

Disk Type
METAL ROD (WITH REMOVABLE ID DISK)

Mon. Agency
MNDT

Description: (2016) **Stamping:** 8102 M 2016

4.5 MILES SOUTHEAST OF WATERVILLE, 4.2 MILES SOUTHEAST ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 60 IN WATERVILLE, AT TRUNK HIGHWAY 13 MILEPOINT 38.35, 67.0 FEET EAST OF TRUNK HIGHWAY 13, 48.3 FEET SOUTH OF A FIELD ENTRANCE, 1.5 FEET WEST OF A WITNESS POST.

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1151.523	0.016	350.985	0.005	2/1	2020	00000949

Geoid Separations(ft): GEOID18 = -93.409 12B = -93.415 09 = -93.333 03 = -93.153

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Geodetic Positions Longitude	County (Feet) X	County (Feet) Y	County (Meters) X	County (Meters) Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Project Info Reference
NAD83(2011)	44 10 16.59504	93 30 25.00718	345112.158	223552.400	105190.396	68138.908	322.537		2020	GPS3368
NAD83(1996)	44 10 16.59491	93 30 25.00746	345112.137	223552.388	105190.390	68138.904	322.596	C	2020	HTH13

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8102_M-DQ6348-3E-10MAR2020.jpg	E	Mar 10, 2020
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8102_M-DQ6348-2-10MAR2020.jpg		Mar 10, 2020
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8102_M-DQ6348-1-10MAR2020.jpg		Mar 10, 2020

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_105737.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_105737.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8103 A **NGS Name:** 8103 A

County: WASECA, MN (Sheet 1)

NGS ACRN: PP3521 Get Map
NGS Quad / Sta Num : 44093331/
USGS Quad: MADISON LAKE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	30	108 N	24 W	440750.47	934531.92	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1988	2004	GOOD	Horz=NO Vert=NO	YES		FLUSH	MARKER W/BAR MAGNET

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 25 FT)

Disk Type
VERTICAL CONTROL DISK

Mon. Agency
MNDT

Description: (2010)

Stamping: 8103 A 1988

2.7 MILES NORTHWEST OF JANESVILLE, 0.7 MILE SOUTHEAST ALONG TRUNK HIGHWAY 14 FROM THE JUNCTION OF TRUNK HIGHWAY 14 AND COUNTY ROAD 37 IN SMITH'S MILL, AT TRUNK HIGHWAY 14 MILEPOINT 144.5, 64.0 FEET WEST-SOUTHWEST OF TRUNK HIGHWAY 14, 17.0 FEET NORTHWEST OF AN ENTRANCE, 1.0 FOOT NORTH OF A WITNESS POST.

Station Notes

THE SURVEY MARK IS ON RAILROAD PROPERTY AND HAS BEEN ABANDONED FOR MNDOT GEODETIC USE.

Leveling-Derived Orthometric Heights (Elevations)

Vertical Datum	Orthometric (Feet) Height	Accuracy	Orthometric (Meters) Height	Accuracy	Survey Order/(Class)	Project Info Year	Reference
NAVD88	1033.098	0.016	314.889	0.005	2/1	1995	00000135
NGVD29	1032.947	0.016	314.843	0.005	2/1	1988	VWASE

Geoid Separations(ft): GEOID18 = -94.518 12B = -94.524 09 = -94.439 03 = -94.281

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Longitude	County (Feet) X	Y	County (Meters) X	Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Reference
NAD83(2011)	44 07 50.47080	93 45 31.91712	278860.004	209329.342	84996.6990	63803.711	286.071		2012	GPS2800
NAD83(2007)	44 07 50.47077	93 45 31.91790	278859.947	209329.340	84996.6820	63803.710	286.096		2007	GPS2300
NAD83(1996)	44 07 50.47022	93 45 31.91699	278860.013	209329.283	84996.7020	63803.693	286.134	C	2005	GPS2088

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8103_A-PP3521-3S-08JUN2004.jpg	S	Jun 8, 2004
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8103_A-PP3521-2-08JUN2004.jpg		Jun 8, 2004
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8103_A-PP3521-1-08JUN2004.jpg		Jun 8, 2004

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33181.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33181.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8103 AA **NGS Name:** 8103 AA

County: WASECA, MN (Sheet 1)

NGS ACRN: DP5021 Get Map
NGS Quad / Sta Num : 44093322/
USGS Quad: WASECA

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	5	107 N	23 W	440610.26	933719.10	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2014	2018	GOOD	Horz=YES Vert=YES	YES		RECESSED 2 IN.	BAR MAG IN DRILL HOLE

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 30 FT)

Disk Type
METAL ROD (WITH REMOVABLE ID DISK)

Mon. Agency
MNDT

Description: (2014) **Stamping:** 8103 AA 2014

6.0 MILES NORTHWEST OF WASECA, 8.45 MILES NORTHWEST ALONG TRUNK HIGHWAY 14 FROM THE JUNCTION OF TRUNK HIGHWAY 14 AND TRUNK HIGHWAY 13 IN WASECA, AT TRUNK HIGHWAY 14 MILEPOINT 152.15, 91.6 FEET EAST OF COUNTY ROAD 17, 68.5 FEET SOUTH OF A WESTBOUND TRUNK HIGHWAY 14 FOG LINE, 31.7 FEET NORTH OF AN EASTBOUND TRUNK HIGHWAY 14 FOG LINE, 1.5 FEET SOUTH OF A WITNESS POST.

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1137.734	0.016	346.782	0.005	2/1	2016	00000870

Geoid Separations(ft): GEOID18 = -94.596 12B = -94.600 09 = -94.531 03 = -94.360

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Geodetic Positions Longitude	County (Feet) X	County (Feet) Y	County (Meters) X	County (Meters) Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Project Info Reference
NAD83(2011)	44 06 10.26169	93 37 19.10492	314716.668	198844.408	95925.8320	60607.897	317.949		2014	GPS3043
NAD83(1996)	44 06 10.26144	93 37 19.10532	314716.638	198844.383	95925.8230	60607.889	318.024	C	2014	HNEW14

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8103_AA-DP5021-3N-01AUG2018.jpg	N	Aug 1, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8103_AA-DP5021-2-01AUG2018.jpg		Aug 1, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8103_AA-DP5021-1-01AUG2018.jpg		Aug 1, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_101485.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_101485.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8103 AB **NGS Name:** 8103 AB

County: WASECA, MN (Sheet 1)

NGS ACRN: DP5022 Get Map
NGS Quad / Sta Num : 44093322/
USGS Quad: WASECA

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	4	107 N	23 W	440556.66	933611.97	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2014	2018	GOOD	Horz=YES Vert=YES	YES		RECESSED 2 IN.	BAR MAG IN DRILL HOLE

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 19 FT)

Disk Type
METAL ROD (WITH REMOVABLE ID DISK)

Mon. Agency
MNDT

Description: (2014)

Stamping: 8103 AB 2014

5.0 MILES NORTHWEST OF WASECA, 7.45 MILES NORTHWEST ALONG TRUNK HIGHWAY 14 FROM THE JUNCTION OF TRUNK HIGHWAY 14 AND TRUNK HIGHWAY 13 IN WASECA, AT TRUNK HIGHWAY 14 MILEPOINT 153.15, 38.1 FEET SOUTH OF AN EASTBOUND TRUNK HIGHWAY 14 FOG LINE, 1.5 FEET NORTH OF A WITNESS POST.

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1127.038	0.016	343.522	0.005	2/1	2016	00000870

Geoid Separations(ft): GEOID18 = -94.550 12B = -94.554 09 = -94.485 03 = -94.311

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Geodetic Positions Longitude	County (Feet) X	County (Feet) Y	County (Meters) X	County (Meters) Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Project Info Reference
NAD83(2011)	44 05 56.65761	93 36 11.97627	319603.588	197425.451	97415.3680	60175.398	314.703		2014	GPS3043
NAD83(1996)	44 05 56.65736	93 36 11.97666	319603.559	197425.426	97415.3600	60175.390	314.778	C	2014	HNEW14

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8103_AB-DP5022-3S-01AUG2018.jpg	S	Aug 1, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8103_AB-DP5022-2-01AUG2018.jpg		Aug 1, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8103_AB-DP5022-1-01AUG2018.jpg		Aug 1, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_101482.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_101482.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8103 AC **NGS Name:** 8103 AC

County: WASECA, MN (Sheet 1)

NGS ACRN: DP5023 Get Map
NGS Quad / Sta Num : 44093322/
USGS Quad: WASECA

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	10	107 N	23 W	440458.90	933403.13	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2014	2018	GOOD	Horz=YES Vert=YES	YES		RECESSED 2 IN.	BAR MAG IN DRILL HOLE

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 24 FT)

Disk Type
METAL ROD (WITH REMOVABLE ID DISK)

Mon. Agency
MNDT

Description: (2014) **Stamping:** 8103 AC 2014

3.1 MILES WEST OF WASECA, 5.05 MILES NORTHWEST ALONG TRUNK HIGHWAY 14 FROM THE JUNCTION OF TRUNK HIGHWAY 14 AND TRUNK HIGHWAY 13 IN WASECA, AT TRUNK HIGHWAY 14 MILEPOINT 155.5, 47.0 FEET WEST OF EASTBOUND TRUNK HIGHWAY 14, 31.7 FEET SOUTHEAST OF THE EXIT RAMP FROM EASTBOUND TRUNK HIGHWAY 14 TO COUNTY ROAD 2, 1.5 FEET EAST OF A WITNESS POST.

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1131.979	0.016	345.028	0.005	2/1	2016	00000870

Geoid Separations(ft): GEOID18 = -94.485 12B = -94.488 09 = -94.419 03 = -94.248

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Geodetic Positions Longitude	County (Feet) X	County (Feet) Y	County (Meters) X	County (Meters) Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Project Info Reference
NAD83(2011)	44 04 58.89935	93 34 03.12656	328960.238	191500.301	100267.281	58369.409	316.230		2014	GPS3043
NAD83(1996)	44 04 58.89911	93 34 03.12680	328960.220	191500.277	100267.276	58369.401	316.302	C	2014	HNEW14

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8103_AC-DP5023-3W-01AUG2018.jpg	W	Aug 1, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8103_AC-DP5023-2-01AUG2018.jpg		Aug 1, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8103_AC-DP5023-1-01AUG2018.jpg		Aug 1, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_101475.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_101475.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8103 AD **NGS Name:** 8103 AD

County: WASECA, MN (Sheet 1)

NGS ACRN: DP9094 Get Map
NGS Quad / Sta Num : 44093322/
USGS Quad: WASECA

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	15	107 N	23 W	440405.90	933403.32	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2014	2018	GOOD	Horz=YES Vert=YES	YES		RECESSED 2 IN.	BAR MAG IN DRILL HOLE

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 34 FT)

Disk Type
METAL ROD (WITH REMOVABLE ID DISK)

Mon. Agency
MNDT

Description: (2014)

Stamping: 8103 AD 2014

3.0 MILES WEST OF WASECA, 4.05 MILES NORTHWEST ALONG TRUNK HIGHWAY 14 FROM THE JUNCTION OF TRUNK HIGHWAY 14 AND TRUNK HIGHWAY 13 IN WASECA, AT TRUNK HIGHWAY 14 MILEPOINT 156.5, 66.3 FEET WEST OF AN EASTBOUND TRUNK HIGHWAY 14 FOG LINE, 1.5 FEET EAST OF A WITNESS POST.

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1107.439	0.016	337.548	0.005	2/1	2016	00000870

Geoid Separations(ft): GEOID18 = -94.583 12B = -94.590 09 = -94.518 03 = -94.350

*** No Horizontal Positions in the Database ***

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8103_AD-DP9094-3W-01AUG2018.jpg	W	Aug 1, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8103_AD-DP9094-2-01AUG2018.jpg		Aug 1, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8103_AD-DP9094-1-01AUG2018.jpg		Aug 1, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_101474.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_101474.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8103 AE
NGS Name: 8103 AE

County: WASECA, MN (Sheet 1)

NGS ACRN: DP9097 Get Map
NGS Quad / Sta Num : 44093322/
USGS Quad: WASECA

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	24	107 N	23 W	440328.23	933244.14	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2014	2018	GOOD	Horz=YES Vert=YES	YES		RECESSED 2 IN.	BAR MAG IN DRILL HOLE

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 35 FT)

Disk Type
METAL ROD (WITH REMOVABLE ID DISK)

Mon. Agency
MNDT

Description: (2014)

Stamping: 8103 AE 2014

2.2 MILES SOUTHWEST OF WASECA, 2.45 MILES WEST ALONG TRUNK HIGHWAY 14 FROM THE JUNCTION OF TRUNK HIGHWAY 14 AND TRUNK HIGHWAY 13 IN WASECA, AT TRUNK HIGHWAY 14 MILEPOINT 158.15, 63.0 FEET SOUTH OF AN EASTBOUND TRUNK HIGHWAY 14 FOG LINE, 1.5 FEET NORTH OF A WITNESS POST.

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1114.830	0.016	339.801	0.005	2/1	2016	00000870

Geoid Separations(ft): GEOID18 = -94.537 12B = -94.544 09 = -94.472 03 = -94.314

*** No Horizontal Positions in the Database ***

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8103_AE-DP9097-3S-01AUG2018.jpg	S	Aug 1, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8103_AE-DP9097-2-01AUG2018.jpg		Aug 1, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8103_AE-DP9097-1-01AUG2018.jpg		Aug 1, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_101476.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_101476.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8103 AF **NGS Name:** 8103 AF

County: WASECA, MN (Sheet 1)

NGS ACRN: DP5024 Get Map
NGS Quad / Sta Num : 44093322/
USGS Quad: WASECA

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	13	107 N	22 W	440329.29	933136.41	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2014	2018	GOOD	Horz=YES Vert=YES	YES		RECESSED 2 IN.	BAR MAG IN DRILL HOLE

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 29 FT)

Disk Type
METAL ROD (WITH REMOVABLE ID DISK)

Mon. Agency
MNDT

Description: (2014) **Stamping:** 8103 AF 2014

1.5 MILES SOUTHWEST OF WASECA, 1.55 MILES WEST ALONG TRUNK HIGHWAY 14 FROM THE JUNCTION OF TRUNK HIGHWAY 14 AND TRUNK HIGHWAY 13 IN WASECA, AT TRUNK HIGHWAY 14 MILEPOINT 159.10, 85.5 FEET SOUTH OF AN EASTBOUND TRUNK HIGHWAY 14 FOG LINE, 2.5 FEET NORTH OF A RIGHT-OF-WAY POST, 2.5 FEET NORTH OF A WITNESS POST.

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1138.754	0.016	347.093	0.005	2/1	2016	00000870

Geoid Separations(ft): GEOID18 = -94.426 12B = -94.432 09 = -94.357 03 = -94.199

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Geodetic Positions Longitude	County (Feet) X	County (Feet) Y	County (Meters) X	County (Meters) Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Project Info Reference
NAD83(2011)	44 03 29.29415	93 31 36.41096	339602.612	182344.543	103511.083	55578.728	318.321		2014	GPS3043
NAD83(1996)	44 03 29.29392	93 31 36.41102	339602.608	182344.520	103511.082	55578.721	318.392	C	2014	HNEW14

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8103_AF-DP5024-3S-01AUG2018.jpg	S	Aug 1, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8103_AF-DP5024-2-01AUG2018.jpg		Aug 1, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8103_AF-DP5024-1-07AUG2018.jpg		Aug 7, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_101473.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_101473.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8103 AG **NGS Name:** 8103 AG

County: WASECA, MN (Sheet 1)

NGS ACRN: DP9100 Get Map
NGS Quad / Sta Num : 44093322/
USGS Quad: WASECA

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	19	107 N	22 W	440335.56	933038.45	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2014	2018	GOOD	Horz=YES Vert=YES	YES		FLUSH	BAR MAG IN DRILL HOLE

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 19 FT)

Disk Type
METAL ROD (WITH REMOVABLE ID DISK)

Mon. Agency
MNDT

Description: (2014) **Stamping:** 8103 AG 2014

1.15 MILES SOUTH OF WASECA, 0.75 MILE WEST ALONG TRUNK HIGHWAY 14 FROM THE JUNCTION OF TRUNK HIGHWAY 14 AND TRUNK HIGHWAY 13 IN WASECA, AT TRUNK HIGHWAY 14 MILEPOINT 159.85, 28.6 FEET SOUTH OF AN EASTBOUND TRUNK HIGHWAY 14 FOG LINE, 131.0 FEET WEST-SOUTHWEST OF THE WEST END OF A GUARD RAIL, 1.5 FEET NORTH OF A WITNESS POST.

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1185.401	0.016	361.311	0.005	2/1	2016	00000870

Geoid Separations(ft): GEOID18 = -94.308 12B = -94.314 09 = -94.239 03 = -94.084

*** No Horizontal Positions in the Database ***

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8103_AG-DP9100-3S-01AUG2018.jpg	S	Aug 1, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8103_AG-DP9100-2-01AUG2018.jpg		Aug 1, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8103_AG-DP9100-1-01AUG2018.jpg		Aug 1, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_101472.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_101472.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8103 B **NGS Name:** 8103 B

County: WASECA, MN (Sheet 1)

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	31	108 N	24 W	440724.10	934457.20	2	C

NGS ACRN: PP3522 Get Map
NGS Quad / Sta Num : 44093323/
USGS Quad: JANESVILLE

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1988	2004	GOOD	Horz=NO Vert=NO	YES		FLUSH	MARKER W/BAR MAGNET

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 20 FT)

Disk Type
VERTICAL CONTROL DISK

Mon. Agency
MNDT

Description: (2010) **Stamping:** 8103 B 1988

1.4 MILES SOUTHEAST ALONG TRUNK HIGHWAY 14 FROM THE JUNCTION OF TRUNK HIGHWAY 14 AND COUNTY ROAD 37 IN SMITH'S MILL, NEAR THE JUNCTION OF TRUNK HIGHWAY 14 AND 390TH AVENUE, AT TRUNK HIGHWAY 14 MILEPOINT 145.2, 116.0 FEET SOUTHWEST OF TRUNK HIGHWAY 14, 8.3 FEET SOUTHWEST OF THE SOUTH RAIL OF THE RAILROAD TRACKS, 1.0 FOOT NORTH OF A WITNESS POST.

Station Notes
THE SURVEY MARK IS ON RAILROAD PROPERTY AND HAS BEEN ABANDONED FOR MNDOT GEODETIC USE.

Leveling-Derived Orthometric Heights (Elevations)

Vertical Datum	Orthometric (Feet) Height	Accuracy	Orthometric (Meters) Height	Accuracy	Survey Order/(Class)	Project Info Year	Reference
NAVD88	1050.300	0.016	320.132	0.005	2/1	1995	00000135
NGVD29	1050.146	0.016	320.085	0.005	2/1	1988	VWASE

Geoid Separations(ft): GEOID18 = -94.567 12B = -94.573 09 = -94.491 03 = -94.334

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Longitude	County (Feet) X	Y	County (Meters) X	Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Reference
NAD83(2011)	44 07 24.09979	93 44 57.20313	281364.903	206633.202	85760.1940	62981.926	291.301		2012	GPS2800
NAD83(2007)	44 07 24.09976	93 44 57.20391	281364.847	206633.200	85760.1770	62981.925	291.325		2007	GPS2300
NAD83(1996)	44 07 24.09938	93 44 57.20330	281364.891	206633.161	85760.1900	62981.913	291.369	C	2005	GPS2088

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8103_B-PP3522-3S-08JUN2004.jpg	S	Jun 8, 2004
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8103_B-PP3522-2-08JUN2004.jpg		Jun 8, 2004
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8103_B-PP3522-1-08JUN2004.jpg		Jun 8, 2004

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33182.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33182.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8103 C **NGS Name:** 8103 C

County: WASECA, MN (Sheet 1)

NGS ACRN: PP3523 Get Map
NGS Quad / Sta Num : 44093323/
USGS Quad: JANESVILLE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	32	108 N	24 W	440702.59	934415.22	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1988	2003	GOOD	Horz=NO Vert=NO	NO		FLUSH	MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
CULVERT - ANY SIZE, ANY TYPE	VERTICAL CONTROL DISK	MNDT

Description: (2010) **Stamping:** 8103 C 1988

1.5 MILES WEST ALONG TRUNK HIGHWAY 14 FROM THE JUNCTION OF TRUNK HIGHWAY 14 AND COUNTY ROAD 3 (MAIN STREET) IN JANESVILLE, AT A RAILROAD CULVERT AT THE WEST END OF A CURVE, AT TRUNK HIGHWAY 14 MILEPOINT 145.9, 93.0 FEET SOUTHWEST OF TRUNK HIGHWAY 14, 53.3 FEET NORTHEAST OF A TELEPHONE POLE, 10.0 FEET NORTHEAST OF THE NORTH RAIL OF THE RAILROAD TRACKS, 1.8 FEET WEST-NORTHWEST OF THE EAST EDGE OF A CULVERT HEADWALL.

Station Notes

THE SURVEY MARK IS ON RAILROAD PROPERTY AND HAS BEEN ABANDONED FOR MNDOT GEODETIC USE.

Leveling-Derived Orthometric Heights (Elevations)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1060.516	0.016	323.246	0.005	2/1	1995	00000135
NGVD29	1060.355	0.016	323.197	0.005	2/1	1988	VWASE

Geoid Separations(ft): GEOID18 = -94.616 12B = -94.623 09 = -94.537 03 = -94.383

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Geodetic Positions Longitude	County (Feet) X	County (Feet) Y	County (Meters) X	County (Meters) Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Project Info Reference
NAD83(2011)	44 07 02.58952	93 44 15.22294	284405.421	204424.290	86686.9460	62308.648	294.393		2012	GPS2800
NAD83(2007)	44 07 02.58950	93 44 15.22372	284405.365	204424.289	86686.9290	62308.648	294.417		2007	GPS2300
NAD83(1996)	44 07 02.58908	93 44 15.22309	284405.410	204424.246	86686.9420	62308.635	294.460	C	2000	GPS1453

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33183.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33183.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8103 D

NGS Name: 8103 D

County: WASECA, MN (Sheet 1)

NGS ACRN: PP3524 Get Map
NGS Quad / Sta Num : 44093323/
USGS Quad: JANESVILLE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	33	108 N	24 W	440657.67	934323.29	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1988	2018	GOOD	Horz=NO Vert=NO	YES		FLUSH	NO MAG MATERIAL

Monument Type
CULVERT - ANY SIZE, ANY TYPE

Disk Type
VERTICAL CONTROL DISK

Mon. Agency
MNDT

Description: (2010)

Stamping: 8103 D 1988

0.30 MILE WEST OF JANESVILLE, 0.30 MILE WEST ALONG COUNTY ROAD 14 FROM THE JUNCTION OF COUNTY ROAD 14 AND COUNTY ROAD 18 NORTH IN JANESVILLE, 50.0 FEET SOUTH OF COUNTY ROAD 14, 0.4 FOOT WEST OF THE SOUTHEAST CORNER OF A HEADWALL OF A TRUNK HIGHWAY 14 CULVERT AT COUNTY DITCH 6.

Leveling-Derived Orthometric Heights (Elevations)

Vertical Datum	Orthometric (Feet) Height	Accuracy	Orthometric (Meters) Height	Accuracy	Survey Order/(Class)	Project Info Year	Reference
NAVD88	1019.168	0.016	310.643	0.005	2/1	2016	00000870
NGVD29	1019.063	0.016	310.611	0.005	2/1	1988	VWASE

Geoid Separations(ft): GEOID18 = -94.645 12B = -94.652 09 = -94.570 03 = -94.413

*** No Horizontal Positions in the Database ***

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8103_D-PP3524-3S-01AUG2018.jpg	S	Aug 1, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8103_D-PP3524-2-01AUG2018.jpg		Aug 1, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8103_D-PP3524-1-01AUG2018.jpg		Aug 1, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33184.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33184.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8103 E **NGS Name:** 8103 E

County: WASECA, MN (Sheet 1)

NGS ACRN: PP3525 Get Map
NGS Quad / Sta Num : 44093323/
USGS Quad: JANESVILLE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	33	108 N	24 W	440656.98	934233.45	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1988	2018	GOOD	Horz=NO Vert=YES	YES		FLUSH	MARKER W/BAR MAGNET

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 25 FT)

Disk Type
VERTICAL CONTROL DISK

Mon. Agency
MNDT

Description: (2010) **Stamping:** 8103 E 1988

IN JANESVILLE, 0.1 MILE WEST ON COUNTY ROAD 14 FROM THE JUNCTION OF COUNTY ROAD 14 AND COUNTY ROAD 3 (MAIN STREET) IN JANESVILLE, 148.0 FEET SOUTH OF COUNTY ROAD 14, IN A CITY PARK, 79.0 FEET WEST OF NORTH MOTT STREET, 5.0 FEET NORTHWEST OF THE NORTHWEST CORNER OF A PICNIC SHELTER, 0.3 FOOT NORTHWEST OF THE NORTHWEST CORNER OF A CONCRETE SLAB.

Station Notes
DUE TO TREE COVER, THIS SURVEY MARK HAS BEEN ABANDONED FOR MNDOT GEODETIC HORIZONTAL SURVEYS.

Leveling-Derived Orthometric Heights (Elevations)

Vertical Datum	Orthometric (Feet) Height	Accuracy	Orthometric (Meters) Height	Accuracy	Survey Order/(Class)	Project Info Year	Reference
NAVD88	1051.920	0.016	320.626	0.005	2/1	2016	00000870
NGVD29	1051.770	0.016	320.580	0.005	2/1	1988	VWASE

Geoid Separations(ft): GEOID18 = -94.659 12B = -94.665 09 = -94.586 03 = -94.426

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Longitude	County (Feet) X	Y	County (Meters) X	Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Reference
NAD83(2011)	44 06 56.97617	93 42 33.45334	291824.199	203783.228	88948.1940	62113.252	291.774		2012	GPS2800
NAD83(2007)	44 06 56.97614	93 42 33.45412	291824.142	203783.225	88948.1760	62113.251	291.798		2007	GPS2300
NAD83(1996)	44 06 56.97583	93 42 33.45365	291824.176	203783.193	88948.1870	62113.242	291.842	C	2000	GPS1453

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8103_E-PP3525-3S-01AUG2018.jpg	S	Aug 1, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8103_E-PP3525-2-01AUG2018.jpg		Aug 1, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8103_E-PP3525-1-01AUG2018.jpg		Aug 1, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33185.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33185.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8103 F

NGS Name: 8103 F

County: WASECA, MN (Sheet 1)

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	34	108 N	24 W	440701.00	934225.00	2	

NGS ACRN: PP3526 Get Map
NGS Quad / Sta Num : 44093323/
USGS Quad: JANESVILLE

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1988	2005	DESTROYED	Horz=NO Vert=NO	NO			MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
CONCRETE FOUNDATION	VERTICAL CONTROL DISK	MNDT

Description: (2010)

Stamping: 8103 F 1988

IN A CITY WATER TANK IN JANESVILLE, 0.1 MILE NORTH ALONG COUNTY ROAD 3 (MAIN STREET) FROM THE JUNCTION OF COUNTY ROAD 3 (MAIN STREET) AND TRUNK HIGHWAY 14, THEN 0.05 MILE EAST ON 2ND STREET, THEN SOUTH 150.0 FEET ALONG AN ALLEY, 46.0 FEET WEST OF AN ALLEY, 22.3 FEET NORTHEAST OF A STANDPIPE, IN THE TOP OF THE NORTHEAST CORNER OF THE CONCRETE BASE OF THE NORTHEAST LEG OF A WATER TANK.

Leveling-Derived Orthometric Heights (Elevations)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1067.780	0.016	325.460	0.005	2/1	1995	00000135
NGVD29	1067.609	0.016	325.408	0.005	2/1	1988	VWASE

Geoid Separations(ft): GEOID18 = -94.655 12B = -94.662 09 = -94.583 03 = -94.422

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33186.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33186.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8103 G **NGS Name:** 8103 G

County: WASECA, MN (Sheet 1)

NGS ACRN: PP3527 Get Map
NGS Quad / Sta Num : 44093323/
USGS Quad: JANESVILLE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	34	108 N	24 W	440658.00	934143.54	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1988	2018	GOOD	Horz=YES Vert=YES	YES		RECESSED 2 IN.	MARKER W/BAR MAGNET

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 20 FT)

Disk Type
VERTICAL CONTROL DISK

Mon. Agency
MNDT

Description: (2010) **Stamping:** 8103 G 1988

0.6 MILE EAST OF JANESVILLE, 0.6 MILE EAST ALONG COUNTY ROAD 14 FROM THE JUNCTION OF COUNTY ROAD 14 AND COUNTY ROAD 3 (MAIN STREET) IN JANESVILLE, 57.5 FEET SOUTH OF COUNTY ROAD 14, 19.0 FEET EAST OF AN ENTRANCE, 1.9 FEET WEST OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Elevations)

Vertical Datum	Orthometric (Feet) Height	Accuracy	Orthometric (Meters) Height	Accuracy	Survey Order/(Class)	Project Info Year	Reference
NAVD88	1049.637	0.016	319.930	0.005	2/1	2016	00000870
NGVD29	1049.493	0.016	319.886	0.005	2/1	1988	VWASE

Geoid Separations(ft): GEOID18 = -94.659 12B = -94.668 09 = -94.590 03 = -94.426

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Longitude	County (Feet) X	Y	County (Meters) X	Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Reference
NAD83(2011)	44 06 57.99845	93 41 43.53962	295466.559	203852.055	90058.3870	62134.231	291.076		2014	GPS3043
NAD83(2007)	44 06 57.99843	93 41 43.54040	295466.503	203852.053	90058.3700	62134.230	291.100		2007	GPS2300
NAD83(1996)	44 06 57.99825	93 41 43.54011	295466.524	203852.035	90058.3770	62134.225	291.140	C	2014	HNEW14

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8103_G-PP3527-3S-01AUG2018.jpg	S	Aug 1, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8103_G-PP3527-2-01AUG2018.jpg		Aug 1, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8103_G-PP3527-1-01AUG2018.jpg		Aug 1, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33187.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33187.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8103 H **NGS Name:** 8103 H

County: WASECA, MN (Sheet 1)

NGS ACRN: PP3528 Get Map
NGS Quad / Sta Num : 44093323/
USGS Quad: JANESVILLE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	35	108 N	24 W	440651.65	934052.60	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1988	2005	GOOD	Horz=NO Vert=NO	NO		FLUSH	MARKER W/BAR MAGNET

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 25 FT)

Disk Type
VERTICAL CONTROL DISK

Mon. Agency
MNDT

Description: (2010)

Stamping: 8103 H 1988

1.5 MILES EAST ALONG TRUNK HIGHWAY 14 FROM THE JUNCTION OF TRUNK HIGHWAY 14 AND COUNTY ROAD 3 (MAIN STREET) IN JANESVILLE, AT TRUNK HIGHWAY 14 MILEPOINT 148.7, 55.0 FEET SOUTH-SOUTHWEST OF TRUNK HIGHWAY 14, 48.0 FEET NORTH-NORTHWEST OF THE NORTH RAIL OF THE RAILROAD TRACKS, 11.0 FEET EAST OF AN ENTRANCE, 2.8 FEET WEST OF A WITNESS POST.

Station Notes

THE SURVEY MARK IS ON RAILROAD PROPERTY AND HAS BEEN ABANDONED FOR MNDOT GEODETIC USE.

Leveling-Derived Orthometric Heights (Elevations)

Vertical Datum	Orthometric (Feet) Height	Accuracy	Orthometric (Meters) Height	Accuracy	Survey Order/(Class)	Project Info Year	Reference
NAVD88	1107.727	0.016	337.636	0.005	2/1	1995	00000135
NGVD29	1107.567	0.016	337.587	0.005	2/1	1988	VWASE

Geoid Separations(ft): GEOID18 = -94.662 12B = -94.668 09 = -94.593 03 = -94.426

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Longitude	County (Feet) X	Y	County (Meters) X	Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Reference
NAD83(2011)	44 06 51.65221	93 40 52.59758	299176.992	203174.630	91189.3300	61927.751	308.774		2012	GPS2800
NAD83(2007)	44 06 51.65219	93 40 52.59835	299176.936	203174.628	91189.3120	61927.751	308.798		2007	GPS2300
NAD83(1996)	44 06 51.65199	93 40 52.59796	299176.964	203174.608	91189.3210	61927.744	308.843	C	2000	GPS1453

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33188.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33188.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8103 J **NGS Name:** 8103 J

County: WASECA, MN (Sheet 1)

NGS ACRN: PP3529 Get Map
NGS Quad / Sta Num : 44093323/
USGS Quad: JANESVILLE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	36	108 N	24 W	440639.78	933908.85	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1988	2004	GOOD	Horz=NO Vert=NO	YES		FLUSH	MARKER W/BAR MAGNET

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 20 FT)

Disk Type
VERTICAL CONTROL DISK

Mon. Agency
MNDT

Description: (2010) **Stamping:** 8103 J 1988

2.8 MILES EAST ALONG TRUNK HIGHWAY 14 FROM THE JUNCTION OF TRUNK HIGHWAY 14 AND COUNTY ROAD 3 (MAIN STREET) IN JANESVILLE, AT TRUNK HIGHWAY 14 MILEPOINT 150.15, 83.5 FEET SOUTH OF TRUNK HIGHWAY 14, 63.0 FEET NORTH-NORTHEAST OF A TELEPHONE POLE, 35.5 FEET SOUTHEAST OF UNDERGROUND CABLE POST NUMBER MN022125, 18.8 FEET NORTH OF THE NORTH RAIL OF THE RAILROAD TRACKS, 12.0 FEET WEST OF 50TH STREET, 7.1 FEET EAST-NORTHEAST OF A RAILROAD CROSSING SIGN, 2.4 FEET EAST OF A WITNESS POST.

Station Notes
THE SURVEY MARK IS ON RAILROAD PROPERTY AND HAS BEEN ABANDONED FOR MNDOT GEODETIC USE.

Leveling-Derived Orthometric Heights (Elevations)

Vertical Datum	Orthometric (Feet) Height	Accuracy	Orthometric (Meters) Height	Accuracy	Survey Order/(Class)	Project Info Year	Reference
NAVD88	1124.017	0.016	342.601	0.005	2/1	1995	00000135
NGVD29	1123.869	0.016	342.556	0.005	2/1	1988	VWASE

Geoid Separations(ft): GEOID18 = -94.636 12B = -94.642 09 = -94.570 03 = -94.396

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Longitude	County (Feet) X	Y	County (Meters) X	Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Reference
NAD83(2011)	44 06 39.78209	93 39 08.84889	306735.321	201903.749	93493.1130	61540.386	313.754		2012	GPS2800
NAD83(2007)	44 06 39.78208	93 39 08.84967	306735.264	201903.748	93493.0960	61540.386	313.778		2007	GPS2300
NAD83(1996)	44 06 39.78182	93 39 08.84928	306735.292	201903.722	93493.1040	61540.378	313.825	C	2000	GPS1453

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8103_J-PP3529-3S-08JUN2004.jpg	S	Jun 8, 2004
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8103_J-PP3529-2-08JUN2004.jpg		Jun 8, 2004
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8103_J-PP3529-1-08JUN2004.jpg		Jun 8, 2004

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33189.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33189.pdf

Geodetic Data Sheet (Brief)
GSID Station # 33190

8103 K

04/28/2026
Sheet Help

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8103 K
NGS Name: 8103 K

County: WASECA, MN (Sheet 1)

NGS ACRN: PP3530 Get Map
NGS Quad / Sta Num : 44093323/
USGS Quad: JANESVILLE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	6	107 N	23 W	440629.30	933813.91	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1988	1998	GOOD	Horz=NO Vert=NO	NO		FLUSH	MARKER W/BAR MAGNET

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 25 FT)

Disk Type
VERTICAL CONTROL DISK

Mon. Agency
MNDT

Description: (2010)

Stamping: 8103 K 1988

3.6 MILES EAST ALONG TRUNK HIGHWAY 14 FROM THE JUNCTION OF TRUNK HIGHWAY 14 AND COUNTY ROAD 3 (MAIN STREET) IN JANESVILLE, AT TRUNK HIGHWAY 14 MILEPOINT 151.0, 57.8 FEET SOUTHWEST OF TRUNK HIGHWAY 14, 110.7 FEET WEST-SOUTHWEST OF TRUNK HIGHWAY 14 MILEPOST 151, 44.6 FEET NORTHEAST OF THE NORTH RAIL OF THE RAILROAD TRACKS, 1.4 FEET WEST OF A WITNESS POST.

Station Notes

THE SURVEY MARK IS ON RAILROAD PROPERTY AND HAS BEEN ABANDONED FOR MNDOT GEODETIC USE.

Leveling-Derived Orthometric Heights (Elevations)

Vertical Datum	Orthometric (Feet) Height	Accuracy	Orthometric (Meters) Height	Accuracy	Survey Order/(Class)	Project Info Year	Reference
NAVD88	1120.825	0.016	341.628	0.005	2/1	1995	00000135
NGVD29	1120.683	0.016	341.585	0.005	2/1	1988	VWASE

Geoid Separations(ft): GEOID18 = -94.616 12B = -94.619 09 = -94.550 03 = -94.376

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Longitude	County (Feet) X	Y	County (Meters) X	Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Reference
NAD83(2011)	44 06 29.29851	93 38 13.91172	310734.255	200806.740	94711.9900	61206.017	312.797		2012	GPS2800
NAD83(2007)	44 06 29.29850	93 38 13.91250	310734.198	200806.739	94711.9730	61206.017	312.821		2007	GPS2300
NAD83(1996)	44 06 29.29822	93 38 13.91206	310734.230	200806.711	94711.9830	61206.008	312.868	C	2000	GPS1453

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33190.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33190.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8103 L **NGS Name:** 8103 L

County: WASECA, MN (Sheet 1)

NGS ACRN: PP3531 Get Map
NGS Quad / Sta Num : 44093322/
USGS Quad: WASECA

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	5	107 N	23 W	440612.84	933719.55	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1988	1998	GOOD	Horz=NO Vert=NO	NO			MARKER W/BAR MAGNET

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 20 FT)

Disk Type
VERTICAL CONTROL DISK

Mon. Agency
MNDT

Description: (2010) **Stamping:** 8103 L 1988

4.4 MILES EAST ALONG TRUNK HIGHWAY 14 FROM THE JUNCTION OF TRUNK HIGHWAY 14 AND COUNTY ROAD 3 (MAIN STREET) IN JANESVILLE, IN THE SOUTHEAST QUADRANT OF THE JUNCTION OF TRUNK HIGHWAY 14 AND COUNTY ROAD 17, AT TRUNK HIGHWAY 14 MILEPOINT 151.8, 86.0 FEET EAST OF COUNTY ROAD 17, 80.5 FEET EAST-SOUTHEAST OF A RAILROAD CROSSING POST, 37.2 FEET SOUTH-SOUTHWEST OF THE SOUTH RAIL OF THE RAILROAD TRACKS, 0.3 FOOT NORTHWEST OF A WITNESS POST.

Station Notes
THE SURVEY MARK IS ON RAILROAD PROPERTY AND HAS BEEN ABANDONED FOR MNDOT GEODETIC USE.

Leveling-Derived Orthometric Heights (Elevations)

Vertical Datum	Orthometric (Feet) Height	Accuracy	Orthometric (Meters) Height	Accuracy	Survey Order/(Class)	Project Info Year	Reference
NAVD88	1139.568	0.016	347.341	0.005	2/1	1995	00000135
NGVD29	1139.433	0.016	347.300	0.005	2/1	1988	VWASE

Geoid Separations(ft): GEOID18 = -94.593 12B = -94.596 09 = -94.527 03 = -94.357

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Longitude	County (Feet) X	Y	County (Meters) X	Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Reference
NAD83(2011)	44 06 12.83658	93 37 19.55029	314686.399	199105.432	95916.6060	60687.457	318.513		2012	GPS2800
NAD83(2007)	44 06 12.83657	93 37 19.55107	314686.342	199105.431	95916.5890	60687.457	318.537		2007	GPS2300
NAD83(1996)	44 06 12.83623	93 37 19.55068	314686.371	199105.397	95916.5980	60687.446	318.586	C	2000	GPS1453

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33191.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33191.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8103 M **NGS Name:** 8103 M

County: WASECA, MN (Sheet 1)

NGS ACRN: PP3532 Get Map
NGS Quad / Sta Num : 44093322/
USGS Quad: WASECA

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	5	107 N	23 W	440604.75	933626.94	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1988	2018	GOOD	Horz=YES Vert=YES	YES		FLUSH	MARKER W/BAR MAGNET

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 25 FT)

Disk Type
VERTICAL CONTROL DISK

Mon. Agency
MNDT

Description: (2010) **Stamping:** 8103 M 1988

5.0 MILES WEST-NORTHWEST OF WASECA, 8.45 MILES NORTHWEST ALONG TRUNK HIGHWAY 14 FROM THE JUNCTION OF TRUNK HIGHWAY 14 AND TRUNK HIGHWAY 13 IN WASECA TO TRUNK HIGHWAY 14 MILEPOINT 152.15, THEN 0.05 MILE NORTH ON COUNTY ROAD 17, THEN 0.75 MILE EAST ON COUNTY ROAD 14, 73.5 FEET NORTH-NORTHEAST OF COUNTY ROAD 14, 24.2 FEET EAST OF A POWER POLE, 2.9 FEET WEST OF A RIGHT-OF-WAY POST, 1.2 FEET NORTH OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Elevations)

Vertical Datum	Orthometric (Feet) Height	Accuracy	Orthometric (Meters) Height	Accuracy	Survey Order/(Class)	Project Info Year	Reference
NAVD88	1138.541	0.016	347.028	0.005	2/1	2016	00000870
NGVD29	1138.413	0.016	346.989	0.005	2/1	1988	VWASE

Geoid Separations(ft): GEOID18 = -94.554 12B = -94.557 09 = -94.488 03 = -94.314

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Longitude	County (Feet) X	Y	County (Meters) X	Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Reference
NAD83(2011)	44 06 04.74495	93 36 26.94384	318518.191	198253.537	97084.5390	60427.799	318.210		2014	GPS3043
NAD83(2007)	44 06 04.74494	93 36 26.94462	318518.135	198253.536	97084.5220	60427.799	318.234		2007	GPS2300
NAD83(1996)	44 06 04.74464	93 36 26.94427	318518.160	198253.506	97084.5290	60427.789	318.286	C	2014	HNEW14

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8103_M-PP3532-3N-01AUG2018.jpg	N	Aug 1, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8103_M-PP3532-2-01AUG2018.jpg		Aug 1, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8103_M-PP3532-1-01AUG2018.jpg		Aug 1, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33192.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33192.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8103 N **NGS Name:** 8103 N

County: WASECA, MN (Sheet 1)

NGS ACRN: PP3533 Get Map
NGS Quad / Sta Num : 44093322/
USGS Quad: WASECA

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	10	107 N	23 W	440540.76	933438.82	2	B

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1988	2018	DESTROYED	Horz=NO Vert=NO	YES		RECESSED 2 IN.	MARKER W/BAR MAGNET

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 25 FT)

Disk Type
VERTICAL CONTROL DISK

Mon. Agency
MNDT

Description: (2010) **Stamping:** 8103 N 1988

3.7 MILES WEST ALONG TRUNK HIGHWAY 14 FROM THE JUNCTION OF TRUNK HIGHWAY 14 AND TRUNK HIGHWAY 13 IN WASECA, IN THE SOUTHWEST QUADRANT OF THE JUNCTION OF TRUNK HIGHWAY 14 AND COUNTY ROAD 52, AT TRUNK HIGHWAY 14 MILEPOINT 154.1, 37.0 FEET WEST OF COUNTY ROAD 52 (GRAVEL), 41.0 FEET SOUTH-SOUTHWEST OF THE SOUTH RAIL OF THE RAILROAD TRACKS, 58.5 FEET SOUTHWEST OF A RAILROAD CROSSING POST, 95.2 FEET SOUTH-SOUTHWEST OF A GAS PIPELINE POST, 6.8 FEET NORTHEAST OF A CABLE MARKER, 1.5 FEET SOUTH OF A WITNESS POST.

Station Notes
THE SURVEY MARK IS ON RAILROAD PROPERTY AND HAS BEEN ABANDONED FOR MNDOT GEODETIC USE.

Leveling-Derived Orthometric Heights (Elevations)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1136.694	0.016	346.465	0.005	2/1	2004	00000449
NGVD29	1136.579	0.016	346.430	0.005	2/1	2001	VJANE

Geoid Separations(ft): GEOID18 = -94.462 12B = -94.465 09 = -94.396 03 = -94.219

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Geodetic Positions Longitude	County (Feet) X	County (Feet) Y	County (Meters) X	County (Meters) Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Project Info Reference
NAD83(2011)	44 05 40.75814	93 34 38.82313	326388.538	195759.853	99483.4250	59667.722	317.674		2012	GPS2800
NAD83(2007)	44 05 40.75813	93 34 38.82391	326388.480	195759.852	99483.4080	59667.722	317.698		2007	GPS2300
NAD83(1996)	44 05 40.75768	93 34 38.82329	326388.525	195759.806	99483.4220	59667.708	317.749	B	2005	GPS2036

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8103_N-PP3533-3S-08JUN2004.jpg	S	Jun 8, 2004
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8103_N-PP3533-2-08JUN2004.jpg		Jun 8, 2004
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8103_N-PP3533-1-08JUN2004.jpg		Jun 8, 2004

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33193.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33193.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8103 P **NGS Name:** 8103 P

County: WASECA, MN (Sheet 1)

NGS ACRN: PP3534 Get Map
NGS Quad / Sta Num : 44093322/
USGS Quad: WASECA

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	11	107 N	23 W	440524.13	933344.80	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1988	2005	DESTROYED	Horz=NO Vert=NO	NO			MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
CULVERT - ANY SIZE, ANY TYPE	VERTICAL CONTROL DISK	MNDT

Description: (2010) **Stamping:** 8103 P 1988

2.9 MILES WEST-NORTHWEST ALONG TRUNK HIGHWAY 14 FROM THE JUNCTION OF TRUNK HIGHWAY 14 AND TRUNK HIGHWAY 13 IN WASECA, AT TRUNK HIGHWAY 14 MILEPOINT 154.9, 95.0 FEET SOUTH-SOUTHWEST OF TRUNK HIGHWAY 14, 37.7 FEET SOUTHWEST OF UNDERGROUND CABLE MARKER POST NUMBER MN022028, 8.0 FEET NORTH-NORTHEAST OF THE NORTH RAIL OF THE RAILROAD TRACKS, IN THE TOP OF THE NORTHEAST CORNER OF A CONCRETE CULVERT UNDER THE RAILROAD TRACKS.

Station Notes

THE CONCRETE CULVERT WAS REMOVED, REPLACED WITH A METAL PIPE (6-8-2004).

Leveling-Derived Orthometric Heights (Elevations)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1141.379	0.016	347.893	0.005	2/1	2004	00000449
NGVD29	1141.274	0.016	347.861	0.005	2/1	2001	VJANE

Geoid Separations(ft): GEOID18 = -94.413 12B = -94.416 09 = -94.347 03 = -94.173

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Geodetic Positions Longitude	County (Feet) X	County (Feet) Y	County (Meters) X	County (Meters) Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Project Info Reference
NAD83(2011)	44 05 24.13460	93 33 44.80124	330317.904	194045.234	100681.098	59145.106	319.116		2012	GPS2800
NAD83(2007)	44 05 24.13460	93 33 44.80202	330317.847	194045.235	100681.081	59145.106	319.140		2007	GPS2300
NAD83(1996)	44 05 24.13411	93 33 44.80141	330317.891	194045.185	100681.095	59145.091	319.191	C	2000	GPS1453

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33194.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33194.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8103 Q **NGS Name:** 8103 Q

County: WASECA, MN (Sheet 1)

NGS ACRN: PP3535 Get Map
NGS Quad / Sta Num : 44093322/
USGS Quad: WASECA

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	12	107 N	23 W	440505.60	933248.48	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1988	2005	DESTROYED	Horz=NO Vert=NO	NO		FLUSH	MARKER W/BAR MAGNET

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 25 FT)

Disk Type
VERTICAL CONTROL DISK

Mon. Agency
MNDT

Description: (2010)

Stamping: 8103 Q 1988

2.05 MILES WEST-NORTHWEST ALONG TRUNK HIGHWAY 14 FROM THE JUNCTION OF TRUNK HIGHWAY 14 AND TRUNK HIGHWAY 13 IN WASECA, IN THE SOUTHEAST QUADRANT OF THE JUNCTION OF TRUNK HIGHWAY 14 AND COUNTY ROAD 27, AT TRUNK HIGHWAY 14 MILEPOINT 155.75, 56.0 FEET EAST OF COUNTY ROAD 27, 42.5 FEET SOUTH-SOUTHWEST OF THE SOUTH RAIL OF THE RAILROAD TRACKS, 17.7 FEET NORTHEAST OF A POWER POLE, 9.5 FEET WEST-NORTHWEST OF A TELEPHONE POLE, 1.1 FEET WEST OF A WITNESS POST.

Station Notes

THE DISK WAS TURNED IN AT THE MANKATO DISTRICT OFFICE OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION. THE SURVEY MARK IS ON RAILROAD PROPERTY AND HAS BEEN ABANDONED FOR MNDOT GEODETIC USE.

Leveling-Derived Orthometric Heights (Elevations)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1134.850	0.016	345.903	0.005	2/1	2004	00000449
NGVD29	1134.752	0.016	345.873	0.005	2/1	2001	VJANE

Geoid Separations(ft): GEOID18 = -94.357 12B = -94.360 09 = -94.291 03 = -94.124

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Geodetic Positions Longitude	County (Feet) X	County (Feet) Y	County (Meters) X	County (Meters) Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Project Info Reference
NAD83(2011)	44 05 05.60491	93 32 48.47969	334414.270	192137.021	101929.673	58563.481	317.144		2012	GPS2800
NAD83(2007)	44 05 05.60492	93 32 48.48049	334414.212	192137.022	101929.656	58563.482	317.167		2007	GPS2300
NAD83(1996)	44 05 05.60440	93 32 48.47989	334414.255	192136.969	101929.669	58563.465	317.218	C	2000	GPS1453

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33195.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33195.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8103 R **NGS Name:** 8103 R

County: WASECA, MN (Sheet 1)

NGS ACRN: PP3536 Get Map
NGS Quad / Sta Num : 44093322/
USGS Quad: WASECA

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	13	107 N	23 W	440449.00	933200.00	2	

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1988	1988	GOOD	Horz=NO Vert=NO	NO		FLUSH	MARKER W/BAR MAGNET

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 25 FT)

Disk Type
VERTICAL CONTROL DISK

Mon. Agency
MNDT

Description: (2010)

Stamping: 8103 R 1988

1.3 MILES WEST-NORTHWEST ALONG TRUNK HIGHWAY 14 FROM THE JUNCTION OF TRUNK HIGHWAY 14 AND TRUNK HIGHWAY 13 IN WASECA, NEAR THE JUNCTION OF TRUNK HIGHWAY 14 AND COUNTY ROAD 2, AT TRUNK HIGHWAY 14 MILEPOINT 156.5, SOUTHWEST OF TRUNK HIGHWAY 14, 52.5 FEET WEST-NORTHWEST OF A TELEPHONE POLE, 50.0 FEET NORTH OF COUNTY ROAD 2, 44.5 FEET NORTHEAST OF A LIGHT POLE, 44.0 FEET SOUTH-SOUTHWEST OF THE SOUTHWEST RAIL OF THE RAILROAD TRACKS, 7.0 FEET EAST-NORTHEAST OF UNDERGROUND CABLE MARKER NUMBER SS, 0.9 FOOT NORTH-NORTHEAST OF A CORNER FENCE POST, 1.4 FEET WEST-NORTHWEST OF A WITNESS POST.

Station Notes
THE SURVEY MARK IS ON RAILROAD PROPERTY AND HAS BEEN ABANDONED FOR MNDOT GEODETIC USE.

Leveling-Derived Orthometric Heights (Elevations)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1137.622	0.016	346.748	0.005	2/1	1995	00000135
NGVD29	1137.531	0.016	346.720	0.005	2/1	1988	VWASE

Geoid Separations(ft): GEOID18 = -94.304 12B = -94.308 09 = -94.235 03 = -94.075

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33196.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33196.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8103 S **NGS Name:** 8103 S

County: WASECA, MN (Sheet 1)

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	3	107 N	24 W	440630.38	934226.91		3

NGS ACRN: Get Map
NGS Quad / Sta Num : 44093323/
USGS Quad: JANESVILLE

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2004	2018	GOOD	Horz=NO Vert=NO	YES	81005	FLUSH	NO MAG MATERIAL

Monument Type	Disk Type	Mon. Agency
BRIDGE RAILING	SURVEY DISK	MNDT

Description: (2014) **Stamping:** 8103 S 2004

IN JANESVILLE, IN A BRIDGE RAILING IN THE SOUTHEAST CORNER OF COUNTY ROAD 3 BRIDGE NUMBER 81005 OVER TRUNK HIGHWAY 14, AT THE JUNCTION OF TRUNK HIGHWAY 14 AND COUNTY ROAD 3 IN JANESVILLE, AT TRUNK HIGHWAY 14 MILEPOINT 147.8, 15.0 FEET EAST OF NORTHBOUND COUNTY ROAD 3.

Station Notes

THE SURVEY MARK HAS BEEN DEEMED UNSAFE DUE TO FALL RISK AND HAS BEEN ABANDONED FOR MNDOT GEODETIC USE.

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -94.688 12B = -94.695 09 = -94.616 03 = -94.458

*** No Horizontal Positions in the Database ***

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8103_S-3N-01AUG2018.jpg	N	Aug 1, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8103_S-2-01AUG2018.jpg		Aug 1, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8103_S-1-01AUG2018.jpg		Aug 1, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_101424.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_101424.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8103 T **NGS Name:** 8103 T

County: WASECA, MN (Sheet 1)

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	32	108 N	24 W	440721.88	934454.18		3

NGS ACRN: Get Map
NGS Quad / Sta Num : 44093323/
USGS Quad: JANESVILLE

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2004	2018	GOOD	Horz=NO Vert=NO	YES	81003	FLUSH	NO MAG MATERIAL

Monument Type	Disk Type	Mon. Agency
BRIDGE RAILING	SURVEY DISK	MNDT

Description: (2014) **Stamping:** 8103 T 2004

2.0 MILES WEST-NORTHWEST OF JANESVILLE, IN A BRIDGE RAILING IN THE SOUTHEAST CORNER OF WESTBOUND TRUNK HIGHWAY 14 BRIDGE NUMBER 81003 OVER THE RAILROAD TRACKS AND COUNTY ROAD 14, 2.45 MILES WEST ALONG TRUNK HIGHWAY 14 FROM THE JUNCTION OF TRUNK HIGHWAY 14 AND COUNTY ROAD 3 IN JANESVILLE, AT TRUNK HIGHWAY 14 MILEPOINT 145.35, 24.0 FEET EAST OF WESTBOUND TRUNK HIGHWAY 14.

Station Notes

THE SURVEY MARK HAS BEEN DEEMED UNSAFE DUE TO FALL RISK AND HAS BEEN ABANDONED FOR MNDOT GEODETIC USE.

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -94.570 12B = -94.577 09 = -94.495 03 = -94.337

*** No Horizontal Positions in the Database ***

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8103_T-3N-01AUG2018.jpg	N	Aug 1, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8103_T-2-01AUG2018.jpg		Aug 1, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8103_T-1-01AUG2018.jpg		Aug 1, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_101425.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_101425.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8103 U **NGS Name:** 8103 U

County: WASECA, MN (Sheet 1)

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	30	108 N	24 W	440725.75	934456.08		3

NGS ACRN: Get Map
NGS Quad / Sta Num : 44093323/
USGS Quad: JANESVILLE

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2004	2018	GOOD	Horz=NO Vert=NO	YES	81004	FLUSH	NO MAG MATERIAL

Monument Type	Disk Type	Mon. Agency
BRIDGE RAILING	SURVEY DISK	MNDT

Description: (2014) **Stamping:** 8103 U 2004

2.0 MILES WEST-NORTHWEST OF JANESVILLE, IN A BRIDGE RAILING IN THE NORTHWEST CORNER OF EASTBOUND TRUNK HIGHWAY 14 BRIDGE NUMBER 81004 OVER THE RAILROAD TRACKS AND COUNTY ROAD 14, 2.5 MILES WEST ALONG TRUNK HIGHWAY 14 FROM THE JUNCTION OF TRUNK HIGHWAY 14 AND COUNTY ROAD 3 IN JANESVILLE, AT TRUNK HIGHWAY 14 MILEPOST 145.3, 25.0 FEET WEST OF EASTBOUND TRUNK HIGHWAY 14.

Station Notes

THE SURVEY MARK HAS BEEN DEEMED UNSAFE DUE TO FALL RISK AND HAS BEEN ABANDONED FOR MNDOT GEODETIC USE.

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -94.567 12B = -94.573 09 = -94.491 03 = -94.334

*** No Horizontal Positions in the Database ***

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8103_U-3S-01AUG2018.jpg	S	Aug 1, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8103_U-2-01AUG2018.jpg		Aug 1, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8103_U-1-01AUG2018.jpg		Aug 1, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_101426.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_101426.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8103 V
NGS Name: 8103 V

County: WASECA, MN (Sheet 1)

NGS ACRN: DP9093 Get Map
NGS Quad / Sta Num : 44093331/
USGS Quad: MADISON LAKE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	30	108 N	24 W	440752.23	934511.91	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2014	2018	GOOD	Horz=YES Vert=YES	YES		RECESSED 2 IN.	BAR MAG IN DRILL HOLE

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 12 FT)

Disk Type
METAL ROD (WITH REMOVABLE ID DISK)

Mon. Agency
MNDT

Description: (2014)

Stamping: 8103 V 2014

2.6 MILES NORTHWEST OF JANESVILLE, 3.1 MILES NORTHWEST ALONG TRUNK HIGHWAY 14 FROM THE JUNCTION OF TRUNK HIGHWAY 14 AND COUNTY ROAD 3 IN JANESVILLE, AT TRUNK HIGHWAY 14 MILEPOINT 144.65, 32.7 FEET SOUTHWEST OF AN EASTBOUND TRUNK HIGHWAY 14 FOG LINE, 137.0 FEET WEST OF THE CENTER OF A MAINTENANCE U-TURN, 1.5 FEET NORTHEAST OF A WITNESS POST.

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1034.509	0.016	315.319	0.005	2/1	2016	00000870

Geoid Separations(ft): GEOID18 = -94.531 12B = -94.537 09 = -94.452 03 = -94.294

*** No Horizontal Positions in the Database ***

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8103_V-DP9093-3SW-01AUG2018.jpg	SW	Aug 1, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8103_V-DP9093-2-01AUG2018.jpg		Aug 1, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8103_V-DP9093-1-01AUG2018.jpg		Aug 1, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_101498.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_101498.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8103 W **NGS Name:** 8103 W

County: WASECA, MN (Sheet 1)

NGS ACRN: DP5025 Get Map
NGS Quad / Sta Num : 44093323/
USGS Quad: JANESVILLE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	31	108 N	24 W	440720.80	934456.25	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2014	2018	GOOD	Horz=YES Vert=YES	YES		RECESSED 2 IN.	BAR MAG IN DRILL HOLE

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 19 FT)

Disk Type
METAL ROD (WITH REMOVABLE ID DISK)

Mon. Agency
MNDT

Description: (2014) **Stamping:** 8103 W 2014

2.2 MILES NORTHWEST OF JANESVILLE, 2.4 MILES NORTHWEST ALONG TRUNK HIGHWAY 14 FROM THE JUNCTION OF TRUNK HIGHWAY 14 AND COUNTY ROAD 3 IN JANESVILLE, AT TRUNK HIGHWAY 14 MILEPOINT 145.35, 31.3 FEET WEST OF AN EASTBOUND TRUNK HIGHWAY 14 FOG LINE, 171.8 FEET SOUTH OF THE SOUTHWEST CORNER OF A BRIDGE RAIL, 1.5 FEET EAST OF A WITNESS POST.

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1080.651	0.016	329.383	0.005	2/1	2016	00000870

Geoid Separations(ft): GEOID18 = -94.570 12B = -94.577 09 = -94.495 03 = -94.337

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Geodetic Positions Longitude	County (Feet) X	County (Feet) Y	County (Meters) X	County (Meters) Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Project Info Reference
NAD83(2011)	44 07 20.80137	93 44 56.24661	281431.305	206298.487	85780.4330	62879.905	300.553		2014	GPS3043
NAD83(1996)	44 07 20.80108	93 44 56.24676	281431.294	206298.458	85780.4300	62879.896	300.617	C	2014	HNEW14

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8103_W-DP5025-3W-01AUG2018.jpg	W	Aug 1, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8103_W-DP5025-2-01AUG2018.jpg		Aug 1, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8103_W-DP5025-1-01AUG2018.jpg		Aug 1, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_101497.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_101497.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8103 X
NGS Name: 8103 X

County: WASECA, MN (Sheet 1)

NGS ACRN: DP5026 Get Map
NGS Quad / Sta Num : 44093323/
USGS Quad: JANESVILLE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	32	108 N	24 W	440653.44	934409.65	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2014	2018	GOOD	Horz=YES Vert=YES	YES		RECESSED 2 IN.	BAR MAG IN DRILL HOLE

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 24 FT)

Disk Type
METAL ROD (WITH REMOVABLE ID DISK)

Mon. Agency
MNDT

Description: (2014)

Stamping: 8103 X 2014

1.2 MILES WEST OF JANESVILLE, 1.5 MILES WEST ALONG TRUNK HIGHWAY 14 FROM THE JUNCTION OF TRUNK HIGHWAY 14 AND COUNTY ROAD 3 IN JANESVILLE, AT TRUNK HIGHWAY 14 MILEPOINT 146.25, 84.8 FEET SOUTH OF AN EASTBOUND TRUNK HIGHWAY 14 FOG LINE, 3.4 FEET NORTH OF A RIGHT-OF-WAY POST, 3.4 FEET NORTH OF A WITNESS POST.

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1069.752	0.016	326.061	0.005	2/1	2016	00000870

Geoid Separations(ft): GEOID18 = -94.626 12B = -94.632 09 = -94.550 03 = -94.396

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Geodetic Positions Longitude	County (Feet) X	County (Feet) Y	County (Meters) X	County (Meters) Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Project Info Reference
NAD83(2011)	44 06 53.44176	93 44 09.65445	284802.446	203493.913	86807.9590	62025.069	297.216		2014	GPS3043
NAD83(1996)	44 06 53.44151	93 44 09.65465	284802.432	203493.888	86807.9550	62025.061	297.281	C	2014	HNEW14

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8103_X-DP5026-3S-01AUG2018.jpg	S	Aug 1, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8103_X-DP5026-2-01AUG2018.jpg		Aug 1, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8103_X-DP5026-1-01AUG2018.jpg		Aug 1, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_101496.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_101496.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8103 Y
NGS Name: 8103 Y

County: WASECA, MN (Sheet 1)

NGS ACRN: DP5027 Get Map
NGS Quad / Sta Num : 44093323/
USGS Quad: JANESVILLE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	2	107 N	24 W	440630.66	934114.17	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2014	2018	GOOD	Horz=YES Vert=YES	YES		RECESSED 2 IN.	BAR MAG IN DRILL HOLE

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 24 FT)

Disk Type
METAL ROD (WITH REMOVABLE ID DISK)

Mon. Agency
MNDT

Description: (2014)

Stamping: 8103 Y 2014

1.0 MILE EAST OF JANESVILLE, 1.0 MILE EAST ALONG TRUNK HIGHWAY 14 FROM THE JUNCTION OF TRUNK HIGHWAY 14 AND COUNTY ROAD 3 IN JANESVILLE, AT TRUNK HIGHWAY 14 MILEPOINT 148.8, 30.4 FEET SOUTH OF AN EASTBOUND TRUNK HIGHWAY 14 FOG LINE, 1.5 FEET NORTH OF A WITNESS POST.

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1055.116	0.016	321.600	0.005	2/1	2016	00000870

Geoid Separations(ft): GEOID18 = -94.688 12B = -94.695 09 = -94.619 03 = -94.455

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Geodetic Positions Longitude	County (Feet) X	County (Feet) Y	County (Meters) X	County (Meters) Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Project Info Reference
NAD83(2011)	44 06 30.65698	93 41 14.17501	297582.932	201063.216	90703.4590	61284.191	292.746		2014	GPS3043
NAD83(1996)	44 06 30.65678	93 41 14.17541	297582.903	201063.196	90703.4500	61284.185	292.812	C	2014	HNEW14

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8103_Y-DP5027-3S-01AUG2018.jpg	S	Aug 1, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8103_Y-DP5027-2-01AUG2018.jpg		Aug 1, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8103_Y-DP5027-1-01AUG2018.jpg		Aug 1, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_101492.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_101492.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8103 Z **NGS Name:** 8103 Z

County: WASECA, MN (Sheet 1)

NGS ACRN: DP5028 Get Map
NGS Quad / Sta Num : 44093323/
USGS Quad: JANESVILLE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	1	107 N	24 W	440631.10	934001.52	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2014	2018	GOOD	Horz=YES Vert=YES	YES		RECESSED 2 IN.	BAR MAG IN DRILL HOLE

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 29 FT)

Disk Type
METAL ROD (WITH REMOVABLE ID DISK)

Mon. Agency
MNDT

Description: (2014) **Stamping:** 8103 Z 2014

2.0 MILES EAST OF JANESVILLE, 2.0 MILES EAST ALONG TRUNK HIGHWAY 14 FROM THE JUNCTION OF TRUNK HIGHWAY 14 AND COUNTY ROAD 3 IN JANESVILLE, AT TRUNK HIGHWAY 14 MILEPOINT 149.8, 71.8 FEET SOUTH OF AN EASTBOUND TRUNK HIGHWAY 14 FOG LINE, 97.0 FEET NORTH OF 378TH AVENUE, 94.0 FEET EAST OF COUNTY ROAD 33 (50TH STREET), 1.5 FEET NORTH OF A WITNESS POST.

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1115.726	0.016	340.074	0.005	2/1	2016	00000870

Geoid Separations(ft): GEOID18 = -94.672 12B = -94.678 09 = -94.606 03 = -94.436

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Geodetic Positions Longitude	County (Feet) X	County (Feet) Y	County (Meters) X	County (Meters) Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Project Info Reference
NAD83(2011)	44 06 31.10105	93 40 01.51908	302884.517	201059.296	92319.3850	61282.996	311.224		2014	GPS3043
NAD83(1996)	44 06 31.10084	93 40 01.51950	302884.486	201059.275	92319.3760	61282.990	311.292	C	2014	HNEW14

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8103_Z-DP5028-3S-01AUG2018.jpg	S	Aug 1, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8103_Z-DP5028-2-01AUG2018.jpg		Aug 1, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8103_Z-DP5028-1-01AUG2018.jpg		Aug 1, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_101490.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_101490.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8104 A **NGS Name:** 8104 A

County: WASECA, MN (Sheet 1)

NGS ACRN: PP3544 Get Map
NGS Quad / Sta Num : 44093233/
USGS Quad: MERIDEN

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	16	107 N	22 W	440437.09	932904.59	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1977	2018	GOOD	Horz=NO Vert=YES	YES		PROJECTS 5 IN.	MARKER IS STEEL ROD

Monument Type
COPPER CLAD ROD (NO SLEEVE)

Disk Type
VERTICAL CONTROL DISK

Mon. Agency
MNDT

Description: (2009)

Stamping: 8104 A 1977

IN WASECA, 1.1 MILES EAST ALONG ELM STREET (OLD HIGHWAY 14) FROM THE JUNCTION OF ELM STREET (OLD HIGHWAY 14) AND TRUNK HIGHWAY 13 IN WASECA, 48.0 FEET SOUTH-SOUTHEAST OF ELM STREET (OLD TRUNK HIGHWAY 14), 260.0 FEET EAST OF AN ENTRANCE, 33.7 FEET SOUTHWEST OF A LIGHT POLE/POWER POLE, 9.7 FEET WEST-SOUTHWEST OF A FENCE CORNER, 0.5 FOOT SOUTH SOUTHEAST OF A WITNESS POST.

Station Notes

DUE TO THE PROXIMITY TO A FENCE, THIS SURVEY MARK HAS BEEN ABANDONED FOR MNDOT GEODETIC HORIZONTAL SURVEYS. THE ROD DEPTH IS UNKNOWN.

Leveling-Derived Orthometric Heights (Elevations)

Vertical Datum	Orthometric (Feet) Height	Accuracy	Orthometric (Meters) Height	Accuracy	Survey Order/(Class)	Project Info Year	Reference
NAVD88	1123.046	0.016	342.305	0.005	2/1	1995	00000135
NGVD29	1122.973	0.016	342.283	0.005	2/1	1988	VWASE

Geoid Separations(ft): GEOID18 = -93.996 12B = -94.002 09 = -93.920 03 = -93.769

*** No Horizontal Positions in the Database ***

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8104_A-PP3544-3S-31JUL2018.jpg	S	Jul 31, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8104_A-PP3544-2-31JUL2018.jpg		Jul 31, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8104_A-PP3544-1-31JUL2018.jpg		Jul 31, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33197.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33197.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8104 B **NGS Name:** 8104 B

County: WASECA, MN (Sheet 1)

NGS ACRN: PP3545 Get Map
NGS Quad / Sta Num : 44093233/
USGS Quad: MERIDEN

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	9	107 N	22 W	440449.74	932801.07	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1977	2018	GOOD	Horz=YES Vert=YES	YES		RECESSED 2 IN.	MARKER IS STEEL ROD

Monument Type
COPPER CLAD ROD (NO SLEEVE)

Disk Type
VERTICAL CONTROL DISK

Mon. Agency
MNDT

Description: (2005) **Stamping:** 8104 B 1977

2.0 MILES EAST OF WASECA, 2.1 MILES EAST ALONG COUNTY ROAD 14 FROM THE JUNCTION OF COUNTY ROAD 14 AND TRUNK HIGHWAY 13 IN WASECA, 50.5 FEET NORTH OF TRUNK HIGHWAY 14, 55.0 FEET WEST OF 150TH STREET, 9.0 FEET WEST-NORTHWEST OF A POWER POLE ON THE EAST LINE OF SECTION 9, 2.0 FEET WEST OF A WITNESS POST.

Station Notes
THE ROD DEPTH IS UNKNOWN.

Leveling-Derived Orthometric Heights (Elevations)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1129.867	0.016	344.384	0.005	2/1	1995	00000135
NGVD29	1129.798	0.016	344.363	0.005	2/1	1988	VWASE

Geoid Separations(ft): GEOID18 = -93.842 12B = -93.852 09 = -93.766 03 = -93.612

*** No Horizontal Positions in the Database ***

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8104_B-PP3545-3N-31JUL2018.jpg	N	Jul 31, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8104_B-PP3545-2-31JUL2018.jpg		Jul 31, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8104_B-PP3545-1-31JUL2018.jpg		Jul 31, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33198.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33198.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8104 C **NGS Name:** 8104 C

County: WASECA, MN (Sheet 1)

NGS ACRN: PP3546 Get Map
NGS Quad / Sta Num : 44093233/
USGS Quad: MERIDEN

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	10	107 N	22 W	440449.91	932651.77	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1977	2018	GOOD	Horz=NO Vert=YES	YES		FLUSH	MARKER IS STEEL ROD

Monument Type	Disk Type	Mon. Agency
COPPER CLAD ROD (NO SLEEVE)	VERTICAL CONTROL DISK	MNDT

Description: (2005) **Stamping:** 8104 C 1977

3.0 MILES EAST OF WASECA, 3.1 MILES EAST ALONG COUNTY ROAD 14 FROM THE JUNCTION OF COUNTY ROAD 14 AND TRUNK HIGHWAY 13 IN WASECA, 53.0 FEET SOUTH-SOUTHEAST OF TRUNK HIGHWAY 14, 175.0 FEET EAST OF A TOWNSHIP ROAD (355TH AVENUE) SOUTHWEST, 168.8 FEET EAST OF A GRAVEL ROAD, 7.0 FEET SOUTH-SOUTHWEST OF CABLE MARKER BOX NUMBER A12D, 1.0 FOOT SOUTHWEST OF A WITNESS POST.

Station Notes

DUE TO TREE COVER, THIS SURVEY MARK HAS BEEN ABANDONED FOR MNDOT GEODETIC HORIZONTAL SURVEYS. THE ROD DEPTH IS UNKNOWN.

Leveling-Derived Orthometric Heights (Elevations)

Vertical Datum	Orthometric (Feet) Height	Accuracy	Orthometric (Meters) Height	Accuracy	Survey Order/(Class)	Project Info Year	Reference
NAVD88	1121.438	0.016	341.815	0.005	2/1	1995	00000135
NGVD29	1121.376	0.016	341.796	0.005	2/1	1988	VWASE

Geoid Separations(ft): GEOID18 = -93.707 12B = -93.717 09 = -93.632 03 = -93.481

*** No Horizontal Positions in the Database ***

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8104_C-PP3546-3SE-30JUL2018.jpg	SE	Jul 30, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8104_C-PP3546-2-30JUL2018.jpg		Jul 30, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8104_C-PP3546-1-30JUL2018.jpg		Jul 30, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33199.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33199.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8104 D **NGS Name:** 8104 D

County: WASECA, MN (Sheet 1)

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	11	107 N	22 W	440454.00	932642.00		

NGS ACRN: Get Map
NGS Quad / Sta Num : 44093233/
USGS Quad: MERIDEN

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1977	2018	DESTROYED	Horz=NO Vert=NO	NO		FLUSH	NO MAG MATERIAL

Monument Type
CULVERT - ANY SIZE, ANY TYPE

Disk Type
SURVEY DISK

Mon. Agency
MNDT

Description: (2005)

Stamping: 8104 D 1977

3.05 MILES EAST ALONG TRUNK HIGHWAY 14 FROM THE JUNCTION OF TRUNK HIGHWAY 14 AND TRUNK HIGHWAY 13 IN WASECA, IN THE SOUTHWEST WING WALL OF A TRUNK HIGHWAY 14 BOX CULVERT, AT A DRAIN TO GOOSE LAKE.

Station Notes
THE BOX CULVERT WAS REPLACED WITH A METAL CULVERT.

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -93.681 12B = -93.687 09 = -93.605 03 = -93.451

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33200.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33200.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8104 E **NGS Name:** 8104 E

County: WASECA, MN (Sheet 1)

NGS ACRN: PP3547 Get Map
NGS Quad / Sta Num : 44093233/
USGS Quad: MERIDEN

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	12	107 N	22 W	440514.80	932535.46	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1977	2018	GOOD	Horz=NO Vert=YES	YES		PROJECTS 4 IN.	MARKER IS STEEL ROD

Monument Type
COPPER CLAD ROD (NO SLEEVE)

Disk Type
VERTICAL CONTROL DISK

Mon. Agency
MNDT

Description: (2005) **Stamping:** 8104 E 1977

4.30 MILES EAST OF WASECA, 4.25 MILES EAST ALONG COUNTY ROAD 14 FROM THE JUNCTION OF COUNTY ROAD 14 AND TRUNK HIGHWAY 13 IN WASECA, 47.0 FEET SOUTH OF COUNTY ROAD 14, 29.0 FEET EAST OF 170TH STREET, 38.3 FEET NORTH OF DRIVEWAY NUMBER 17130, 8.1 FEET NORTH-NORTHWEST OF A TELEPHONE POLE, 1.7 FEET WEST OF A GAS PIPELINE STEEL POST, 1.0 FOOT EAST OF A WITNESS POST.

Station Notes

DUE TO THE PROXIMITY TO A POWER POLE, THIS SURVEY MARK HAS BEEN ABANDONED FOR MNDOT GEODETIC HORIZONTAL SURVEYS. THE ROD DEPTH IS UNKNOWN.

Leveling-Derived Orthometric Heights (Elevations)

Vertical Datum	Orthometric (Feet) Height	Accuracy	Orthometric (Meters) Height	Accuracy	Survey Order/(Class)	Project Info Year	Reference
NAVD88	1126.566	0.016	343.378	0.005	2/1	1995	00000135
NGVD29	1126.513	0.016	343.362	0.005	2/1	1988	VWASE

Geoid Separations(ft): GEOID18 = -93.517 12B = -93.520 09 = -93.441 03 = -93.290

*** No Horizontal Positions in the Database ***

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8104_E-PP3547-3S-30JUL2018.jpg	S	Jul 30, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8104_E-PP3547-2-30JUL2018.jpg		Jul 30, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8104_E-PP3547-1-30JUL2018.jpg		Jul 30, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33201.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33201.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8104 F **NGS Name:** 8104 F

County: WASECA, MN (Sheet 1)

NGS ACRN: PP3548 Get Map
NGS Quad / Sta Num : 44093233/
USGS Quad: MERIDEN

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	12	107 N	22 W	440515.21	932423.48	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1977	2012	DESTROYED	Horz=NO Vert=NO	YES		PROJECTS 6 IN.	MARKER IS STEEL ROD

Monument Type
COPPER CLAD ROD (NO SLEEVE)

Disk Type
VERTICAL CONTROL DISK

Mon. Agency
MNDT

Description: (1988) **Stamping:** 8104 F 1977

5.1 MILES EAST OF WASECA, 5.22 MILES EAST ALONG TRUNK HIGHWAY 14 FROM THE JUNCTION OF TRUNK HIGHWAY 14 AND COUNTY ROAD 13 IN WASECA TO TRUNK HIGHWAY 14 MILEPOINT 166.10, 45.5 FEET NORTH OF TRUNK HIGHWAY 14, 37.6 FEET EAST-NORTHEAST OF THE NORTH LEG OF A COUNTY LINE SIGN, 23.0 FEET WEST OF A DITCH ALONG THE EAST LINE OF SECTION 12, 5.0 FEET EAST OF A WEST POWER POLE, 4.0 FEET WEST OF AN EAST POWER POLE, 0.9 FOOT EAST OF A WITNESS POST. THE ROD DEPTH IS UNKNOWN. THE STATION IS NOT THE BEST FOR GPS DUE TO TALL POLES EAST AND WEST, SEE PHOTOS.

Station Notes

PROJECTED 3.0 INCHES IN 2003 AND 6.0 INCHES IN 2004. THE DISK WAS TURNED IN TO THE OFFICE. FOUND PROJECTING 12.0 INCHES WITH THE ROD BENT TO THE SIDE. THE DISK WAS LOOSE, AND ROD WAS LOOSE IN THE GROUND.

Leveling-Derived Orthometric Heights (Elevations)

Vertical Datum	Orthometric (Feet) Height	Accuracy	Orthometric (Meters) Height	Accuracy	Survey Order/(Class)	Project Info Year	Reference
NAVD88	1112.872	0.016	339.204	0.005	2/1	2004	00000449
NGVD29	1112.823	0.016	339.189	0.005	2/1	2001	VJANE

Geoid Separations(ft): GEOID18 = -93.402 12B = -93.402 09 = -93.327 03 = -93.176

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Longitude	County (Feet) X	Y	County (Meters) X	Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Reference
NAD83(2011)	44 05 15.20582	93 24 23.48288	371281.359	192858.961	113166.785	58783.529	310.736		2012	GPS2800
NAD83(2007)	44 05 15.20585	93 24 23.48365	371281.303	192858.965	113166.767	58783.530	310.759		2007	GPS2300
NAD83(1996)	44 05 15.20527	93 24 23.48288	371281.358	192858.906	113166.784	58783.512	310.813	C	2005	GPS2088

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8104_F-PP3548-3N-08OCT2012.jpg	N	Oct 8, 2012
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8104_F-PP3548-2-08OCT2012.jpg		Oct 8, 2012
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8104_F-PP3548-1-08OCT2012.jpg		Oct 8, 2012

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33202.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33202.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8104 G **NGS Name:** 8104 G

County: WASECA, MN (Sheet 1)

NGS ACRN: PP3542 Get Map
NGS Quad / Sta Num : 44093233/
USGS Quad: MERIDEN

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	16	107 N	22 W	440419.00	932853.00	2	

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1988	2014	GOOD	Horz=NO Vert=NO	NO		FLUSH	MARKER W/BAR MAGNET

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 25 FT)

Disk Type
VERTICAL CONTROL DISK

Mon. Agency
MNDT

Description: (2010) **Stamping:** 8104 G 1988

0.8 MILE EAST ALONG TRUNK HIGHWAY 14 FROM THE JUNCTION OF TRUNK HIGHWAY 14 AND TRUNK HIGHWAY 13 IN WASECA, THEN SOUTH 0.25 MILE ON COUNTY ROAD 5 (11TH STREET) SOUTHEAST, THEN 0.55 MILE EAST ON COUNTY ROAD 5 (5TH AVENUE), 56.5 FEET SOUTH-SOUTHWEST OF COUNTY ROAD 5 (5TH AVENUE), 29.0 FEET WEST-NORTHWEST OF A FIELD ENTRANCE, 25.4 FEET NORTH-NORTHEAST OF THE NORTH RAIL OF THE RAILROAD TRACKS, 8.5 FEET EAST OF A POWER POLE NUMBER 625.

Station Notes
THE SURVEY MARK IS ON RAILROAD PROPERTY AND HAS BEEN ABANDONED FOR MNDOT GEODETIC USE.

Leveling-Derived Orthometric Heights (Elevations)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1139.781	0.016	347.406	0.005	2/1	1995	00000135
NGVD29	1139.709	0.016	347.384	0.005	2/1	1988	VWASE

Geoid Separations(ft): GEOID18 = -94.012 12B = -94.019 09 = -93.934 03 = -93.786

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33203.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33203.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8104 H **NGS Name:** 8104 H

County: WASECA, MN (Sheet 1)

NGS ACRN: PP3543 Get Map
NGS Quad / Sta Num : 44093233/
USGS Quad: MERIDEN

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	16	107 N	22 W	440415.00	932806.00	2	

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1988	2014	GOOD	Horz=NO Vert=NO	NO			NO MAG MATERIAL

Monument Type	Disk Type	Mon. Agency
WALL - LIGHT RETAINING	VERTICAL CONTROL DISK	MNDT

Description: (2010) **Stamping:** 8104 H 1988

0.8 MILE EAST ALONG TRUNK HIGHWAY 14 FROM THE JUNCTION OF TRUNK HIGHWAY 14 AND TRUNK HIGHWAY 13 IN WASECA, THEN 0.25 MILE SOUTH ON COUNTY ROAD 5 (11TH STREET), THEN EAST 0.75 MILE ON COUNTY ROAD 5 (5TH AVENUE), THEN EAST 0.45 MILE ON 355TH AVENUE (GRAVEL ROAD), 96.0 FEET SOUTH-SOUTHWEST OF 355TH AVENUE (GRAVEL ROAD), 164.0 FEET EAST OF A HIGH TENSION POWER LINE POLE, IN THE TOP OF A CONCRETE CULVERT UNDER A RAILROAD, 12.2 FEET SOUTH-SOUTHWEST OF THE SOUTH RAIL OF THE RAILROAD TRACKS.

Station Notes

THE SURVEY MARK IS ON RAILROAD PROPERTY AND HAS BEEN ABANDONED FOR MNDOT GEODETIC USE.

Leveling-Derived Orthometric Heights (Elevations)

Vertical Datum	Orthometric (Feet) Height	Accuracy	Orthometric (Meters) Height	Accuracy	Survey Order/(Class)	Project Info Year	Reference
NAVD88	1130.267	0.016	344.506	0.005	2/1	1995	00000135
NGVD29	1130.201	0.016	344.486	0.005	2/1	1988	VWASE

Geoid Separations(ft): GEOID18 = -93.927 12B = -93.934 09 = -93.848 03 = -93.701

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33204.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33204.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8104 J

NGS Name: 8104 J

County: WASECA, MN (Sheet 1)

NGS ACRN: DP5029 Get Map
NGS Quad / Sta Num : 44093233/
USGS Quad: MERIDEN

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	21	107 N	22 W	440313.85	932812.48	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2014	2018	GOOD	Horz=YES Vert=YES	YES		RECESSED 3 IN.	BAR MAG IN DRILL HOLE

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 23 FT)

Disk Type
METAL ROD (WITH REMOVABLE ID DISK)

Mon. Agency
MNDT

Description: (2014)

Stamping: 8104 J 2014

2.4 MILES SOUTHEAST OF WASECA, 1.45 MILES EAST ALONG TRUNK HIGHWAY 14 FROM THE JUNCTION OF TRUNK HIGHWAY 14 AND TRUNK HIGHWAY 13 IN WASECA, AT TRUNK HIGHWAY MILEPOINT 162.1, 33.9 FEET NORTH OF A WESTBOUND TRUNK HIGHWAY 14 FOG LINE, 1.5 FEET SOUTH OF A WITNESS POST.

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1143.092	0.016	348.415	0.005	2/1	2016	00000870

Geoid Separations(ft): GEOID18 = -94.075 12B = -94.084 09 = -93.996 03 = -93.855

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Geodetic Positions Longitude	County (Feet) X	County (Feet) Y	County (Meters) X	County (Meters) Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Project Info Reference
NAD83(2011)	44 03 13.85398	93 28 12.47829	354484.483	180675.927	108047.086	55070.133	319.738		2014	GPS3043
NAD83(1996)	44 03 13.85378	93 28 12.47844	354484.471	180675.906	108047.083	55070.126	319.806	C	2014	HNEW14

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8104_J-DP5029-3N-02AUG2018.jpg	N	Aug 2, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8104_J-DP5029-2-02AUG2018.jpg		Aug 2, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8104_J-DP5029-1-02AUG2018.jpg		Aug 2, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_101471.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_101471.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8104 K **NGS Name:** 8104 K

County: WASECA, MN (Sheet 1)

NGS ACRN: DP5030 Get Map
NGS Quad / Sta Num : 44093233/
USGS Quad: MERIDEN

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	22	107 N	22 W	440323.63	932701.34	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2014	2018	GOOD	Horz=YES Vert=YES	YES		RECESSED 2 IN.	BAR MAG IN DRILL HOLE

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 24 FT)

Disk Type
METAL ROD (WITH REMOVABLE ID DISK)

Mon. Agency
MNDT

Description: (2014) **Stamping:** 8104 K 2014

3.2 MILES EAST-SOUTHEAST OF WASECA, 2.45 MILES EAST ALONG TRUNK HIGHWAY 14 FROM THE JUNCTION OF TRUNK HIGHWAY 14 AND TRUNK HIGHWAY 13 IN WASECA, AT TRUNK HIGHWAY 14 MILEPOINT 163.1, 33.1 FEET SOUTH OF AN EASTBOUND TRUNK HIGHWAY 14 FOG LINE, 85.2 FEET NORTH-NORTHWEST OF A RIGHT-OF-WAY POST, 1.5 FEET NORTH OF A WITNESS POST.

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1133.610	0.016	345.525	0.005	2/1	2016	00000870

Geoid Separations(ft): GEOID18 = -93.917 12B = -93.924 09 = -93.838 03 = -93.694

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Geodetic Positions Longitude	County (Feet) X	County (Feet) Y	County (Meters) X	County (Meters) Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Project Info Reference
NAD83(2011)	44 03 23.63264	93 27 01.34197	359686.075	181631.922	109632.535	55361.521	316.895		2014	GPS3043
NAD83(1996)	44 03 23.63242	93 27 01.34218	359686.060	181631.901	109632.530	55361.514	316.964	C	2014	HNEW14

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8104_K-DP5030-3S-02AUG2018.jpg	S	Aug 2, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8104_K-DP5030-2-02AUG2018.jpg		Aug 2, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8104_K-DP5030-1-02AUG2018.jpg		Aug 2, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_101469.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_101469.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8105 A **NGS Name:** 8105 A

County: WASECA, MN (Sheet 1)

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	18	105 N	24 W	435328.00	934452.00		

NGS ACRN: Get Map
NGS Quad / Sta Num : 43093414/
USGS Quad: WALDORF

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1954	2013	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	SURVEY DISK	MNDT

Description: (2005) **Stamping:** 8105 A 1967

3.1 MILES SOUTH OF WALDORF, 2.5 MILES WEST ALONG TRUNK HIGHWAY 30 FROM THE JUNCTION OF TRUNK HIGHWAY 30 AND TRUNK HIGHWAY 83, 60.0 FEET NORTH OF TRUNK HIGHWAY 30, AT TRUNK HIGHWAY 30 MILEPOINT 155.4, AT THE NORTHWEST CORNER OF THE JUNCTION OF TRUNK HIGHWAY 30 AND 10TH STREET, 1.0 MILE EAST OF A COUNTY LINE, 0.5 FOOT SOUTH OF A WITNESS POST.

Station Notes

THE CONCRETE WAS FOUND BROKEN.

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -95.462 12B = -95.456 09 = -95.387 03 = -95.256

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33205.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33205.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8105 B **NGS Name:** 8105 B

County: WASECA, MN (Sheet 1)

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	20	105 N	24 W	435328.59	934341.61	2	C

NGS ACRN: OO1227 Get Map
NGS Quad / Sta Num : 43093414/
USGS Quad: WALDORF

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1954	2020	GOOD	Horz=YES Vert=YES	YES		RECESSED 3 IN.	STEEL ROD IMBED IN MON

Monument Type
CONCRETE POST (PREFABRICATED)

Disk Type
BENCH MARK DISK

Mon. Agency
MNDT

Description: (2005) **Stamping:** 8105 B 1967

3.1 MILES SOUTH OF WALDORF, 1.5 MILES WEST ALONG TRUNK HIGHWAY 30 FROM THE JUNCTION OF TRUNK HIGHWAY 30 AND TRUNK HIGHWAY 83 (THE JUNCTION IS 2.5 MILES SOUTH OF WALDORF), 60.0 FEET SOUTH OF TRUNK HIGHWAY 30, AT TRUNK HIGHWAY 30 MILEPOINT 156.4, 136.5 FEET WEST OF COUNTY ROAD 3 (20TH STREET), 59.0 FEET SOUTH OF TRUNK HIGHWAY 30, 2.4 FEET WEST OF A RIGHT-OF-WAY POST, 0.5 FOOT NORTH OF A WITNESS POST.

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1077.777	0.016	328.507	0.005	2/1	2015	00000851

Geoid Separations(ft): GEOID18 = -95.551 12B = -95.541 09 = -95.472 03 = -95.344

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Geodetic Positions Longitude	County (Feet) X	County (Feet) Y	County (Meters) X	County (Meters) Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Project Info Reference
NAD83(2011)	43 53 28.59073	93 43 41.61058	286046.309	121973.049	87187.0890	37177.460	299.391	C	2020	HTH30
NAD83(1996)	43 53 28.59052	93 43 41.61073	286046.298	121973.027	87187.0860	37177.453	299.450	C	2020	HTH30
NAD83(1986)	43 53 28.58626	93 43 41.61196	286046.203	121972.597	87187.0570	37177.322		3	1986	17289
NAD27	43 53 28.69592	93 43 40.79762						3	1980	16297

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8105_B-OO1227-3S-08MAR2020.jpg	S	Mar 8, 2020
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8105_B-OO1227-2-08MAR2020.jpg		Mar 8, 2020
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8105_B-OO1227-1-08MAR2020.jpg		Mar 8, 2020

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33206.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33206.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8105 C
NGS Name: 8105 C

County: WASECA, MN (Sheet 1)

NGS ACRN: OO0743 Get Map
NGS Quad / Sta Num : 43093414/
USGS Quad: WALDORF

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	16	105 N	24 W	435329.78	934227.52	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1967	2018	GOOD	Horz=NO Vert=YES	YES		RECESSED 2 IN.	STEEL ROD IMBED IN MON

Monument Type	Disk Type	Mon. Agency
CONCRETE POST (PREFABRICATED)	BENCH MARK DISK	MNDT

Description: (2016) **Stamping:** 8105 C 1967 1095

3.5 MILES SOUTH-SOUTHWEST OF WALDORF, 0.5 MILE WEST ALONG TRUNK HIGHWAY 30 FROM THE JUNCTION OF TRUNK HIGHWAY 83 AND TRUNK HIGHWAY 30 (THE JUNCTION IS 3.0 MILES SOUTH OF WALDORF), AT TRUNK HIGHWAY 30 MILEPOINT 157.45, 68.0 FEET NORTH OF TRUNK HIGHWAY 30, 33.0 FEET EAST OF A FIELD ENTRANCE, 6.5 FEET EAST OF A POWER POLE WITH 3 GUY WIRES, 0.5 FOOT SOUTH OF A WITNESS POST.

Station Notes

DUE TO TREE COVER, THIS SURVEY MARK HAS BEEN ABANDONED FOR MNDOT GEODETIC HORIZONTAL SURVEYS.

Leveling-Derived Orthometric Heights (Elevations)

Vertical Datum	Orthometric (Feet) Height	Accuracy	Orthometric (Meters) Height	Accuracy	Survey Order/(Class)	Project Info Year	Reference
NAVD88	1095.562	0.016	333.928	0.005	2/1	2019	00000938
NGVD29	1095.457	0.016	333.896	0.005	2/1	1992	UNCHECKD

Geoid Separations(ft): GEOID18 = -95.623 12B = -95.613 09 = -95.544 03 = -95.416

*** No Horizontal Positions in the Database ***

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8105_C-OO0743-3N-25JUL2018.jpg	N	Jul 25, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8105_C-OO0743-2-25JUL2018.jpg		Jul 25, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8105_C-OO0743-1-25JUL2018.jpg		Jul 25, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33207.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33207.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8105 D **NGS Name:** 8105 D

County: WASECA, MN (Sheet 1)

NGS ACRN: OO0739 Get Map
NGS Quad / Sta Num : 43093414/
USGS Quad: WALDORF

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	15	105 N	24 W	435330.09	934149.42	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1967	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 3 IN.	STEEL ROD IMBED IN MON

Monument Type
CONCRETE POST (PREFABRICATED)

Disk Type
BENCH MARK DISK

Mon. Agency
MNDT

Description: (2016) **Stamping:** 8105 D 1967

3.6 MILES SOUTH OF WALDORF, AT THE JUNCTION OF TRUNK HIGHWAY 83 AND TRUNK HIGHWAY 30 (THE JUNCTION IS 3.0 MILES SOUTH OF WALDORF), 129.0 FEET EAST OF TRUNK HIGHWAY 83, 102.5 FEET NORTH OF TRUNK HIGHWAY 30, 67.5 FEET NORTHWEST OF THE NORTH END OF A CONCRETE CULVERT, 63.5 FEET SOUTHEAST OF A TELEPHONE PEDESTAL, 51.6 FEET NORTHWEST OF A POWER POLE, 1.0 FOOT SOUTHWEST OF A WITNESS POST.

Station Pair: WEBER - WASECA, MN

Leveling-Derived Orthometric Heights (Elevations)

Vertical Datum	Orthometric (Feet) Height	Accuracy	Orthometric (Meters) Height	Accuracy	Survey Order/(Class)	Project Info Year	Reference
NAVD88	1103.758	0.016	336.426	0.005	2/1	2019	00000938
NGVD29	1103.469	0.016	336.338	0.005	2/1	1992	UNCHECKD

Geoid Separations(ft): GEOID18 = -95.653 12B = -95.643 09 = -95.574 03 = -95.449

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Longitude	County (Feet) X	Y	County (Meters) X	Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Reference
NAD83(2011)	43 53 30.09255	93 41 49.41591	294263.673	122045.821	89691.7470	37199.641	307.268	C	2025	H23BLUE
NAD83(2007)	43 53 30.09254	93 41 49.41667	294263.617	122045.821	89691.7300	37199.641	307.292		2007	GPS2300
NAD83(1996)	43 53 30.09190	93 41 49.41587	294263.675	122045.756	89691.7480	37199.621	307.337	C	2020	HTH30

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8105_D-OO0739-3E-25JUL2018.jpg	E	Jul 25, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8105_D-OO0739-2-25JUL2018.jpg		Jul 25, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8105_D-OO0739-1-10MAR2020.jpg		Mar 10, 2020

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33208.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33208.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8105 E **NGS Name:** 8105 E

County: WASECA, MN (Sheet 1)

NGS ACRN: OO0744 Get Map
NGS Quad / Sta Num : 43093414/
USGS Quad: WALDORF

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	23	105 N	24 W	435329.02	934038.12	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1967	2020	GOOD	Horz=YES Vert=YES	YES		RECESSED 2 IN.	STEEL ROD IMBED IN MON

Monument Type
CONCRETE POST (PREFABRICATED)

Disk Type
BENCH MARK DISK

Mon. Agency
MNDT

Description: (2016) **Stamping:** 8105 E 1967 1104

4.0 MILES SOUTH-SOUTHEAST OF WALDORF, 1.0 MILE EAST ALONG TRUNK HIGHWAY 30 FROM THE JUNCTION OF TRUNK HIGHWAY 83 AND TRUNK HIGHWAY 30 (THE JUNCTION IS 3.0 MILES SOUTH OF WALDORF), AT TRUNK HIGHWAY 30 MILEPOINT 158.95, 51.5 FEET SOUTH OF TRUNK HIGHWAY 30, 72.0 FEET EAST OF 45TH STREET, 54.0 FEET EAST-SOUTHEAST OF THE EAST END OF A METAL CULVERT, 1.0 FOOT EAST OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Elevations)

Vertical Datum	Orthometric (Feet) Height	Accuracy	Orthometric (Meters) Height	Accuracy	Survey Order/(Class)	Project Info Year	Reference
NAVD88	1104.870	0.016	336.765	0.005	2/1	2015	00000851
NGVD29	1104.758	0.016	336.731	0.005	2/1	1992	UNCHECKD

Geoid Separations(ft): GEOID18 = -95.705 12B = -95.695 09 = -95.626 03 = -95.502

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Longitude	County (Feet) X	Y	County (Meters) X	Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Reference
NAD83(2011)	43 53 29.01883	93 40 38.12436	299483.271	121888.319	91282.6840	37151.634	307.604	C	2020	HTH30
NAD83(1996)	43 53 29.01865	93 40 38.12454	299483.258	121888.301	91282.6800	37151.628	307.665	C	2020	HTH30

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8105_E-OO0744-3S-08MAR2020.jpg	S	Mar 8, 2020
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8105_E-OO0744-2-08MAR2020.jpg		Mar 8, 2020
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8105_E-OO0744-1-08MAR2020.jpg		Mar 8, 2020

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33209.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33209.pdf

Geodetic Data Sheet (Brief)
GSID Station # 33210

8105 F

04/28/2026
Sheet Help

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8105 F
NGS Name: 8105 F

County: WASECA, MN (Sheet 1)

NGS ACRN: OO0746 Get Map
NGS Quad / Sta Num : 43093414/
USGS Quad: WALDORF

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	18	105 N	23 W	435330.44	933814.37	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1967	2020	GOOD	Horz=YES Vert=YES	YES		FLUSH	STEEL ROD IMBED IN MON

Monument Type	Disk Type	Mon. Agency
CONCRETE POST (PREFABRICATED)	BENCH MARK DISK	MNDT

Description: (1967) **Stamping:** 8105 F 1967 1131

6.0 MILES SOUTHEAST OF WALDORF, 3.0 MILES EAST ALONG TRUNK HIGHWAY 30 FROM THE JUNCTION OF TRUNK HIGHWAY 83 AND TRUNK HIGHWAY 30, AT TRUNK HIGHWAY 30 MILEPOINT 160.95, 60.0 FEET NORTH OF TRUNK HIGHWAY 30, 71.0 FEET WEST OF A FIELD ENTRANCE, 60.9 FEET WEST-NORTHWEST OF THE WEST END OF A METAL CULVERT, 11.0 FEET EAST OF A FIELD ENTRANCE, 7.0 FEET WEST OF A POWER POLE, 8.8 FEET WEST OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Elevations)

Vertical Datum	Orthometric (Feet) Height	Accuracy	Orthometric (Meters) Height	Accuracy	Survey Order/(Class)	Project Info Year	Reference
NAVD88	1131.071	0.016	344.751	0.005	2/1	2015	00000851
NGVD29	1131.021	0.016	344.736	0.005	2/1	1992	UNCHECKD

Geoid Separations(ft): GEOID18 = -95.764 12B = -95.754 09 = -95.686 03 = -95.561

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Longitude	County (Feet) X	Y	County (Meters) X	Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Reference
NAD83(2011)	43 53 30.44145	93 38 14.36965	310011.616	121937.831	94491.7300	37166.725	315.567	C	2020	HTH30
NAD83(1996)	43 53 30.44126	93 38 14.36982	310011.603	121937.812	94491.7260	37166.719	315.628	C	2020	HTH30

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8105_F-OO0746-3N-08MAR2020.jpg	N	Mar 8, 2020
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8105_F-OO0746-2-08MAR2020.jpg		Mar 8, 2020
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8105_F-OO0746-1-08MAR2020.jpg		Mar 8, 2020

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33210.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33210.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8105 G **NGS Name:** 8105 G

County: WASECA, MN (Sheet 1)

NGS ACRN: OO0747 Get Map
NGS Quad / Sta Num : 43093414/
USGS Quad: WALDORF

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	17	105 N	23 W	435330.48	933736.34	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1967	2018	GOOD	Horz=YES Vert=YES	YES		FLUSH	STEEL ROD IMBED IN MON

Monument Type
CONCRETE POST (PREFABRICATED)

Disk Type
BENCH MARK DISK

Mon. Agency
MNDT

Description: (2005) **Stamping:** 8105 G 1967

4.6 MILES SOUTHEAST OF WALDORF, 3.5 MILES EAST ALONG TRUNK HIGHWAY 30 FROM THE JUNCTION OF TRUNK HIGHWAY 83 AND TRUNK HIGHWAY 30 (THE JUNCTION IS 3.0 MILES SOUTH OF WALDORF), AT TRUNK HIGHWAY 30 MILEPOINT 161.45, 60.0 FEET NORTH OF TRUNK HIGHWAY 30, 146.0 FEET EAST OF COUNTY ROAD 11 (70TH STREET), 12.3 FEET NORTHWEST OF A TELEPHONE PEDESTAL, 1.4 FEET EAST OF A RIGHT-OF-WAY POST, 0.5 FOOT SOUTH OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Elevations)

Vertical Datum	Orthometric (Feet) Height	Accuracy	Orthometric (Meters) Height	Accuracy	Survey Order/(Class)	Project Info Year	Reference
NAVD88	1145.867	0.016	349.261	0.005	2/1	2015	00000851
NGVD29	1145.759	0.016	349.228	0.005	2/1	1992	UNCHECKD

Geoid Separations(ft): GEOID18 = -95.768 12B = -95.758 09 = -95.692 03 = -95.571

*** No Horizontal Positions in the Database ***

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8105_G-OO0747-3N-25JUL2018.jpg	N	Jul 25, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8105_G-OO0747-2-25JUL2018.jpg		Jul 25, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8105_G-OO0747-1-25JUL2018.jpg		Jul 25, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33211.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33211.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8105 H **NGS Name:** 8105 H

County: WASECA, MN (Sheet 1)

NGS ACRN: OO0749 Get Map
NGS Quad / Sta Num : 43093411/
USGS Quad: OTISCO

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	16	105 N	23 W	435330.47	933625.66	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1967	2020	GOOD	Horz=YES Vert=YES	YES		FLUSH	STEEL ROD IMBED IN MON

Monument Type
CONCRETE POST (PREFABRICATED)

Disk Type
BENCH MARK DISK

Mon. Agency
MNDT

Description: (2010) **Stamping:** 8105 H 1967

5.75 MILES WEST OF NEW RICHLAND, 6.0 MILES WEST ALONG TRUNK HIGHWAY 30 FROM THE JUNCTION OF TRUNK HIGHWAY 30 AND TRUNK HIGHWAY 13 IN NEW RICHLAND, AT TRUNK HIGHWAY 30 MILEPOINT 162.45, 54.0 FEET NORTH OF TRUNK HIGHWAY 30, 44.0 FEET EAST OF 80TH STREET, 17.3 FEET EAST OF A TELEPHONE POLE NUMBER C8, 6.0 FEET WEST OF A FENCE CORNER, 0.6 FOOT SOUTH OF A WITNESS POST.

Station Pair: PILTZ - WASECA, MN

Station Notes
THE MARK IS TIPPED SLIGHTLY.

Leveling-Derived Orthometric Heights (Elevations)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1150.555	0.016	350.690	0.005	2/1	2015	00000851
NGVD29	1150.450	0.016	350.658	0.005	2/1	1992	UNCHECKD

Geoid Separations(ft): GEOID18 = -95.771 12B = -95.758 09 = -95.699 03 = -95.577

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Geodetic Positions Longitude	County (Feet) X	County (Feet) Y	County (Meters) X	County (Meters) Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Project Info Reference
NAD83(2011)	43 53 30.47352	93 36 25.65841	317972.490	121872.968	96918.2090	37146.955	321.501	C	2020	HTH30
NAD83(1996)	43 53 30.47336	93 36 25.65862	317972.475	121872.951	96918.2040	37146.950	321.563	C	2020	HTH30
NAD83(1986)	43 53 30.46672	93 36 25.65906	317972.437	121872.279	96918.1930	37146.745		3	1986	17289
NAD27	43 53 30.58438	93 36 24.85890						3	1980	16297

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8105_H-OO0749-3N-09MAR2020.jpg	N	Mar 9, 2020
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8105_H-OO0749-2-09MAR2020.jpg		Mar 9, 2020
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8105_H-OO0749-1-09MAR2020.jpg		Mar 9, 2020

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33212.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33212.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8105 I **NGS Name:** 8105 I

County: WASECA, MN (Sheet 1)

NGS ACRN: OO0753 Get Map
NGS Quad / Sta Num : 43093411/
USGS Quad: OTISCO

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	22	105 N	23 W	435329.56	933513.09	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1967	2018	GOOD	Horz=YES Vert=YES	YES		FLUSH	BAR MAG IN DRILL HOLE

Monument Type	Disk Type	Mon. Agency
CONCRETE POST (PREFABRICATED)	BENCH MARK DISK	MNDT

Description: (2010) **Stamping:** 8105 I 1967

5.0 MILES WEST ALONG TRUNK HIGHWAY 30 FROM THE JUNCTION OF TRUNK HIGHWAY 30 AND TRUNK HIGHWAY 13 IN NEW RICHLAND, 47.0 FEET SOUTH OF TRUNK HIGHWAY 30, AT TRUNK HIGHWAY 30 MILEPOINT 163.45, 49.0 FEET EAST OF COUNTY ROAD 59 (90TH STREET), 21.7 FEET EAST-SOUTHEAST OF A POWER POLE, 0.5 FOOT NORTH OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Elevations)

Vertical Datum	Orthometric (Feet) Height	Accuracy	Orthometric (Meters) Height	Accuracy	Survey Order/(Class)	Project Info Year	Reference
NAVD88	1176.684	0.016	358.654	0.005	2/1	2015	00000851
NGVD29	1176.625	0.016	358.636	0.005	2/1	1992	UNCHECKD

Geoid Separations(ft): GEOID18 = -95.764 12B = -95.748 09 = -95.689 03 = -95.567

*** No Horizontal Positions in the Database ***

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8105_I-OO0753-3S-30JUL2018.jpg	S	Jul 30, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8105_I-OO0753-2-30JUL2018.jpg		Jul 30, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8105_I-OO0753-1-30JUL2018.jpg		Jul 30, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33213.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33213.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8105 J **NGS Name:** 8105 J

County: WASECA, MN (Sheet 1)

NGS ACRN: OO0754 Get Map
NGS Quad / Sta Num : 43093411/
USGS Quad: OTISCO

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	15	105 N	23 W	435331.00	933402.00	2	

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1967	2013	DESTROYED	Horz=NO Vert=NO	NO		FLUSH	SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
UNKNOWN	BENCH MARK DISK	MNDT

Description: (2010) **Stamping:** 8105 J 1967 1174

4.0 MILES WEST ALONG TRUNK HIGHWAY 30 FROM THE JUNCTION OF TRUNK HIGHWAY 30 AND TRUNK HIGHWAY 13 IN NEW RICHLAND, 60.0 FEET NORTH OF TRUNK HIGHWAY 30, AT TRUNK HIGHWAY 30 MILEPOINT 164.45, 193.0 FEET EAST OF A DRIVEWAY NORTH, 99.7 FEET WEST-NORTHWEST OF A TELEPHONE PEDESTAL NUMBER LP4, 6.0 FEET WEST-SOUTHWEST OF AN END FENCE POST, 0.7 FOOT SOUTH OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Elevations)

Vertical Datum	Orthometric (Feet) Height	Accuracy	Orthometric (Meters) Height	Accuracy	Survey Order/(Class)	Project Info Year	Reference
NAVD88	1174.880	0.016	358.104	0.005	2/1	1991	00000025
NGVD29	1174.778	0.016	358.073	0.005	2	1980	L24529

Geoid Separations(ft): GEOID18 = -95.738 12B = -95.725 09 = -95.666 03 = -95.544

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33214.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33214.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8105 K **NGS Name:** 8105 K

County: WASECA, MN (Sheet 1)

NGS ACRN: OO0755 Get Map
NGS Quad / Sta Num : 43093411/
USGS Quad: OTISCO

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	24	105 N	23 W	435329.62	933248.74	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1967	2013	DESTROYED	Horz=NO Vert=NO	YES		FLUSH	STEEL SPIKE ADJ TO MON

Monument Type	Disk Type	Mon. Agency
UNKNOWN	BENCH MARK DISK	MNDT

Description: (2010) **Stamping:** 8105 K 1967

3.0 MILES WEST ON TRUNK HIGHWAY 30 FROM THE JUNCTION OF TRUNK HIGHWAY 30 AND TRUNK HIGHWAY 13 IN NEW RICHLAND, AT TRUNK HIGHWAY 30 MILEPOINT 165.45, 61.5 FEET SOUTH OF TRUNK HIGHWAY 30, 54.0 FEET EAST OF 110TH STREET, 22.3 FEET EAST OF A POWER POLE, 0.5 FOOT NORTH OF A WITNESS POST.

Station Notes

THE CONCRETE WAS FOUND BROKEN.

Leveling-Derived Orthometric Heights (Elevations)

Vertical Datum	Orthometric (Feet) Height	Accuracy	Orthometric (Meters) Height	Accuracy	Survey Order/(Class)	Project Info Year	Reference
NAVD88	1168.990	0.016	356.309	0.005	2/1	1991	00000025
NGVD29	1168.892	0.016	356.279	0.005	2	1980	L24529

Geoid Separations(ft): GEOID18 = -95.702 12B = -95.692 09 = -95.633 03 = -95.505

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Longitude	County (Feet) X	Y	County (Meters) X	Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Reference
NAD83(2011)	43 53 29.61878	93 32 48.73658	333856.930	121659.218	101759.796	37081.804	327.136		2012	GPS2800
NAD83(2007)	43 53 29.61885	93 32 48.73734	333856.874	121659.226	101759.779	37081.806	327.159		2007	GPS2300
NAD83(1996)	43 53 29.61847	93 32 48.73664	333856.925	121659.187	101759.794	37081.794	327.207	C	2005	GPS2088

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8105_K-OO0755-3S-02JUN2004.jpg	S	Jun 2, 2004
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8105_K-OO0755-2-02JUN2004.jpg		Jun 2, 2004
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8105_K-OO0755-1-02JUN2004.jpg		Jun 2, 2004

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33215.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33215.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8105 L **NGS Name:** 8105 L

County: WASECA, MN (Sheet 1)

NGS ACRN: OO0756 Get Map
NGS Quad / Sta Num : 43093411/
USGS Quad: OTISCO

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	24	105 N	23 W	435329.87	933149.67	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1967	2018	GOOD	Horz=NO Vert=NO	YES	6789	FLUSH	NO MAG MATERIAL

Monument Type	Disk Type	Mon. Agency
BRIDGE ABUTMENT	BENCH MARK DISK	MNDT

Description: (2010) **Stamping:** 8105 L 1967

IN THE SOUTHEAST ABUTMENT OF TRUNK HIGHWAY 30 BRIDGE NUMBER 6789 OVER BOOT CREEK, 2.2 MILES WEST ALONG TRUNK HIGHWAY 30 FROM THE JUNCTION OF TRUNK HIGHWAY 30 AND TRUNK HIGHWAY 13 IN NEW RICHLAND, AT TRUNK HIGHWAY 30 MILEPOINT 166.35, 18.0 FEET SOUTH OF TRUNK HIGHWAY 30.

Station Notes

THE SURVEY MARK HAS BEEN DEEMED UNSAFE DUE TO FALL RISK AND HAS BEEN ABANDONED FOR MNDOT GEODETIC USE.

Leveling-Derived Orthometric Heights (Elevations)

Vertical Datum	Orthometric (Feet) Height	Accuracy	Orthometric (Meters) Height	Accuracy	Survey Order/(Class)	Project Info Year	Reference
NAVD88	1158.118	0.016	352.995	0.005	2/1	2015	00000851
NGVD29	1158.036	0.016	352.970	0.005	2/1	1992	UNCHECKD

Geoid Separations(ft): GEOID18 = -95.663 12B = -95.653 09 = -95.590 03 = -95.459

*** No Horizontal Positions in the Database ***

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8105_L-OO0756-3S-26JUL2018.jpg	S	Jul 26, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8105_L-OO0756-2-26JUL2018.jpg		Jul 26, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8105_L-OO0756-1-26JUL2018.jpg		Jul 26, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33216.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33216.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8105 M

NGS Name: 8105 M

County: WASECA, MN (Sheet 1)

NGS ACRN: OO0758 Get Map
NGS Quad / Sta Num : 43093411/
USGS Quad: OTISCO

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	18	105 N	22 W	435331.00	933025.00	2	

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1967	2008	DESTROYED	Horz=NO Vert=NO	NO		FLUSH	STEEL ROD IMBED IN MON

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	BENCH MARK DISK	MNDT

Description: (2010) **Stamping:** 8105 M 1967

1.0 MILE WEST ALONG TRUNK HIGHWAY 30 FROM THE JUNCTION OF TRUNK HIGHWAY 30 AND TRUNK HIGHWAY 13 IN NEW RICHLAND, AT THE JUNCTION OF TRUNK HIGHWAY 30 AND COUNTY ROAD 51 (NORTH-BOUND)/COUNTY ROAD 1 (SOUTH-BOUND), AT TRUNK HIGHWAY 30 MILEPOINT 167.45, 117.7 FEET NORTH OF TRUNK HIGHWAY 30, 75.0 FEET WEST OF COUNTY ROAD 51, 99.7 FEET NORTHEAST OF A TELEPHONE POLE NUMBER B22, 0.7 FOOT SOUTHEAST OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Elevations)

Vertical Datum	Orthometric (Feet) Height	Accuracy	Orthometric (Meters) Height	Accuracy	Survey Order/(Class)	Project Info Year	Reference
NAVD88	1182.074	0.016	360.297	0.005	2/1	1991	00000025
NGVD29	1181.983	0.016	360.269	0.005	2	1980	L24529

Geoid Separations(ft): GEOID18 = -95.577 12B = -95.571 09 = -95.508 03 = -95.367

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33217.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33217.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8105 N

NGS Name: 8105 N

County: WASECA, MN (Sheet 1)

NGS ACRN: OO0757 Get Map
NGS Quad / Sta Num : 43093411/
USGS Quad: OTISCO

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	19	105 N	22 W	435329.00	933057.00	2	

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1978	2008	DESTROYED	Horz=NO Vert=NO	YES		FLUSH	NO MAG MATERIAL

Monument Type	Disk Type	Mon. Agency
BRIDGE RAILING	VERTICAL CONTROL DISK	MNDT

Description: (1978) **Stamping:** 8105 N 1978

IN THE SOUTHEAST HEADWALL OF A TRUNK HIGHWAY 30 DOUBLE BOX CULVERT, 1.5 MILES WEST ALONG TRUNK HIGHWAY 30 FROM THE JUNCTION OF TRUNK HIGHWAY 30 AND TRUNK HIGHWAY 13 IN NEW RICHLAND, AT TRUNK HIGHWAY 30 MILEPOINT 167, 22.0 FEET SOUTH OF TRUNK HIGHWAY 30.

Leveling-Derived Orthometric Heights (Elevations)

Vertical Datum	Orthometric (Feet) Height	Accuracy	Orthometric (Meters) Height	Accuracy	Survey Order/(Class)	Project Info Year	Reference
NAVD88	1164.620	0.016	354.977	0.005	2/1	1991	00000025
NGVD29	1164.525	0.016	354.948	0.005	2	1980	L24529

Geoid Separations(ft): GEOID18 = -95.613 12B = -95.607 09 = -95.548 03 = -95.407

*** No Horizontal Positions in the Database ***

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8105_N-OO0757-3S-09JUN2008.jpg	S	Jun 9, 2008
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8105_N-OO0757-2-09JUN2008.jpg		Jun 9, 2008
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8105_N-OO0757-1-09JUN2008.jpg		Jun 9, 2008

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33218.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33218.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8105 N RESET **NGS Name:** 8105 N RESET

County: WASECA, MN (Sheet 1)

NGS ACRN: DM5202 Get Map
NGS Quad / Sta Num : 43093411/
USGS Quad: OTISCO

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	19	105 N	22 W	435329.80	933056.76	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1983	2018	GOOD	Horz=NO Vert=NO	YES	8131	FLUSH	NO MAG MATERIAL

Monument Type	Disk Type	Mon. Agency
BRIDGE RAILING	VERTICAL CONTROL DISK	MNDT

Description: (2010) **Stamping:** 8105 N 1978 RESET 1983

IN A RAIL IN THE SOUTHEAST CORNER OF BRIDGE NUMBER 8131, 1.5 MILES WEST ALONG TRUNK HIGHWAY 30 FROM THE JUNCTION OF TRUNK HIGHWAY 30 AND TRUNK HIGHWAY 13 IN NEW RICHLAND, AT TRUNK HIGHWAY 30 MILEPOINT 167.0, 22.0 FEET SOUTH OF TRUNK HIGHWAY 30.

Station Notes

THE SURVEY MARK HAS BEEN DEEMED UNSAFE DUE TO FALL RISK AND HAS BEEN ABANDONED FOR MNDOT GEODETIC USE.

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Accuracy	Orthometric (Meters) Height	Accuracy	Survey Order/(Class)	Project Info Year	Reference
NAVD88	1169.463	0.016	356.453	0.005	2/1	2015	00000851

Geoid Separations(ft): GEOID18 = -95.613 12B = -95.607 09 = -95.544 03 = -95.407

*** No Horizontal Positions in the Database ***

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8105_N_RESET-DM5202-3S-26JUL2018.jpg	S	Jul 26, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8105_N_RESET-DM5202-2-26JUL2018.jpg		Jul 26, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8105_N_RESET-DM5202-1-26JUL2018.jpg		Jul 26, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_86430.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_86430.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8105 P **NGS Name:** 8105 P

County: WASECA, MN (Sheet 1)

NGS ACRN: OO0759 Get Map
NGS Quad / Sta Num : 43093144/
USGS Quad: NEW RICHLAND

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	17	105 N	22 W	435330.68	932937.36	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1978	2018	GOOD	Horz=NO Vert=NO	YES		FLUSH	NO MAG MATERIAL

Monument Type
CULVERT - ANY SIZE, ANY TYPE

Disk Type
VERTICAL CONTROL DISK

Mon. Agency
MNDT

Description: (2008) **Stamping:** 8105 P 1978

IN NEW RICHLAND, IN THE SOUTHEAST HEADWALL OF A TRUNK HIGHWAY 30 BOX CULVERT UNDER BROADWAY STREET, 0.4 MILE WEST OF THE JUNCTION OF TRUNK HIGHWAY 30 AND TRUNK HIGHWAY 13, AT THE JUNCTION OF TRUNK HIGHWAY 30 AND BROADWAY STREET, AT TRUNK HIGHWAY 30 MILEPOINT 168.1, 45.5 FEET NORTH OF TRUNK HIGHWAY 30, 40.4 FEET EAST OF BROADWAY STREET.

Station Notes

THE SURVEY MARK HAS BEEN DEEMED UNSAFE DUE TO FALL RISK AND HAS BEEN ABANDONED FOR MNDOT GEODETIC USE.

Leveling-Derived Orthometric Heights (Elevations)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1175.385	0.016	358.258	0.005	2/1	2020	00000949
NGVD29	1175.447	0.016	358.277	0.005	2	1980	L24529

Geoid Separations(ft): GEOID18 = -95.525 12B = -95.518 09 = -95.456 03 = -95.311

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Geodetic Positions Longitude	County (Feet) X	County (Feet) Y	County (Meters) X	County (Meters) Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Project Info Reference
NAD83(2011)	43 53 30.68281	93 29 37.36018	347872.233	121664.383	106031.669	37083.378	329.146		2012	GPS2800
NAD83(2007)	43 53 30.68304	93 29 37.36114	347872.163	121664.407	106031.647	37083.385	329.180		2007	GPS2300
NAD83(1996)	43 53 30.68245	93 29 37.36047	347872.211	121664.347	106031.662	37083.367	329.238	C	2008	HMANC

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8105_P-OO0759-3N-10JUN2008.jpg	N	Jun 10, 2008
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8105_P-OO0759-2-10JUN2008.jpg		Jun 10, 2008
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8105_P-OO0759-1-10JUN2008.jpg		Jun 10, 2008

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33219.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33219.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8105 Q **NGS Name:** 8105 Q

County: WASECA, MN (Sheet 1)

NGS ACRN: OO0760 Get Map
NGS Quad / Sta Num : 43093144/
USGS Quad: NEW RICHLAND

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	17	105 N	22 W	435346.00	932936.00	2	

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1978	2008	DESTROYED	Horz=NO Vert=NO	NO		FLUSH	SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
CONCRETE FOUNDATION	VERTICAL CONTROL DISK	MNDT

Description: (2002) **Stamping:** 8105 Q 1978

IN NEW RICHLAND, IN THE SOUTHEAST CORNER OF THE SOUTHEAST LEG OF A WATER TANK, 0.3 MILE NORTH OF THE JUNCTION OF BROADWAY AND TRUNK HIGHWAY 30, 100.0 FEET EAST OF AN EAST CURB ON BROADWAY, 23.0 FEET SOUTH OF 2ND STREET EXTENDED, 106.7 FEET WEST OF THE WEST RAIL OF A RAILROAD, 36.5 FEET NORTH OF THE NORTH WALL OF A BUILDING. THE FOUNDATION HAS BEEN REMOVED.

Leveling-Derived Orthometric Heights (Elevations)

Vertical Datum	Orthometric (Feet) Height	Accuracy	Orthometric (Meters) Height	Accuracy	Survey Order/(Class)	Project Info Year	Reference
NAVD88	1183.426	0.016	360.709	0.005	2/1	2004	00000449
NGVD29	1183.338	0.016	360.682	0.005	2	1980	L24529

Geoid Separations(ft): GEOID18 = -95.492 12B = -95.485 09 = -95.426 03 = -95.282

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33220.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33220.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8105 R **NGS Name:** 8105 R

County: WASECA, MN (Sheet 1)

NGS ACRN: DL5469 Get Map
NGS Quad / Sta Num : 43093411/
USGS Quad: OTISCO

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	18	105 N	22 W	435330.69	933026.09	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2008	2025	GOOD	Horz=YES Vert=YES	YES		FLUSH	BAR MAG IN DRILL HOLE

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 25 FT)

Disk Type
METAL ROD (WITH REMOVABLE ID DISK)

Mon. Agency
MNDT

Description: (2008)

Stamping: 8105 R 2008

1.0 MILE WEST OF NEW RICHLAND, 1.0 MILE WEST ALONG TRUNK HIGHWAY 30 FROM THE JUNCTION OF TRUNK HIGHWAY 30 AND TRUNK HIGHWAY 13 IN NEW RICHLAND, AT TRUNK HIGHWAY 30 MILEPOINT 167.60, 58.3 FEET NORTH OF TRUNK HIGHWAY 30, 127.3 FEET WEST OF COUNTY ROAD 51 (130TH STREET), 2.4 FEET SOUTH OF A WITNESS POST.

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1180.628	0.016	359.856	0.005	2/1	2015	00000851

Geoid Separations(ft): GEOID18 = -95.577 12B = -95.574 09 = -95.512 03 = -95.371

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Geodetic Positions Longitude	County (Feet) X	County (Feet) Y	County (Meters) X	County (Meters) Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Project Info Reference
NAD83(2011)	43 53 30.68978	93 30 26.09414	344303.447	121690.353	104943.901	37091.294	330.727	C	2020	HTH30
NAD83(2007)	43 53 30.69013	93 30 26.09514	344303.374	121690.389	104943.878	37091.305	330.747	C	2009	GPS2574
NAD83(1996)	43 53 30.68953	93 30 26.09441	344303.427	121690.328	104943.895	37091.286	330.820	C	2020	HTH30

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8105_R-DL5469-3N-17SEP2025.jpg	N	Sep 17, 2025
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8105_R-DL5469-2-17SEP2025.jpg		Sep 17, 2025
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8105_R-DL5469-1-17SEP2025.jpg		Sep 17, 2025

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_80871.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_80871.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8105 S **NGS Name:** 8105 S

County: WASECA, MN (Sheet 1)

NGS ACRN: DP6226 Get Map
NGS Quad / Sta Num : 43093414/
USGS Quad: WALDORF

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	19	105 N	24 W	435328.78	934452.56	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2013	2020	GOOD	Horz=YES Vert=YES	YES		RECESSED 2 IN.	BAR MAG IN DRILL HOLE

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 30 FT)

Disk Type
METAL ROD (WITH REMOVABLE ID DISK)

Mon. Agency
MNDT

Description: (2013) **Stamping:** 8105 S 2013

3.7 MILES SOUTHWEST OF WALDORF, 2.5 MILES WEST ALONG TRUNK HIGHWAY 30 FROM THE JUNCTION OF TRUNK HIGHWAY 30 AND TRUNK HIGHWAY 83 (THE JUNCTION IS 3.0 MILES SOUTH OF WALDORF), AT TRUNK HIGHWAY 30 MILEPOINT 155.45, 44.4 FEET SOUTH OF TRUNK HIGHWAY 30, 70.2 FEET WEST OF 10TH STREET, 16.9 FEET EAST OF A FIELD ENTRANCE, 10.0 FEET WEST OF A WITNESS POST.

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1074.174	0.016	327.409	0.005	2/1	2015	00000851

Geoid Separations(ft): GEOID18 = -95.466 12B = -95.456 09 = -95.384 03 = -95.256

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Geodetic Positions Longitude	County (Feet) X	County (Feet) Y	County (Meters) X	County (Meters) Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Project Info Reference
NAD83(2011)	43 53 28.77780	93 44 52.55748	280851.131	122043.741	85603.5960	37199.007	298.311	C	2020	HTH30
NAD83(1996)	43 53 28.77759	93 44 52.55762	280851.121	122043.719	85603.5930	371990000	298.371	C	2020	HTH30

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8105_S-DP6226-3S-08MAR2020.jpg	S	Mar 8, 2020
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8105_S-DP6226-2-08MAR2020.jpg		Mar 8, 2020
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8105_S-DP6226-1-08MAR2020.jpg		Mar 8, 2020

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_100301.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_100301.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8105 T **NGS Name:** 8105 T

County: WASECA, MN (Sheet 1)

NGS ACRN: DP6228 Get Map
NGS Quad / Sta Num : 43093414/
USGS Quad: WALDORF

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	16	105 N	24 W	435329.66	934242.74	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2013	2024	GOOD	Horz=YES Vert=YES	YES		FLUSH	BAR MAG IN DRILL HOLE

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 34 FT)

Disk Type
METAL ROD (WITH REMOVABLE ID DISK)

Mon. Agency
MNDT

Description: (2013)

Stamping: 8105 T 2013

2.75 MILES SOUTH OF WALDORF, 0.75 MILE WEST ALONG TRUNK HIGHWAY 30 FROM THE JUNCTION OF TRUNK HIGHWAY 30 AND TRUNK HIGHWAY 83 (THE JUNCTION IS 3.0 MILES SOUTH OF WALDORF), AT TRUNK HIGHWAY 30 MILEPOINT 157.2, 54.4 FEET NORTH OF TRUNK HIGHWAY 30, 27.1 FEET EAST OF DRIVEWAY NUMBER 2785, 1.5 FEET SOUTH OF A WITNESS POST.

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Accuracy	Orthometric (Meters) Height	Accuracy	Survey Order/(Class)	Project Info Year	Reference
NAVD88	1089.184	0.016	331.984	0.005	2/1	2015	00000851

Geoid Separations(ft): GEOID18 = -95.610 12B = -95.600 09 = -95.531 03 = -95.403

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Longitude	County (Feet) X	Y	County (Meters) X	Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Reference
NAD83(2011)	43 53 29.66012	93 42 42.74117	290358.308	122039.338	88501.3890	37197.665	302.852	C	2025	H23BLUE
NAD83(1996)	43 53 29.65991	93 42 42.74132	290358.297	122039.317	88501.3860	37197.658	302.911	C	2020	HTH30

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8105_T-DP6228-3N-08MAR2020.jpg	N	Mar 8, 2020
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8105_T-DP6228-2-08MAR2020.jpg		Mar 8, 2020
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8105_T-DP6228-1-08MAR2020.jpg		Mar 8, 2020

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_100302.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_100302.pdf

Geodetic Data Sheet (Brief)
GSID Station # 100303

8105 U

04/28/2026
Sheet Help

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8105 U
NGS Name: 8105 U

County: WASECA, MN (Sheet 1)

NGS ACRN: DP6231 Get Map
NGS Quad / Sta Num : 43093414/
USGS Quad: WALDORF

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	13	105 N	24 W	435330.28	933922.78	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2013	2020	GOOD	Horz=YES Vert=YES	YES		FLUSH	BAR MAG IN DRILL HOLE

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 34 FT)

Disk Type
METAL ROD (WITH REMOVABLE ID DISK)

Mon. Agency
MNDT

Description: (2013)

Stamping: 8105 U 2013

3.5 MILES SOUTHEAST OF WALDORF, 2.05 MILES EAST ALONG TRUNK HIGHWAY 30 FROM THE JUNCTION OF TRUNK HIGHWAY 30 AND TRUNK HIGHWAY 83 (THE JUNCTION IS 3.0 MILES SOUTH OF WALDORF), AT TRUNK HIGHWAY 30 MILEPOINT 160.0, 50.3 FEET NORTH OF TRUNK HIGHWAY 30, 289.0 FEET EAST OF 55TH STREET, 18.4 FEET EAST OF A FIELD ENTRANCE, 12.0 FEET SOUTHWEST OF A WITNESS POST.

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1114.069	0.016	339.569	0.005	2/1	2015	00000851

Geoid Separations(ft): GEOID18 = -95.741 12B = -95.731 09 = -95.666 03 = -95.538

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Geodetic Positions Longitude	County (Feet) X	County (Feet) Y	County (Meters) X	County (Meters) Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Project Info Reference
NAD83(2011)	43 53 30.28241	93 39 22.78059	305001.800	121966.083	92964.7350	37175.336	310.394	C	2020	HTH30
NAD83(1996)	43 53 30.28223	93 39 22.78077	305001.787	121966.064	92964.7310	37175.331	310.455	C	2020	HTH30

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8105_U-DP6231-3N-08MAR2020.jpg	N	Mar 8, 2020
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8105_U-DP6231-2-08MAR2020.jpg		Mar 8, 2020
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8105_U-DP6231-1-08MAR2020.jpg		Mar 8, 2020

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_100303.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_100303.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8105 V **NGS Name:** 8105 V

County: WASECA, MN (Sheet 1)

NGS ACRN: DP6233 Get Map
NGS Quad / Sta Num : 43093411/
USGS Quad: OTISCO

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	22	105 N	23 W	435329.74	933404.45	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2013	2020	GOOD	Horz=YES Vert=YES	YES		FLUSH	BAR MAG IN DRILL HOLE

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 33 FT)

Disk Type
METAL ROD (WITH REMOVABLE ID DISK)

Mon. Agency
MNDT

Description: (2013) **Stamping:** 8105 V 2013

4.1 MILES WEST OF NEW RICHLAND, 4.05 MILES WEST ALONG TRUNK HIGHWAY 30 FROM THE JUNCTION OF TRUNK HIGHWAY 30 AND TRUNK HIGHWAY 13 IN NEW RICHLAND, AT TRUNK HIGHWAY 30 MILEPOINT 164.4, 49.2 FEET SOUTH OF TRUNK HIGHWAY 30, 33.1 FEET EAST OF A FIELD ENTRANCE, 1.5 FEET NORTH OF A WITNESS POST.

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1174.886	0.016	358.106	0.005	2/1	2015	00000851

Geoid Separations(ft): GEOID18 = -95.741 12B = -95.728 09 = -95.669 03 = -95.544

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Geodetic Positions Longitude	County (Feet) X	County (Feet) Y	County (Meters) X	County (Meters) Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Project Info Reference
NAD83(2011)	43 53 29.74250	93 34 04.45245	328312.353	121714.825	100069.805	37098.753	328.933	C	2020	HTH30
NAD83(1996)	43 53 29.74234	93 34 04.45266	328312.337	121714.809	100069.800	37098.748	328.995	C	2020	HTH30

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8105_V-DP6233-3S-11MAR2020.jpg	S	Mar 11, 2020
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8105_V-DP6233-2-11MAR2020.jpg		Mar 11, 2020
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8105_V-DP6233-1-11MAR2020.jpg		Mar 11, 2020

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_100304.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_100304.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8105 W **NGS Name:** 8105 W

County: WASECA, MN (Sheet 1)

NGS ACRN: DP6236 Get Map
NGS Quad / Sta Num : 43093411/
USGS Quad: OTISCO

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	19	105 N	22 W	435329.46	933109.27	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2013	2025	GOOD	Horz=YES Vert=YES	YES		FLUSH	BAR MAG IN DRILL HOLE

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 24 FT)

Disk Type
METAL ROD (WITH REMOVABLE ID DISK)

Mon. Agency
MNDT

Description: (2013) **Stamping:** 8105 W 2013

1.7 MILES WEST OF NEW RICHLAND, 1.65 MILES WEST ALONG TRUNK HIGHWAY 30 FROM THE JUNCTION OF TRUNK HIGHWAY 30 AND TRUNK HIGHWAY 13 IN NEW RICHLAND, AT TRUNK HIGHWAY 30 MILEPOINT 166.85, 52.0 FEET SOUTH OF TRUNK HIGHWAY 30, 26.3 FEET EAST OF A FIELD ENTRANCE, 1.5 FEET NORTH OF A WITNESS POST.

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1164.830	0.016	355.041	0.005	2/1	2015	00000851

Geoid Separations(ft): GEOID18 = -95.626 12B = -95.617 09 = -95.558 03 = -95.420

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Geodetic Positions Longitude	County (Feet) X	County (Feet) Y	County (Meters) X	County (Meters) Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Project Info Reference
NAD83(2011)	43 53 29.46376	93 31 09.26939	341140.818	121589.077	103979.929	37060.425	325.900	C	2020	HTH30
NAD83(1996)	43 53 29.46359	93 31 09.26959	341140.803	121589.060	103979.925	37060.420	325.963	C	2020	HTH30

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8105_W-DP6236-3S-17SEP2025.jpg	S	Sep 17, 2025
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8105_W-DP6236-2-17SEP2025.jpg		Sep 17, 2025
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8105_W-DP6236-1-17SEP2025.jpg		Sep 17, 2025

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_100305.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_100305.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8106 A
NGS Name: 8106 A

County: WASECA, MN (Sheet 1)

NGS ACRN: OO0762 Get Map
NGS Quad / Sta Num : 43093144/
USGS Quad: NEW RICHLAND

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	21	105 N	22 W	435329.87	932840.10	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1978	2018	GOOD	Horz=NO Vert=NO	YES		FLUSH	NO MAG MATERIAL

Monument Type	Disk Type	Mon. Agency
CULVERT - ANY SIZE, ANY TYPE	BENCH MARK DISK	MNDT

Description: (2010) **Stamping:** 8106 A 1978

IN THE SOUTHEAST HEADWALL OF A TRUNK HIGHWAY 30 BOX CULVERT, 0.45 MILE EAST ALONG TRUNK HIGHWAY 30 FROM THE JUNCTION OF TRUNK HIGHWAY 30 AND TRUNK HIGHWAY 13 IN NEW RICHLAND, AT TRUNK HIGHWAY 30 MILEPOINT 168.9, 34.1 FEET SOUTH OF TRUNK HIGHWAY 30.

Station Notes

THE SURVEY MARK HAS BEEN DEEMED UNSAFE DUE TO FALL RISK AND HAS BEEN ABANDONED FOR MNDOT GEODETIC USE.

Leveling-Derived Orthometric Heights (Elevations)

Vertical Datum	Orthometric (Feet) Height	Accuracy	Orthometric (Meters) Height	Accuracy	Survey Order/(Class)	Project Info Year	Reference
NAVD88	1182.117	0.016	360.310	0.005	2/1	2015	00000851
NGVD29	1182.088	0.016	360.301	0.005	2/1	1992	UNCHECKD

Geoid Separations(ft): GEOID18 = -95.449 12B = -95.443 09 = -95.387 03 = -95.233

*** No Horizontal Positions in the Database ***

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8106_A-OO0762-3S-30JUL2018.jpg	S	Jul 30, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8106_A-OO0762-2-30JUL2018.jpg		Jul 30, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8106_A-OO0762-1-30JUL2018.jpg		Jul 30, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33221.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33221.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8106 A 1 **NGS Name:** 8106 A 1

County: WASECA, MN (Sheet 1)

NGS ACRN: OO0763 Get Map
NGS Quad / Sta Num : 43093144/
USGS Quad: NEW RICHLAND

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	15	105 N	22 W	435330.90	932800.34	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1978	2025	GOOD	Horz=NO Vert=YES	YES		FLUSH	MARKER IS STEEL ROD

Monument Type	Disk Type	Mon. Agency
COPPER CLAD ROD (NO SLEEVE) (DEPTH 64 FT)	VERTICAL CONTROL DISK	MNDT

Description: (2010) **Stamping:** 8106 A 1 1978

1.0 MILE EAST ALONG TRUNK HIGHWAY 30 FROM THE JUNCTION OF TRUNK HIGHWAY 30 AND TRUNK HIGHWAY 13 IN NEW RICHLAND, AT TRUNK HIGHWAY 30 MILEPOINT 169.5, AT THE CENTERLINE OF 150TH STREET EXTENDED, 74.3 FEET NORTH OF TRUNK HIGHWAY 30, 44.8 FEET WEST OF A RIGHT-OF-WAY MONUMENT, 12.0 FEET EAST OF A FIELD ENTRANCE, 6.6 FEET WEST OF A RIGHT-OF-WAY SIGN POST, 0.8 FOOT SOUTH OF A WITNESS POST.

Station Notes

DUE TO TREE COVER, THIS SURVEY MARK HAS BEEN ABANDONED FOR MNDOT GEODETIC HORIZONTAL SURVEYS.

Leveling-Derived Orthometric Heights (Elevations)

Vertical Datum	Orthometric (Feet) Height	Accuracy	Orthometric (Meters) Height	Accuracy	Survey Order/(Class)	Project Info Year	Reference
NAVD88	1209.752	0.016	368.733	0.005	2/1	2015	00000851
NGVD29	1209.699	0.016	368.717	0.005	2/1	1992	UNCHECKD

Geoid Separations(ft): GEOID18 = -95.390 12B = -95.387 09 = -95.328 03 = -95.170

*** No Horizontal Positions in the Database ***

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8106_A_1-OO0763-3N-17SEP2025.jpg	N	Sep 17, 2025
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8106_A_1-OO0763-2-17SEP2025.jpg		Sep 17, 2025
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8106_A_1-OO0763-1-17SEP2025.jpg		Sep 17, 2025

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33222.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33222.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8106 B **NGS Name:** 8106 B

County: WASECA, MN (Sheet 1)

NGS ACRN: OO0764 Get Map
NGS Quad / Sta Num : 43093144/
USGS Quad: NEW RICHLAND

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	14	105 N	22 W	435330.82	932647.71	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1956	2025	GOOD	Horz=YES Vert=YES	YES		FLUSH	STEEL ROD IMBED IN MON

Monument Type
CONCRETE POST (PREFABRICATED)

Disk Type
BENCH MARK DISK

Mon. Agency
MNDT

Description: (2010) **Stamping:** 8106 B 1956

2.0 MILES EAST OF NEW RICHLAND, 2.0 MILES EAST ALONG TRUNK HIGHWAY 30 FROM THE JUNCTION OF TRUNK HIGHWAY 30 AND TRUNK HIGHWAY 13 IN NEW RICHLAND, AT TRUNK HIGHWAY 30 MILEPOINT 170.5, 75.4 FEET NORTH OF TRUNK HIGHWAY 30, 34.0 FEET EAST OF 160TH STREET, 6.0 FEET NORTHEAST OF A TELEPHONE PEDESTAL NUMBER 3000 10 3010 3020, 0.6 FOOT EAST OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Elevations)

Vertical Datum	Orthometric (Feet) Height	Accuracy	Orthometric (Meters) Height	Accuracy	Survey Order/(Class)	Project Info Year	Reference
NAVD88	1207.242	0.016	367.968	0.005	2/1	2015	00000851
NGVD29	1207.163	0.016	367.944	0.005	2/1	1992	UNCHECKD

Geoid Separations(ft): GEOID18 = -95.279 12B = -95.275 09 = -95.223 03 = -95.056

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Longitude	County (Feet) X	Y	County (Meters) X	Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Reference
NAD83(2011)	43 53 30.82458	93 26 47.71249	360295.666	121595.359	109818.339	37062.340	338.929		2024	GPS3701
NAD83(1996)	43 53 30.82440	93 26 47.71269	360295.651	121595.340	109818.334	37062.334	338.984	C	2024	HELLE

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8106_B-OO0764-3N-17SEP2025.jpg	N	Sep 17, 2025
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8106_B-OO0764-2-17SEP2025.jpg		Sep 17, 2025
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8106_B-OO0764-1-17SEP2025.jpg		Sep 17, 2025

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33223.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33223.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8106 C **NGS Name:** 8106 C

County: WASECA, MN (Sheet 1)

NGS ACRN: OO0765 Get Map
NGS Quad / Sta Num : 43093144/
USGS Quad: NEW RICHLAND

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	23	105 N	22 W	435330.00	932547.00	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2010	2015	DESTROYED	Horz=NO Vert=NO	YES		FLUSH	NO MAG MATERIAL

Monument Type	Disk Type	Mon. Agency
WALL - LIGHT RETAINING	BENCH MARK DISK	MNDT

Description: (2010) **Stamping:** 8106 C 1978

IN THE SOUTHEAST CORNER OF A TRUNK HIGHWAY 30 TRIPLE BOX CULVERT, 2.85 MILES EAST ALONG TRUNK HIGHWAY 30 FROM THE JUNCTION OF TRUNK HIGHWAY 30 AND TRUNK HIGHWAY 13 IN NEW RICHLAND, AT TRUNK HIGHWAY 30 MILEPOINT 171.35, 25.2 FEET SOUTH OF TRUNK HIGHWAY 30. THE SET DATE IS AN ESTIMATE, AT SOME POINT BETWEEN 2008 AND 2012 THE CULVERT HAS BEEN REPLACED AND THE EXISTING DISK WAS SET IN THE NEW CULVERT.

Leveling-Derived Orthometric Heights (Elevations)

Vertical Datum	Orthometric (Feet) Height	Accuracy	Orthometric (Meters) Height	Accuracy	Survey Order/(Class)	Project Info Year	Reference
NAVD88	1198.351	0.016	365.258	0.005	2/1	1991	00000025
NGVD29	1198.275	0.016	365.235	0.005	2	1980	L24529

Geoid Separations(ft): GEOID18 = -95.180 12B = -95.177 09 = -95.128 03 = -94.954

*** No Horizontal Positions in the Database ***

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8106_C-OO0765-3S-05JUN2013.jpg	S	Jun 5, 2013
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8106_C-OO0765-2-05JUN2013.jpg		Jun 5, 2013
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8106_C-OO0765-1-05JUN2013.jpg		Jun 5, 2013

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33224.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33224.pdf

8106 C RESET

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8106 C RESET
NGS Name: 8106 C RESET

County: WASECA, MN (Sheet 1)

NGS ACRN: DP6240 Get Map
NGS Quad / Sta Num : 43093144/
USGS Quad: NEW RICHLAND

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	23	105 N	22 W	435329.62	932547.01	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2010	2018	GOOD	Horz=NO Vert=NO	YES		FLUSH	NO MAG MATERIAL

Monument Type	Disk Type	Mon. Agency
CULVERT - ANY SIZE, ANY TYPE	BENCH MARK DISK	MNDT

Description: (2010) **Stamping:** 8106 C RESET 2010

IN THE SOUTHEAST CORNER OF A TRUNK HIGHWAY 30 TRIPLE BOX CULVERT, 2.85 MILES EAST ALONG TRUNK HIGHWAY 30 FROM THE JUNCTION OF TRUNK HIGHWAY 30 AND TRUNK HIGHWAY 13 IN NEW RICHLAND, AT TRUNK HIGHWAY 30 MILEPOINT 171.35, 25.2 FEET SOUTH OF TRUNK HIGHWAY 30. AT SOME POINT BETWEEN 2008 AND 2012 THE CULVERT HAS BEEN REPLACED AND THE EXISTING DISK WAS SET IN THE NEW CULVERT.

Station Notes

THE SET DATE IS AN ESTIMATE. THE SURVEY MARK HAS BEEN DEEMED UNSAFE DUE TO FALL RISK AND HAS BEEN ABANDONED FOR MNDOT GEODETIC USE.

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1201.198	0.016	366.126	0.005	2/1	2015	00000851

Geoid Separations(ft): GEOID18 = -95.180 12B = -95.177 09 = -95.128 03 = -94.954

*** No Horizontal Positions in the Database ***

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8106_C_RESET-DP6240-3S-30JUL2018.jpg	S	Jul 30, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8106_C_RESET-DP6240-2-30JUL2018.jpg		Jul 30, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8106_C_RESET-DP6240-1-30JUL2018.jpg		Jul 30, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_103054.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_103054.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8106 D **NGS Name:** 8106 D

County: WASECA, MN (Sheet 1)

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	24	105 N	22 W	435327.24	932536.35	2	3

NGS ACRN: OO0766 Get Map
NGS Quad / Sta Num : 43093144/
USGS Quad: NEW RICHLAND

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1978	2018	GOOD	Horz=NO Vert=NO	YES	88510	FLUSH	NO MAG MATERIAL

Monument Type	Disk Type	Mon. Agency
BRIDGE ABUTMENT	VERTICAL CONTROL DISK	MNDT

Description: (2010) **Stamping:** 8106 D 1978

IN THE SOUTHEAST ABUTMENT OF COUNTY ROAD 63 BRIDGE NUMBER 88510 OVER THE LE SUEUR RIVER, 3.0 MILES EAST ALONG TRUNK HIGHWAY 30 FROM THE JUNCTION OF TRUNK HIGHWAY 30 AND TRUNK HIGHWAY 13 IN NEW RICHLAND TO TRUNK HIGHWAY 30 MILEPOINT 171.50, THEN 0.05 MILE SOUTH ON COUNTY ROAD 63 (170TH STREET), 13.0 FEET EAST OF COUNTY ROAD 63 (170TH STREET).

Station Notes

THE SURVEY MARK HAS BEEN DEEMED UNSAFE DUE TO FALL RISK AND HAS BEEN ABANDONED FOR MNDOT GEODETIC USE.

Leveling-Derived Orthometric Heights (Elevations)

Vertical Datum	Orthometric (Feet) Height	Accuracy	Orthometric (Meters) Height	Accuracy	Survey Order/(Class)	Project Info Year	Reference
NAVD88	1197.858	0.016	365.108	0.005	2/1	2015	00000851
NGVD29	1197.783	0.016	365.085	0.005	2/1	1992	UNCHECKD

Geoid Separations(ft): GEOID18 = -95.167 12B = -95.164 09 = -95.115 03 = -94.941

*** No Horizontal Positions in the Database ***

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8106_D-OO0766-3E-30JUL2018.jpg	E	Jul 30, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8106_D-OO0766-2-30JUL2018.jpg		Jul 30, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8106_D-OO0766-1-30JUL2018.jpg		Jul 30, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33225.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33225.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8106 E
NGS Name: 8106 E

County: WASECA, MN (Sheet 1)

NGS ACRN: OO0767 Get Map
NGS Quad / Sta Num : 43093144/
USGS Quad: NEW RICHLAND

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	23	105 N	22 W	435238.34	932537.11	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1978	2023	GOOD	Horz=YES Vert=YES	YES		FLUSH	MARKER IS STEEL ROD

Monument Type
COPPER CLAD ROD (NO SLEEVE) (DEPTH 48 FT)

Disk Type
VERTICAL CONTROL DISK

Mon. Agency
MNDT

Description: (2010)

Stamping: 8106 E 1978

3.25 MILES EAST-SOUTHEAST OF NEW RICHLAND, 3.0 MILES EAST ALONG TRUNK HIGHWAY 30 FROM THE JUNCTION OF TRUNK HIGHWAY 30 AND TRUNK HIGHWAY 13 IN NEW RICHLAND, THEN 1.0 MILE SOUTH ON COUNTY ROAD 63 (170TH STREET), 32.0 FEET WEST OF COUNTY ROAD 63, 48.0 FEET NORTH OF COUNTY ROAD 58, 3.0 FEET SOUTHEAST OF A POWER POLE, 2.0 FEET SOUTHEAST OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Elevations)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1220.043	0.016	371.870	0.005	2/1	2015	00000851
NGVD29	1220.014	0.016	371.861	0.005	2/1	1992	UNCHECKD

Geoid Separations(ft): GEOID18 = -95.275 12B = -95.269 09 = -95.223 03 = -95.042

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Geodetic Positions Longitude	County (Feet) X	County (Feet) Y	County (Meters) X	County (Meters) Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Project Info Reference
NAD83(2011)	43 52 38.34210	93 25 37.11061	365432.982	116248.228	111384.196	35432.531	342.830	3	2021	GPSBM

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8106_E-OO0767-3W-24APR2023.jpg	W	Apr 24, 2023
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8106_E-OO0767-2-24APR2023.jpg		Apr 24, 2023
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8106_E-OO0767-1-24APR2023.jpg		Apr 24, 2023

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33226.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33226.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8106 F
NGS Name: 8106 F

County: WASECA, MN (Sheet 1)

NGS ACRN: DP6239 Get Map
NGS Quad / Sta Num : 43093144/
USGS Quad: NEW RICHLAND

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	15	105 N	22 W	435330.86	932724.01	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2013	2025	GOOD	Horz=YES Vert=YES	YES		RECESSED 1 IN.	BAR MAG IN DRILL HOLE

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 34 FT)

Disk Type
METAL ROD (WITH REMOVABLE ID DISK)

Mon. Agency
MNDT

Description: (2013)

Stamping: 8106 F 2013

1.95 MILES EAST OF NEW RICHLAND, 1.45 MILES EAST ALONG TRUNK HIGHWAY 30 FROM THE JUNCTION OF TRUNK HIGHWAY 30 AND TRUNK HIGHWAY 13 IN NEW RICHLAND, AT TRUNK HIGHWAY 30 MILEPOINT 169.95, 74.3 FEET NORTH OF TRUNK HIGHWAY 30, 19.0 FEET EAST OF 155TH STREET, 8.7 FEET WEST OF A WITNESS POST.

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1190.605	0.016	362.897	0.005	2/1	2015	00000851

Geoid Separations(ft): GEOID18 = -95.338 12B = -95.334 09 = -95.275 03 = -95.115

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Geodetic Positions Longitude	County (Feet) X	County (Feet) Y	County (Meters) X	County (Meters) Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Project Info Reference
NAD83(2011)	43 53 30.86026	93 27 24.00618	357637.891	121616.213	109008.247	37068.696	333.844		2024	GPS3701
NAD83(1996)	43 53 30.86008	93 27 24.00639	357637.876	121616.195	109008.243	37068.690	333.899	C	2024	HELLE

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8106_F-DP6239-3N-17SEP2025.jpg	N	Sep 17, 2025
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8106_F-DP6239-2-17SEP2025.jpg		Sep 17, 2025
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8106_F-DP6239-1-17SEP2025.jpg		Sep 17, 2025

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_100306.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_100306.pdf

Geodetic Data Sheet (Brief)
GSID Station # 100307

8106 G

04/28/2026
Sheet Help

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8106 G
NGS Name: 8106 G

County: WASECA, MN (Sheet 1)

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	24	105 N	22 W	435329.23	932534.23	2	C

NGS ACRN: DP6241 Get Map
NGS Quad / Sta Num : 43093144/
USGS Quad: NEW RICHLAND

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2013	2023	GOOD	Horz=YES Vert=YES	YES		RECESSED 2 IN.	BAR MAG IN DRILL HOLE

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 24 FT)

Disk Type
METAL ROD (WITH REMOVABLE ID DISK)

Mon. Agency
MNDT

Description: (2013)

Stamping: 8106 G 2013

3.25 MILES EAST OF NEW RICHLAND, 2.95 MILES EAST ALONG TRUNK HIGHWAY 30 FROM THE JUNCTION OF TRUNK HIGHWAY 30 AND TRUNK HIGHWAY 13 IN NEW RICHLAND, AT TRUNK HIGHWAY 30 MILEPOINT 171.55, 48.5 FEET SOUTH OF TRUNK HIGHWAY 30, 167.2 FEET EAST OF COUNTY ROAD 63, 13.3 FEET WEST OF AN ENTRANCE, 1.5 FEET EAST OF A WITNESS POST.

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Accuracy	Orthometric (Meters) Height	Accuracy	Survey Order/(Class)	Project Info Year	Reference
NAVD88	1205.231	0.016	367.355	0.005	2/1	2015	00000851

Geoid Separations(ft): GEOID18 = -95.161 12B = -95.157 09 = -95.105 03 = -94.931

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Longitude	County (Feet) X	Y	County (Meters) X	Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Reference
NAD83(2011)	43 53 29.23440	93 25 34.23287	365675.611	121400.421	111458.149	37002.922	338.356		2024	GPS3701
NAD83(1996)	43 53 29.23422	93 25 34.23307	365675.597	121400.403	111458.145	37002.917	338.411	C	2024	HELLE

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8106_G-DP6241-3S-24APR2023.jpg	S	Apr 24, 2023
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8106_G-DP6241-2-24APR2023.jpg		Apr 24, 2023
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8106_G-DP6241-1-24APR2023.jpg		Apr 24, 2023

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_100307.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_100307.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8107 A

NGS Name: 8107 A

County: WASECA, MN (Sheet 1)

NGS ACRN: OO0738 Get Map
NGS Quad / Sta Num : 43093414/
USGS Quad: WALDORF

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	10	105 N	24 W	435423.00	934154.00	2	

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1978	2013	DESTROYED	Horz=NO Vert=NO	NO		PROJECTS 2 IN.	STEEL SPIKE IMBED IN MON

Monument Type	Disk Type	Mon. Agency
UNKNOWN	BENCH MARK DISK	MNDT

Description: (2010)

Stamping: 8107 A 1978

1.6 MILES SOUTH ALONG TRUNK HIGHWAY 83 FROM THE JUNCTION OF TRUNK HIGHWAY 83 AND COUNTY ROAD 3 IN WALDORF, THEN 0.05 MILE WEST ON 240TH AVENUE, 350.0 FEET WEST OF TRUNK HIGHWAY 83, 64.8 FEET NORTH-NORTHEAST OF A TELEPHONE PEDESTAL, 34.5 FEET NORTHWEST OF A MAILBOX POST, 32.0 FEET NORTH OF A TOWNSHIP ROAD (240TH AVENUE), 3.0 FEET WEST OF A DRIVEWAY SOUTH EXTENDED, 2.5 FEET EAST OF A POWER POLE NUMBER 5, 0.9 FOOT EAST OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Elevations)

Vertical Datum	Orthometric (Feet) Height	Accuracy	Orthometric (Meters) Height	Accuracy	Survey Order/(Class)	Project Info Year	Reference
NAVD88	1098.462	0.016	334.812	0.005	2/1	1991	00000025
NGVD29	1098.354	0.016	334.779	0.005	2	1980	L24529

Geoid Separations(ft): GEOID18 = -95.594 12B = -95.584 09 = -95.515 03 = -95.394

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33227.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33227.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8107 A RESET **NGS Name:** 8107 A RESET

County: WASECA, MN (Sheet 1)

NGS ACRN: DP6229 Get Map
NGS Quad / Sta Num : 43093414/
USGS Quad: WALDORF

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	10	105 N	24 W	435421.83	934156.07	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2013	2018	GOOD	Horz=NO Vert=YES	YES		RECESSED 2 IN.	MARKER IS STEEL ROD

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 64 FT)

Disk Type
METAL ROD (WITH REMOVABLE ID DISK)

Mon. Agency
MNDT

Description: (2016)

Stamping: 8107 A RESET 2013

1.6 MILES SOUTH OF WALDORF, 1.6 MILES SOUTH ALONG TRUNK HIGHWAY 83 FROM THE JUNCTION OF TRUNK HIGHWAY 83 AND COUNTY ROAD 3 IN WALDORF TO TRUNK HIGHWAY 83 MILEPOINT 1.0, THEN 0.05 MILE WEST ON 240TH AVENUE, 32.0 FEET NORTH OF 240TH AVENUE, 3.0 FEET WEST OF DRIVEWAY NUMBER 3430 EXTENDED, 2.5 FEET EAST OF A POWER POLE, 1.0 FOOT SOUTH OF A WITNESS POST.

Station Notes

DUE TO THE PROXIMITY TO A POWER POLE, THIS SURVEY MARK HAS BEEN ABANDONED FOR MNDOT GEODETIC HORIZONTAL SURVEYS.

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1097.019	0.016	334.372	0.005	2/1	2019	00000938

Geoid Separations(ft): GEOID18 = -95.594 12B = -95.584 09 = -95.512 03 = -95.394

*** No Horizontal Positions in the Database ***

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8107_A_RESET-DP6229-3N-06JUN2013.jpg	N	Jun 6, 2013
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8107_A_RESET-DP6229-2-06JUN2013.jpg		Jun 6, 2013
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8107_A_RESET-DP6229-1-06JUN2013.jpg		Jun 6, 2013

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_100097.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_100097.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8107 B **NGS Name:** 8107 B

County: WASECA, MN (Sheet 1)

NGS ACRN: OO0737 Get Map
NGS Quad / Sta Num : 43093414/
USGS Quad: WALDORF

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	10	105 N	24 W	435452.00	934150.00	2	

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1978	2016	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
UNKNOWN	BENCH MARK DISK	MNDT

Description: (1978) **Stamping:** 8107 B

1.44 MILES SOUTH OF WALDORF, IN THE NORTHEAST HEADWALL OF A TRUNK HIGHWAY 83 BOX CULVERT, 1.0 MILE SOUTH ALONG TRUNK HIGHWAY 83 FROM THE JUNCTION OF TRUNK HIGHWAY 83 AND COUNTY ROAD 3, AT TRUNK HIGHWAY 83 MILEPOINT 1.6, 26.2 FEET EAST OF TRUNK HIGHWAY 83.

Station Notes
THE OLD CULVERT WAS REPLACED.

Leveling-Derived Orthometric Heights (Elevations)

Vertical Datum	Orthometric (Feet) Height	Accuracy	Orthometric (Meters) Height	Accuracy	Survey Order/(Class)	Project Info Year	Reference
NAVD88	1077.931	0.016	328.554	0.005	2/1	1991	00000025
NGVD29	1077.823	0.016	328.521	0.005	2	1980	L24529

Geoid Separations(ft): GEOID18 = -95.561 12B = -95.554 09 = -95.482 03 = -95.364

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33228.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33228.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8107 C

NGS Name: 8107 C

County: WASECA, MN (Sheet 1)

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	10	105 N	24 W	435503.00	934149.00	2	

NGS ACRN: OO0736 Get Map
NGS Quad / Sta Num : 43093414/
USGS Quad: WALDORF

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1978	2016	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
UNKNOWN	BENCH MARK DISK	MNDT

Description: (2010)

Stamping: 8107 C 1978

IN THE SOUTHEAST HEADWALL OF A TRUNK HIGHWAY 83 BOX CULVERT, 0.75 MILE SOUTH ALONG TRUNK HIGHWAY 83 FROM THE JUNCTION OF TRUNK HIGHWAY 83 AND COUNTY ROAD 3 IN WALDORF, AT TRUNK HIGHWAY 83 MILEPOINT 1.85, 26.0 FEET EAST OF TRUNK HIGHWAY 83.

Leveling-Derived Orthometric Heights (Elevations)

Vertical Datum	Orthometric (Feet) Height	Accuracy	Orthometric (Meters) Height	Accuracy	Survey Order/(Class)	Project Info Year	Reference
NAVD88	1073.886	0.016	327.321	0.005	2/1	1991	00000025
NGVD29	1073.777	0.016	327.288	0.005	2	1980	L24529

Geoid Separations(ft): GEOID18 = -95.548 12B = -95.541 09 = -95.469 03 = -95.354

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33229.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33229.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8107 D **NGS Name:** 8107 D

County: WASECA, MN (Sheet 1)

NGS ACRN: OO0735 Get Map
NGS Quad / Sta Num : 43093414/
USGS Quad: WALDORF

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	10	105 N	24 W	435513.00	934149.00	2	

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1978	2016	DESTROYED	Horz=NO Vert=NO	NO			NO MAG MATERIAL

Monument Type	Disk Type	Mon. Agency
UNKNOWN	BENCH MARK DISK	MNDT

Description: (2010) **Stamping:** 8107 D 1978

IN THE SOUTHWEST END OF A SOUTHEAST HEADWALL OF A TRUNK HIGHWAY 83 BOX CULVERT, 0.6 MILE SOUTH ALONG TRUNK HIGHWAY 83 FROM THE JUNCTION OF TRUNK HIGHWAY 83 AND COUNTY ROAD 3 IN WALDORF, AT TRUNK HIGHWAY 83 MILEPOINT 2.0, THEN 171.0 FEET EAST ON COUNTY ROAD 64, 34.0 FEET EAST OF TRUNK HIGHWAY 83, 46.0 FEET SOUTH OF COUNTY ROAD 64.

Leveling-Derived Orthometric Heights (Elevations)

Vertical Datum	Orthometric (Feet) Height	Accuracy	Orthometric (Meters) Height	Accuracy	Survey Order/(Class)	Project Info Year	Reference
NAVD88	1069.607	0.016	326.017	0.005	2/1	1991	00000025
NGVD29	1069.499	0.016	325.984	0.005	2	1980	L24529

Geoid Separations(ft): GEOID18 = -95.535 12B = -95.528 09 = -95.456 03 = -95.341

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33230.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33230.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8107 E **NGS Name:** 8107 E

County: WASECA, MN (Sheet 1)

NGS ACRN: OO0734 Get Map
NGS Quad / Sta Num : 43093414/
USGS Quad: WALDORF

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	3	105 N	24 W	435556.60	934149.45	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1978	2018	GOOD	Horz=NO Vert=YES	YES		PROJECTS 3 IN.	NO MAG MATERIAL

Monument Type	Disk Type	Mon. Agency
STRUCTURE (MASSIVE)	BENCH MARK DISK	MNDT

Description: (2016) **Stamping:** 8107 E 1978

IN WALDORF, AT A WATER TANK, IN THE WEST CORNER OF THE BASE OF THE SOUTHWEST LEG OF A TANK, 0.2 MILE SOUTH ALONG COUNTY ROAD 3 FROM THE JUNCTION OF COUNTY ROAD 3 AND COUNTY ROAD 4 IN WALDORF, 143.0 FEET EAST OF COUNTY ROAD 3, 74.0 FEET NORTHEAST OF RAILWAY STREET, 56.0 FEET WEST OF AN ALLEY, 52.6 FEET SOUTHEAST OF THE SOUTHEAST CORNER OF A WATER DEPARTMENT BUILDING.

Leveling-Derived Orthometric Heights (Elevations)

Vertical Datum	Orthometric (Feet) Height	Accuracy	Orthometric (Meters) Height	Accuracy	Survey Order/(Class)	Project Info Year	Reference
NAVD88	1080.405	0.016	329.308	0.005	2/1	2019	00000938
NGVD29	1080.296	0.016	329.275	0.005	2/1	1992	UNCHECKD

Geoid Separations(ft): GEOID18 = -95.476 12B = -95.472 09 = -95.397 03 = -95.289

*** No Horizontal Positions in the Database ***

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8107_E-OO0734-3N-20APR2016.jpg	N	Apr 20, 2016
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8107_E-OO0734-2-20APR2016.jpg		Apr 20, 2016
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8107_E-OO0734-1-20APR2016.jpg		Apr 20, 2016

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33231.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33231.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8107 F

NGS Name: 8107 F

County: WASECA, MN (Sheet 1)

NGS ACRN: OO0733 Get Map
NGS Quad / Sta Num : 43093414/
USGS Quad: WALDORF

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	34	106 N	24 W	435611.00	934145.00	2	

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1978	2016	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
UNKNOWN	VERTICAL CONTROL DISK	MNDT

Description: (2010)

Stamping: 8107 F 1978

ON THE NORTH EDGE OF WALDORF, IN THE EAST END OF THE TOP STEP AT THE NORTH ENTRANCE OF A SCHOOL, 0.1 MILE NORTH OF THE JUNCTION OF COUNTY ROAD 3 (MAIN STREET) AND COUNTY ROAD 4, THEN 300.0 FEET EAST, AT THE NORTH END OF RAYMOND AVENUE, 200.0 FEET SOUTH OF A BITUMINOUS ROAD, 32.6 FEET EAST OF THE NORTHWEST CORNER OF A SCHOOL, 4.0 FEET EAST OF THE NORTH SCHOOL ENTRANCE.

Station Notes

THE STEPS WERE REMOVED.

Leveling-Derived Orthometric Heights (Elevations)

Vertical Datum	Orthometric (Feet) Height	Accuracy	Orthometric (Meters) Height	Accuracy	Survey Order/(Class)	Project Info Year	Reference
NAVD88	1084.263	0.016	330.484	0.005	2/1	1991	00000025
NGVD29	1084.151	0.016	330.450	0.005	2	1980	L24529

Geoid Separations(ft): GEOID18 = -95.462 12B = -95.456 09 = -95.380 03 = -95.275

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33232.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33232.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8107 G

NGS Name: 8107 G

County: WASECA, MN (Sheet 1)

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	3	105 N	24 W	435606.00	934217.00		

NGS ACRN: Get Map
NGS Quad / Sta Num : 43093414/
USGS Quad: WALDORF

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1978	2016	DESTROYED	Horz=NO Vert=NO	NO	3400	FLUSH	NO MAG MATERIAL

Monument Type	Disk Type	Mon. Agency
BRIDGE ABUTMENT	SURVEY DISK	MNDT

Description: (1978)

Stamping: 8107 G 1978

IN THE SOUTHEAST CORNER OF COUNTY ROAD 4 BRIDGE NUMBER 3400 OVER THE LITTLE COBB RIVER, 0.4 MILE WEST ALONG COUNTY ROAD 4 (260TH AVENUE), FROM THE JUNCTION OF COUNTY ROAD 4 AND COUNTY ROAD 3 IN WALDORF, 0.15 MILE WEST ALONG COUNTY ROAD 4 FROM THE JUNCTION WITH TRUNK HIGHWAY 83 IN THE LITTLE COBB RIVER, 12.0 FEET SOUTH OF COUNTY ROAD 4.

Station Notes

THE OLD BRIDGE WAS REPLACED.

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -95.446 12B = -95.439 09 = -95.367 03 = -95.259

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33233.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33233.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8107 H **NGS Name:** 8107 H

County: WASECA, MN (Sheet 1)

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	33	106 N	24 W	435637.00	934237.00	2	

NGS ACRN: OO0732 Get Map
NGS Quad / Sta Num : 43093414/
USGS Quad: WALDORF

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1978	2016	DESTROYED	Horz=NO Vert=NO	NO		FLUSH	NO MAG MATERIAL

Monument Type	Disk Type	Mon. Agency
UNKNOWN	BENCH MARK DISK	MNDT

Description: (2010) **Stamping:** 8107 H 1978

IN THE SOUTHEAST END OF THE NORTHEAST HEADWALL OF A TRUNK HIGHWAY 83 DOUBLE BOX CULVERT, 0.75 MILE NORTHWEST OF THE JUNCTION OF TRUNK HIGHWAY 83 AND COUNTY ROAD 4 IN WALDORF, AT TRUNK HIGHWAY 83 MILEPOINT 3.8, 23.5 FEET NORTHEAST OF TRUNK HIGHWAY 83.

Station Notes

THE OLD CULVERT WAS REPLACED.

Leveling-Derived Orthometric Heights (Elevations)

Vertical Datum	Orthometric (Feet) Height	Accuracy	Orthometric (Meters) Height	Accuracy	Survey Order/(Class)	Project Info Year	Reference
NAVD88	1043.223	0.016	317.975	0.005	2/1	1991	00000025
NGVD29	1043.111	0.016	317.941	0.005	2	1980	L24529

Geoid Separations(ft): GEOID18 = -95.390 12B = -95.387 09 = -95.311 03 = -95.203

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33234.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33234.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8107 J

NGS Name: 8107 J

County: WASECA, MN (Sheet 1)

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	28	106 N	24 W	435717.00	934323.00	2	

NGS ACRN: OO0731 Get Map
NGS Quad / Sta Num : 43093414/
USGS Quad: WALDORF

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1978	2018	DESTROYED	Horz=NO Vert=NO	NO		PROJECTS 4 IN.	STEEL ROD IMBED IN MON

Monument Type	Disk Type	Mon. Agency
UNKNOWN	BENCH MARK DISK	MNDT

Description: (2010) **Stamping:** 8107 J 1978

1.75 MILES NORTHWEST OF THE JUNCTION OF TRUNK HIGHWAY 83 AND COUNTY ROAD 4 IN WALDORF, AT TRUNK HIGHWAY 83 MILEPOINT 4.75, 71.0 FEET SOUTHWEST OF TRUNK HIGHWAY 83, 35.2 FEET WEST OF THE SOUTHEAST END OF A METAL CULVERT, 30.0 FEET SOUTHEAST OF A FIELD ENTRANCE SOUTHWEST, 1.8 FEET SOUTHEAST OF A POWER POLE, 0.8 FOOT EAST OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Elevations)

Vertical Datum	Orthometric (Feet) Height	Accuracy	Orthometric (Meters) Height	Accuracy	Survey Order/(Class)	Project Info Year	Reference
NAVD88	1067.301	0.016	325.314	0.005	2/1	1991	00000025
NGVD29	1067.189	0.016	325.280	0.005	2	1980	L24529

Geoid Separations(ft): GEOID18 = -95.298 12B = -95.295 09 = -95.216 03 = -95.111

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33235.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33235.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8107 K **NGS Name:** 8107 K

County: WASECA, MN (Sheet 1)

NGS ACRN: OO0726 Get Map
NGS Quad / Sta Num : 43093414/
USGS Quad: WALDORF

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	20	106 N	24 W	435816.65	934430.60	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1978	2024	GOOD	Horz=YES Vert=YES	YES		FLUSH	MARKER IS STEEL ROD

Monument Type
COPPER CLAD ROD (NO SLEEVE) (DEPTH 70 FT)

Disk Type
VERTICAL CONTROL DISK

Mon. Agency
MNDT

Description: (2016) **Stamping:** 8107 K 1978

3.5 MILES NORTHWEST OF WALDORF, 3.2 MILES NORTHWEST ALONG TRUNK HIGHWAY 83 FROM THE JUNCTION OF TRUNK HIGHWAY 83 AND COUNTY ROAD 4 IN WALDORF, AT TRUNK HIGHWAY 83 MILEPOINT 6.25, 74.6 FEET SOUTHWEST OF TRUNK HIGHWAY 83, 1.5 FEET SOUTHWEST OF A RIGHT-OF-WAY POST, 1.2 FEET WEST OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Elevations)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1050.923	0.016	320.322	0.005	2/1	2019	00000938
NGVD29	1050.792	0.016	320.282	0.005	2/1	1992	UNCHECKD

Geoid Separations(ft): GEOID18 = -95.154 12B = -95.151 09 = -95.072 03 = -94.967

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Geodetic Positions Longitude	County (Feet) X	County (Feet) Y	County (Meters) X	County (Meters) Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Project Info Reference
NAD83(2011)	43 58 16.65196	93 44 30.60459	282750.401	151177.835	86182.4950	46079.096	291.321	C	2025	H23BLUE
NAD83(1996)	43 58 16.65140	93 44 30.60457	282750.401	151177.778	86182.4950	46079.079			2025	H23BLUE

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8107_K-OO0726-3SW-19APR2021.jpg	SW	Apr 19, 2021
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8107_K-OO0726-2-19APR2021.jpg		Apr 19, 2021
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8107_K-OO0726-1-19APR2021.jpg		Apr 19, 2021

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33236.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33236.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8107 L
NGS Name: 8107 L

County: WASECA, MN (Sheet 1)

NGS ACRN: OO0725 Get Map
NGS Quad / Sta Num : 43093414/
USGS Quad: WALDORF

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	17	106 N	24 W	435843.89	934452.32	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1978	2018	GOOD	Horz=NO Vert=NO	YES	CO RD	FLUSH	NO MAG MATERIAL

Monument Type	Disk Type	Mon. Agency
CULVERT - ANY SIZE, ANY TYPE	VERTICAL CONTROL DISK	MNDT

Description: (2016) **Stamping:** 8107 L 1978

2.75 MILES SOUTHEAST OF PEMBERTON, IN THE SOUTHEAST CORNER OF A COUNTY ROAD 54 TRIPLE BOX CULVERT AT BULL RUN CREEK, 2.85 MILES SOUTHEAST ALONG TRUNK HIGHWAY 83 FROM THE JUNCTION OF TRUNK HIGHWAY 83 AND COUNTY ROAD 53 IN PEMBERTON, THEN 0.1 MILE NORTH ON COUNTY ROAD 54, 14.0 FEET EAST OF COUNTY ROAD 54.

Station Notes

THE SURVEY MARK HAS BEEN DEEMED UNSAFE DUE TO A FALL RISK AND HAS BEEN ABANDONED FOR MNDOT GEODETIC USE.

Leveling-Derived Orthometric Heights (Elevations)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1026.071	0.016	312.747	0.005	2/1	2019	00000938
NGVD29	1025.936	0.016	312.706	0.005	2/1	1992	UNCHECKD

Geoid Separations(ft): GEOID18 = -95.098 12B = -95.092 09 = -95.016 03 = -94.908

*** No Horizontal Positions in the Database ***

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8107_L-OO0725-3N-20APR2016.jpg	N	Apr 20, 2016
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8107_L-OO0725-2-20APR2016.jpg		Apr 20, 2016
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8107_L-OO0725-1-20APR2016.jpg		Apr 20, 2016

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33237.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33237.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8107 M
NGS Name: 8107 M

County: WASECA, MN (Sheet 1)

NGS ACRN: OO0724 Get Map
NGS Quad / Sta Num : 43093441/
USGS Quad: MAPLETON NE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	18	106 N	24 W	435905.96	934515.22	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1978	2018	GOOD	Horz=NO Vert=NO	YES	9206	FLUSH	NO MAG MATERIAL

Monument Type	Disk Type	Mon. Agency
CULVERT - ANY SIZE, ANY TYPE	VERTICAL CONTROL DISK	MNDT

Description: (2016) **Stamping:** 8107 M 1978

2.2 MILES SOUTHEAST OF PEMBERTON, IN THE SOUTHEAST END OF THE NORTHEAST HEADWALL OF A TRUNK HIGHWAY 30 DOUBLE BOX CULVERT AT BULL RUN CREEK, 2.25 MILES SOUTHEAST ALONG TRUNK HIGHWAY 83 FROM THE JUNCTION OF TRUNK HIGHWAY 83 AND COUNTY ROAD 53 IN PEMBERTON, AT TRUNK HIGHWAY 83 MILEPOINT 7.4, 38.0 FEET NORTHEAST OF TRUNK HIGHWAY 83.

Station Notes

THE SURVEY MARK HAS BEEN DEEMED UNSAFE DUE TO A FALL RISK AND HAS BEEN ABANDONED FOR MNDOT GEODETIC USE.

Leveling-Derived Orthometric Heights (Elevations)

Vertical Datum	Orthometric (Feet) Height	Accuracy	Orthometric (Meters) Height	Accuracy	Survey Order/(Class)	Project Info Year	Reference
NAVD88	1025.359	0.016	312.530	0.005	2/1	2019	00000938
NGVD29	1025.237	0.016	312.493	0.005	2/1	1992	UNCHECKD

Geoid Separations(ft): GEOID18 = -95.046 12B = -95.039 09 = -94.960 03 = -94.855

*** No Horizontal Positions in the Database ***

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8107_M-OO0724-3NE-20APR2016.jpg	NE	Apr 20, 2016
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8107_M-OO0724-2-20APR2016.jpg		Apr 20, 2016
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8107_M-OO0724-1-20APR2016.jpg		Apr 20, 2016

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33238.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33238.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8107 N **NGS Name:** 8107 N

County: WASECA, MN (Sheet 1)

NGS ACRN: OO0723 Get Map
NGS Quad / Sta Num : 43093441/
USGS Quad: MAPLETON NE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	18	106 N	24 W	435934.75	934548.48	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1978	2018	GOOD	Horz=NO Vert=YES	YES		FLUSH	MARKER IS STEEL ROD

Monument Type
COPPER CLAD ROD (NO SLEEVE) (DEPTH 64 FT)

Disk Type
VERTICAL CONTROL DISK

Mon. Agency
MNDT

Description: (2016) **Stamping:** 8107 N 1978

1.45 MILES SOUTHEAST OF PEMBERTON, 1.55 MILES SOUTHEAST ALONG TRUNK HIGHWAY 83 FROM THE JUNCTION OF TRUNK HIGHWAY 83 AND COUNTY ROAD 53 IN PEMBERTON, THEN 0.05 MILE WEST ON 300TH AVENUE, 27.0 FEET SOUTH OF 300TH AVENUE, 6.3 FEET EAST OF A POWER POLE, 1.0 FOOT WEST OF A WITNESS POST.

Station Notes
DUE TO TREE COVER, THIS SURVEY MARK HAS BEEN ABANDONED FOR MNDOT GEODETIC HORIZONTAL SURVEYS.

Leveling-Derived Orthometric Heights (Elevations)

Vertical Datum	Orthometric (Feet) Height	Accuracy	Orthometric (Meters) Height	Accuracy	Survey Order/(Class)	Project Info Year	Reference
NAVD88	1037.150	0.016	316.124	0.005	2/1	2019	00000938
NGVD29	1036.996	0.016	316.077	0.005	2/1	1992	UNCHECKD

Geoid Separations(ft): GEOID18 = -94.970 12B = -94.967 09 = -94.888 03 = -94.780

*** No Horizontal Positions in the Database ***

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8107_N-OO0723-3S-31JUL2018.jpg	S	Jul 31, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8107_N-OO0723-2-31JUL2018.jpg		Jul 31, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8107_N-OO0723-1-31JUL2018.jpg		Jul 31, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33239.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33239.pdf

Geodetic Data Sheet (Brief)
GSID Station # 105271

8107 P

04/28/2026
Sheet Help

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8107 P
NGS Name: 8107 P

County: WASECA, MN (Sheet 1)

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	18	106 N	24 W	435928.95	934536.69	2	C

NGS ACRN: DQ5408 Get Map
NGS Quad / Sta Num : 43093441/
USGS Quad: MAPLETON NE

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2016	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 3 IN.	BAR MAG IN DRILL HOLE

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 19 FT)

Disk Type
METAL ROD (WITH REMOVABLE ID DISK)

Mon. Agency
MNDT

Description: (2016)

Stamping: 8107 P 2016

1.8 MILES SOUTHEAST OF PEMBERTON, 1.8 MILES SOUTHEAST ALONG TRUNK HIGHWAY 83 FROM THE JUNCTION OF TRUNK HIGHWAY 83 AND COUNTY ROAD 53 IN PEMBERTON, AT TRUNK HIGHWAY 83 MILEPOINT 7.95, 56.1 FEET NORTHEAST OF TRUNK HIGHWAY 83, 32.7 FEET NORTHWEST OF A FIELD ENTRANCE, 1.5 FEET SOUTHWEST OF A WITNESS POST.

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1034.857	0.016	315.425	0.005	2/1	2019	00000938

Geoid Separations(ft): GEOID18 = -94.990 12B = -94.987 09 = -94.908 03 = -94.803

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Geodetic Positions Longitude	County (Feet) X	County (Feet) Y	County (Meters) X	County (Meters) Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Project Info Reference
NAD83(2011)	43 59 28.94793	93 45 36.69208	277992.266	158547.490	84732.2120	48325.372	286.474	C	2025	H23BLUE
NAD83(1996)	43 59 28.94733	93 45 36.69204	277992.268	158547.430	84732.2130	48325.353			2025	H23BLUE

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8107_P-DQ5408-3NE-17MAY2016.jpg	NE	May 17, 2016
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8107_P-DQ5408-2-17MAY2016.jpg		May 17, 2016
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8107_P-DQ5408-1-17MAY2016.jpg		May 17, 2016

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_105271.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_105271.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8107 Q
NGS Name: 8107 Q

County: WASECA, MN (Sheet 1)

NGS ACRN: DQ5409 Get Map
NGS Quad / Sta Num : 43093441/
USGS Quad: MAPLETON NE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	18	106 N	24 W	435855.77	934509.42	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2016	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 4 IN.	BAR MAG IN DRILL HOLE

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 28 FT)

Disk Type
METAL ROD (WITH REMOVABLE ID DISK)

Mon. Agency
MNDT

Description: (2016)

Stamping: 8107 Q 2016

2.6 MILES SOUTHEAST OF PEMBERTON, 2.55 MILES SOUTHEAST ALONG TRUNK HIGHWAY 83 FROM THE JUNCTION OF TRUNK HIGHWAY 83 AND COUNTY ROAD 53 IN PEMBERTON, AT TRUNK HIGHWAY 83 MILEPOINT 7.2, 71.4 FEET SOUTHWEST OF TRUNK HIGHWAY 83, 3.5 FEET NORTHEAST OF A RIGHT-OF-WAY POST, 1.5 FEET NORTHEAST OF A WITNESS POST.

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1034.594	0.016	315.345	0.005	2/1	2019	00000938

Geoid Separations(ft): GEOID18 = -95.062 12B = -95.059 09 = -94.980 03 = -94.875

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Geodetic Positions Longitude	County (Feet) X	County (Feet) Y	County (Meters) X	County (Meters) Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Project Info Reference
NAD83(2011)	43 58 55.76963	93 45 09.42349	279951.703	155167.519	85329.4500	47295.154	286.353	C	2025	H23BLUE
NAD83(1996)	43 58 55.76905	93 45 09.42346	279951.705	155167.460	85329.4500	47295.137			2025	H23BLUE

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8107_Q-DQ5409-3SW-17MAY2016.jpg	SW	May 17, 2016
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8107_Q-DQ5409-2-17MAY2016.jpg		May 17, 2016
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8107_Q-DQ5409-1-17MAY2016.jpg		May 17, 2016

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_105272.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_105272.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8107 R **NGS Name:** 8107 R

County: WASECA, MN (Sheet 1)

NGS ACRN: DQ5412 Get Map
NGS Quad / Sta Num : 43093414/
USGS Quad: WALDORF

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	33	106 N	24 W	435645.11	934250.57	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2016	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 3 IN.	BAR MAG IN DRILL HOLE

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 54 FT)

Disk Type
METAL ROD (WITH REMOVABLE ID DISK)

Mon. Agency
MNDT

Description: (2016) **Stamping:** 8107 R 2016

1.2 MILES NORTHWEST OF WALDORF, 1.0 MILE NORTHWEST ALONG TRUNK HIGHWAY 83 FROM THE JUNCTION OF TRUNK HIGHWAY 83 AND COUNTY ROAD 4 IN WALDORF, AT TRUNK HIGHWAY 83 MILEPOST 4.0, 72.2 FEET SOUTHWEST OF TRUNK HIGHWAY 83, 3.5 FEET NORTHEAST OF A RIGHT-OF-WAY POST, 3.5 FEET NORTHEAST OF A WITNESS POST.

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1035.897	0.016	315.742	0.005	2/1	2019	00000938

Geoid Separations(ft): GEOID18 = -95.371 12B = -95.367 09 = -95.289 03 = -95.180

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Geodetic Positions Longitude	County (Feet) X	County (Feet) Y	County (Meters) X	County (Meters) Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Project Info Reference
NAD83(2011)	43 56 45.10894	93 42 50.56844	289976.493	141836.117	88385.0120	43231.735	286.671	C	2025	H23BLUE
NAD83(1996)	43 56 45.10840	93 42 50.56843	289976.494	141836.062	88385.0120	43231.718			2025	H23BLUE

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8107_R-DQ5412-3SW-19APR2021.jpg	SW	Apr 19, 2021
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8107_R-DQ5412-2-19APR2021.jpg		Apr 19, 2021
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8107_R-DQ5412-1-19APR2021.jpg		Apr 19, 2021

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_105273.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_105273.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8107 S **NGS Name:** 8107 S

County: WASECA, MN (Sheet 1)

NGS ACRN: DQ5413 Get Map
NGS Quad / Sta Num : 43093414/
USGS Quad: WALDORF

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	3	105 N	24 W	435604.96	934206.81	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2016	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 2 IN.	BAR MAG IN DRILL HOLE

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 23 FT)

Disk Type
METAL ROD (WITH REMOVABLE ID DISK)

Mon. Agency
MNDT

Description: (2016) **Stamping:** 8107 S 2016

IN WALDORF, AT THE JUNCTION OF TRUNK HIGHWAY 83 AND COUNTY ROAD 4 IN WALDORF, AT TRUNK HIGHWAY 83 MILEPOINT 3.0, 68.0 FEET SOUTHWEST OF TRUNK HIGHWAY 83, 113.5 FEET SOUTH OF COUNTY ROAD 4, 6.0 FEET NORTHEAST OF A RIGHT-OF-WAY POST, 5.0 FEET NORTHEAST OF A WITNESS POST.

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1071.504	0.016	326.595	0.005	2/1	2019	00000938

Geoid Separations(ft): GEOID18 = -95.456 12B = -95.449 09 = -95.377 03 = -95.266

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Geodetic Positions Longitude	County (Feet) X	County (Feet) Y	County (Meters) X	County (Meters) Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Project Info Reference
NAD83(2011)	43 56 04.96416	93 42 06.81324	293139.013	137740.300	89348.9500	41983.327	297.488	C	2025	H23BLUE
NAD83(1996)	43 56 04.96361	93 42 06.81322	293139.014	137740.244	89348.9500	41983.310			2025	H23BLUE

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8107_S-DQ5413-3SW-24MAY2016.jpg	SW	May 24, 2016
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8107_S-DQ5413-2-24MAY2016.jpg		May 24, 2016
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8107_S-DQ5413-1-24MAY2016.jpg		May 24, 2016

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_105274.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_105274.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8107 T **NGS Name:** 8107 T

County: WASECA, MN (Sheet 1)

NGS ACRN: DQ5416 Get Map
NGS Quad / Sta Num : 43093414/
USGS Quad: WALDORF

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	15	105 N	24 W	435420.41	934150.26	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2016	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 2 IN.	BAR MAG IN DRILL HOLE

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 35 FT)

Disk Type
METAL ROD (WITH REMOVABLE ID DISK)

Mon. Agency
MNDT

Description: (2016) **Stamping:** 8107 T 2016

2.0 MILES SOUTH OF WALDORF, 1.65 MILES SOUTH ALONG TRUNK HIGHWAY 83 FROM THE JUNCTION OF TRUNK HIGHWAY 83 AND COUNTY ROAD 3 (MAIN STREET) IN WALDORF, AT TRUNK HIGHWAY 83 MILEPOINT 1.0, 61.0 FEET EAST OF TRUNK HIGHWAY 83, 108.3 FEET SOUTH OF 240TH AVENUE, 10.5 FEET WEST OF CABLE BOX NUMBERS 95000, 8, 5001, 1.5 FEET WEST OF A WITNESS POST.

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Accuracy	Orthometric (Meters) Height	Accuracy	Survey Order/(Class)	Project Info Year	Reference
NAVD88	1094.532	0.016	333.614	0.005	2/1	2019	00000938

Geoid Separations(ft): GEOID18 = -95.597 12B = -95.590 09 = -95.518 03 = -95.400

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Longitude	County (Feet) X	Y	County (Meters) X	Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Reference
NAD83(2011)	43 54 20.41476	93 41 50.26147	294249.989	127142.054	89687.5760	38752.976	304.475	C	2025	H23BLUE
NAD83(1996)	43 54 20.41414	93 41 50.26144	294249.991	127141.991	89687.5770	38752.957			2025	H23BLUE

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8107_T-DQ5416-3E-23MAY2016.jpg	E	May 23, 2016
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8107_T-DQ5416-2-23MAY2016.jpg		May 23, 2016
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8107_T-DQ5416-1-23MAY2016.jpg		May 23, 2016

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_105275.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_105275.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8827 A **NGS Name:** 8827 A

County: WASECA, MN (Sheet 1)

NGS ACRN: AI6545 Get Map
NGS Quad / Sta Num : 44093233/
USGS Quad: MERIDEN

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	24	107 N	22 W	440343.23	932441.77	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1998	2014	DESTROYED	Horz=NO Vert=NO	YES		FLUSH	MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
UNKNOWN	SURVEY DISK	MNDT

Description: (2000) **Stamping:** 8827 A 1998

4.5 MILES EAST-SOUTHEAST OF WASECA, 4.73 MILES EAST ALONG OLD TRUNK HIGHWAY 14 FROM THE JUNCTION OF OLD TRUNK HIGHWAY 14 AND COUNTY ROAD 13 IN WASECA TO OLD TRUNK HIGHWAY 14 MILEPOINT 166.1, THEN 0.7 MILE SOUTH ALONG 175TH STREET, THEN 0.25 MILE EAST ALONG 358TH AVENUE, THEN 1.05 MILES SOUTH ALONG 178TH STREET, 25.0 FEET SOUTH OF 348TH AVENUE, 20.4 FEET WEST OF A POWER POLE, 13.0 FEET EAST OF AN ENTRANCE, 12.0 FEET EAST OF 178TH STREET, 8.1 FEET WEST OF A WITNESS POST.

Station Notes

THE DISK WAS TURNED IN TO THE OFFICE.

Leveling-Derived Orthometric Heights (Elevations)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1137.294	0.016	346.648	0.005	2/1	2004	00000464
NGVD29	1137.258	0.016	346.637	0.005	2/1	2001	VJANE

Geoid Separations(ft): GEOID18 = -93.628 12B = -93.628 09 = -93.546 03 = -93.399

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Geodetic Positions Longitude	County (Feet) X	County (Feet) Y	County (Meters) X	County (Meters) Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Project Info Reference
NAD83(2011)	44 03 43.23338	93 24 41.77234	369890.509	183553.240	112742.853	55947.139	318.100		2012	GPS2800
NAD83(2007)	44 03 43.23339	93 24 41.77312	369890.452	183553.241	112742.835	55947.140	318.123		2007	GPS2300
NAD83(1996)	44 03 43.23290	93 24 41.77244	369890.501	183553.191	112742.850	55947.125	318.180	C	2013	HCLINT

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8827_A-AI6545-3S-08OCT2012.jpg	S	Oct 8, 2012
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8827_A-AI6545-2-08OCT2012.jpg		Oct 8, 2012
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8827_A-AI6545-1-08OCT2012.jpg		Oct 8, 2012

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_36699.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_36699.pdf

8827 A RESET

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8827 A RESET **NGS Name:** 8827 A RESET

County: WASECA, MN (Sheet 1)

NGS ACRN: DP9104 Get Map
NGS Quad / Sta Num : 44093233/
USGS Quad: MERIDEN

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	24	107 N	22 W	440343.23	932441.77	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2014	2018	GOOD	Horz=YES Vert=YES	YES		RECESSED 5 IN.	BAR MAG IN DRILL HOLE

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 82 FT)

Disk Type
METAL ROD (WITH REMOVABLE ID DISK)

Mon. Agency
MNDT

Description: (2014) **Stamping:** 8827 A RESET 2014

4.5 MILES EAST-SOUTHEAST OF WASECA, 4.8 MILES EAST ALONG ELM STREET (OLD TRUNK HIGHWAY 14) FROM THE JUNCTION OF ELM STREET AND TRUNK HIGHWAY 13 IN WASECA, THEN 0.7 MILE SOUTH ALONG 175TH STREET, THEN 0.25 MILE EAST ALONG 358TH AVENUE, THEN 1.05 MILES SOUTH ALONG 178TH STREET, 25.0 FEET SOUTH OF 348TH AVENUE, 20.4 FEET WEST OF A POWER POLE WITH A GUY WIRE, 13.0 FEET EAST OF A FIELD ENTRANCE, 12.0 FEET EAST OF 178TH STREET EXTENSION, 8.1 FEET WEST OF A WITNESS POST.

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1137.088	0.016	346.585	0.005	2/1	2016	00000870

Geoid Separations(ft): GEOID18 = -93.628 12B = -93.628 09 = -93.546 03 = -93.399

*** No Horizontal Positions in the Database ***

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8827_A_RESET-DP9104-3S-01AUG2018.jpg	S	Aug 1, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8827_A_RESET-DP9104-2-01AUG2018.jpg		Aug 1, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8827_A_RESET-DP9104-1-01AUG2018.jpg		Aug 1, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_101389.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_101389.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8827 B **NGS Name:** 8827 B

County: WASECA, MN (Sheet 1)

NGS ACRN: AI6546 Get Map
NGS Quad / Sta Num : 44093233/
USGS Quad: MERIDEN

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	13	107 N	22 W	440437.70	932446.51	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1998	2014	DESTROYED	Horz=NO Vert=NO	NO		FLUSH	MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
UNKNOWN	SURVEY DISK	MNDT

Description: (1998) **Stamping:** 8827 B 1998

4.5 MILES EAST OF WASECA, 4.8 MILES EAST ALONG TRUNK HIGHWAY 14 FROM THE JUNCTION OF TRUNK HIGHWAY 14 AND TRUNK HIGHWAY 13 IN WASECA TO TRUNK HIGHWAY 14 MILEPOINT 162.60, THEN 0.7 MILE SOUTH ON 175TH STREET, THEN 0.15 MILE EAST ON 358TH AVENUE, 40.0 FEET NORTH OF 358TH AVENUE, 102.7 FEET EAST OF A POWER POLE, 13.0 FEET EAST OF AN ENTRANCE, 3.6 FEET WEST OF A WITNESS POST.

Station Notes

THE DISK WAS TURNED IN TO THE OFFICE.

Leveling-Derived Orthometric Heights (Elevations)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1124.066	0.016	342.616	0.005	2/1	2004	00000449
NGVD29	1124.014	0.016	342.600	0.005	2/1	2001	VJANE

Geoid Separations(ft): GEOID18 = -93.517 12B = -93.517 09 = -93.438 03 = -93.290

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Geodetic Positions Longitude	County (Feet) X	County (Feet) Y	County (Meters) X	County (Meters) Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Project Info Reference
NAD83(2011)	44 04 37.70258	93 24 46.50663	369577.995	189071.196	112647.598	57629.016	314.107		2012	GPS2800
NAD83(2007)	44 04 37.70260	93 24 46.50740	369577.939	189071.198	112647.581	57629.017	314.130		2007	GPS2300
NAD83(1996)	44 04 37.70221	93 24 46.50669	369577.991	189071.159	112647.597	57629.004	314.182	C	2000	GPS1453

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_36700.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_36700.pdf

8827 B RESET

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 8827 B RESET

NGS Name: 8827 B RESET

County: WASECA, MN (Sheet 1)

NGS ACRN: DP9105 Get Map
NGS Quad / Sta Num : 44093233/
USGS Quad: MERIDEN

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	13	107 N	22 W	440437.70	932446.51	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2014	2018	GOOD	Horz=YES Vert=YES	YES		RECESSED 4 IN.	BAR MAG IN DRILL HOLE

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 131 FT)

Disk Type
METAL ROD (WITH REMOVABLE ID DISK)

Mon. Agency
MNDT

Description: (2014)

Stamping: 8827 B RESET 2014

4.5 MILES EAST OF WASECA, 4.8 MILES EAST ALONG COUNTY ROAD 14 (ELM STREET) FROM THE JUNCTION OF COUNTY ROAD 14 (ELM STREET) AND TRUNK HIGHWAY 13 IN WASECA, THEN 0.7 MILE SOUTH ON 175TH STREET, THEN 0.15 MILE EAST ON 358TH AVENUE, 40.0 FEET NORTH OF 358TH AVENUE, 102.7 FEET EAST OF A POWER POLE, 13.0 FEET EAST OF AN ENTRANCE, 1.0 FOOT SOUTH OF A WITNESS POST.

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1123.879	0.016	342.559	0.005	2/1	2016	00000870

Geoid Separations(ft): GEOID18 = -93.517 12B = -93.517 09 = -93.438 03 = -93.290

*** No Horizontal Positions in the Database ***

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8827_B_RESET-DP9105-3N-30JUL2018.jpg	N	Jul 30, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8827_B_RESET-DP9105-2-30JUL2018.jpg		Jul 30, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/8827_B_RESET-DP9105-1-30JUL2018.jpg		Jul 30, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_101388.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_101388.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: 9 RLG

NGS Name: 9 RLG

County: WASECA, MN (Sheet 1)

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	18	108 N	24 W	440939.00	934604.00		

NGS ACRN: Get Map
NGS Quad / Sta Num : 44093331/
USGS Quad: MADISON LAKE

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1949	1966	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	SURVEY DISK	USGS

Description: (1963)

Stamping: 9 RLG 1949

1.8 MILES NORTH OF SMITH'S MILL, 1.6 MILES NORTH ON COUNTY ROAD 37 (WEST COUNTY LINE ROAD) / (631ST AVENUE), 972.0 FEET SOUTH AND 30.0 FEET EAST OF A TEE-ROAD WEST (COUNTY ROAD 17 AND COUNTY ROAD 37), 95.0 FEET NORTH OF A DRIVEWAY EAST, 341.0 FEET NORTH OF A TEE-ROAD EAST (415TH AVENUE).

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -94.380 12B = -94.380 09 = -94.301 03 = -94.134

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_73349.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_73349.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: A 23 **NGS Name:** A 23

County: WASECA, MN (Sheet 1)

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	20	106 N	22 W	435843.00	933014.00	2	

NGS ACRN: OO0721 Get Map
NGS Quad / Sta Num : 43093411/
USGS Quad: OTISCO

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1933	1988	GOOD	Horz=NO Vert=NO	NO		RECESSED 12 IN.	SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	BENCH MARK DISK	NGS

Description: (2010) **Stamping:** A 23 1149.036 1933

IN OTISCO, 0.5 MILE WEST ALONG COUNTY ROAD 15 (290TH AVENUE) FROM THE JUNCTION OF COUNTY ROAD 15 (290TH AVENUE) AND TRUNK HIGHWAY 13, IN THE SOUTHEAST QUADRANT OF A RAILROAD CROSSING OF COUNTY ROAD 15, 61.0 FEET SOUTH OF COUNTY ROAD 15, 35.0 FEET EAST OF THE EAST RAIL OF THE RAILROAD TRACKS, 20.6 FEET SOUTH-SOUTHWEST OF A TELEPHONE CABLE MARKER POST, 10.0 FEET SOUTH OF THE SOUTH EDGE OF A SIDEWALK, 1.0 FOOT WEST OF A WITNESS POST.

Station Notes

THE SURVEY MARK IS ON RAILROAD PROPERTY AND HAS BEEN ABANDONED FOR MNDOT GEODETIC USE.

Leveling-Derived Orthometric Heights (Elevations)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1149.118	0.016	350.252	0.005	2/0	1991	00000025
NGVD29	1149.036	0.016	350.227	0.005	2/0	1992	UNCHECKD

Geoid Separations(ft): GEOID18 = -94.898 12B = -94.898 09 = -94.819 03 = -94.691

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33240.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33240.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: AITER MNDT **NGS Name:** AITER

County: WASECA, MN (Sheet 1)

NGS ACRN: AI6547 Get Map
NGS Quad / Sta Num : 44093233/
USGS Quad: MERIDEN

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	20	107 N	22 W	440345.00	932925.46	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1998	2018	GOOD	Horz=YES Vert=YES	YES		FLUSH	MARKER W/BAR MAGNET

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 10 FT)

Disk Type
SURVEY DISK

Mon. Agency
MNDT

Description: (2002) **Stamping:** AITER 1998

1.0 MILE SOUTHEAST OF WASECA, 0.35 MILE NORTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 14 IN WASECA TO TRUNK HIGHWAY 14 MILEPOINT 30.6, THEN 0.1 MILE NORTHEAST ON 8TH STREET SOUTHEAST, THEN 0.4 MILE SOUTHEAST ALONG 14TH AVENUE SOUTHEAST, 40.0 FEET NORTHEAST OF 14TH AVENUE SOUTHEAST/139TH STREET, 65.0 FEET SOUTHEAST OF A FIELD ENTRANCE, 50.9 FEET SOUTHEAST OF A POWER POLE, 3.4 FEET NORTHWEST OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Elevations)

Vertical Datum	Orthometric (Feet) Height	Accuracy	Orthometric (Meters) Height	Accuracy	Survey Order/(Class)	Project Info Year	Reference
NAVD88	1137.134	0.016	346.599	0.005	2/1	2020	00000949
NGVD29	1137.088	0.016	346.585	0.005	2/1	2001	VJANE

Geoid Separations(ft): GEOID18 = -94.150 12B = -94.157 09 = -94.075 03 = -93.927

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Longitude	County (Feet) X	Y	County (Meters) X	Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Reference
NAD83(2011)	44 03 44.99805	93 29 25.45566	349176.795	183866.160	106429.300	56042.518	317.906		2012	GPS2800
NAD83(2007)	44 03 44.99808	93 29 25.45641	349176.740	183866.164	106429.283	56042.519	317.929		2007	GPS2300
NAD83(1996)	44 03 44.99819	93 29 25.45569	349176.792	183866.175	106429.299	56042.522	317.970	C	2000	GPS1453

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/AITER-AI6547-3NE-02AUG2018.jpg	NE	Aug 2, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/AITER-AI6547-2-02AUG2018.jpg		Aug 2, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/AITER-AI6547-1-02AUG2018.jpg		Aug 2, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_36686.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_36686.pdf

ALTO MNDT

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: ALTO MNDT **NGS Name:** ALTO

County: WASECA, MN (Sheet 1)

NGS ACRN: AI6548 Get Map
NGS Quad / Sta Num : 44093323/
USGS Quad: JANESVILLE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	4	107 N	24 W	440619.13	934228.04		C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1998	2018	DESTROYED	Horz=NO Vert=NO	NO		FLUSH	MARKER W/BAR MAGNET

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 66 FT)

Disk Type
SURVEY DISK

Mon. Agency
MNDT

Description: (1998) **Stamping:** ALTO 1998

1.0 MILE SOUTH OF JANESVILLE, 0.2 MILE SOUTH ALONG COUNTY ROAD 3 (MAIN STREET) FROM THE JUNCTION OF COUNTY ROAD 3 AND TRUNK HIGHWAY 14 IN JANESVILLE, 44.0 FEET WEST OF COUNTY ROAD 3, 40.7 FEET NORTH-NORTHEAST OF A POWER POLE, 12.0 FEET NORTH OF A FIELD ENTRANCE, 7.3 FEET SOUTH OF A WITNESS POST.

Station Notes

THE DISK WAS TURNED IN AT THE MANKATO DISTRICT OFFICE OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION.

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -94.698 12B = -94.708 09 = -94.629 03 = -94.472

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Longitude	County (Feet) X	Y	County (Meters) X	Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Reference
NAD83(2011)	44 06 19.12688	93 42 28.04275	292182.151	199946.666	89057.2980	60943.866	296.661		2012	GPS2800
NAD83(2007)	44 06 19.12686	93 42 28.04353	292182.094	199946.665	89057.2800	60943.865	296.685		2007	GPS2300
NAD83(1996)	44 06 19.12657	93 42 28.04309	292182.126	199946.635	89057.2900	60943.856	296.729	C	2000	GPS1453

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_36687.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_36687.pdf

ALTON C

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: ALTON C **NGS Name:** ALTON C

County: WASECA, MN (Sheet 1)

NGS ACRN: DH3110 Get Map
NGS Quad / Sta Num : 44093323/
USGS Quad: JANESVILLE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	27	107 N	24 W	440212.06	934149.65		C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2003	2021	GOOD	Horz=YES Vert=YES	YES		FLUSH	STEEL ROD IMBED IN MON

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	SURVEY DISK	MN-161

Description: (2004) **Stamping:** 2003 ALTON-C

5.5 MILES SOUTH OF JANESVILLE, 6.0 MILES SOUTH ALONG COUNTY ROAD 3 FROM THE JUNCTION OF TRUNK HIGHWAY 14 AND COUNTY ROAD 3 IN JANESVILLE, 62.2 FEET EAST OF COUNTY ROAD 3, 32.3 FEET NORTH OF 330TH AVENUE, 5.0 FEET EAST OF A WITNESS POST.

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -94.977 12B = -94.983 09 = -94.898 03 = -94.780

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Longitude	County (Feet) X	Y	County (Meters) X	Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Reference
NAD83(2011)	44 02 12.05758	93 41 49.65100	294746.679	174900.910	89838.9680	53309.904	292.248		2012	GPS2800
NAD83(2007)	44 02 12.05758	93 41 49.65178	294746.622	174900.911	89838.9500	53309.904	292.272		2007	GPS2300
NAD83(1996)	44 02 12.05719	93 41 49.65119	294746.665	174900.871	89838.9630	53309.892	292.319	C	2005	GPS2088

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/ALTON_C-DH3110-3E-19APR2021.jpg	E	Apr 19, 2021
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/ALTON_C-DH3110-2-19APR2021.jpg		Apr 19, 2021
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/ALTON_C-DH3110-1-19APR2021.jpg		Apr 19, 2021

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_50669.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_50669.pdf

ALTON SW

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: ALTON SW **NGS Name:** ALTON SW

County: WASECA, MN (Sheet 1)

NGS ACRN: DH3111 Get Map
NGS Quad / Sta Num : 44093332/
USGS Quad: ST CLAIR

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	31	107 N	24 W	440125.21	934605.12		C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2003	2022	GOOD	Horz=YES Vert=YES	YES		FLUSH	MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	SURVEY DISK	MN-161

Description: (2016) **Stamping:** 2003 ALTON-SW

0.8 MILE NORTHEAST OF PEMBERTON, 0.8 MILE NORTH ALONG COUNTY ROAD 53 FROM THE JUNCTION OF TRUNK HIGHWAY 83 AND COUNTY ROAD 53 IN PEMBERTON, THEN 0.7 MILE EAST ON COUNTY ROAD 10, THEN 0.1 MILE NORTH ON COUNTY ROAD 37, 39.5 FEET EAST OF COUNTY ROAD 37 (631ST AVENUE), 20.0 FEET SOUTH OF A FIELD ENTRANCE, 1.6 FEET WEST OF A WITNESS POST.

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -94.826 12B = -94.826 09 = -94.744 03 = -94.636

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Longitude	County (Feet) X	Y	County (Meters) X	Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Reference
NAD83(2011)	44 01 25.21196	93 46 05.12090	276035.506	170341.894	84135.7900	51920.313	289.784		2012	GPS2800
NAD83(2007)	44 01 25.21196	93 46 05.12166	276035.450	170341.895	84135.7740	51920.313	289.809		2007	GPS2300
NAD83(1996)	44 01 25.21144	93 46 05.12095	276035.502	170341.841	84135.7890	51920.297	289.854	C	2005	GPS2088

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/ALTON_SW-DH3111-3E-31AUG2022.jpg	E	Aug 31, 2022
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/ALTON_SW-DH3111-2-31AUG2022.jpg		Aug 31, 2022
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/ALTON_SW-DH3111-1-31AUG2022.jpg		Aug 31, 2022

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_50652.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_50652.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: ANDY **NGS Name:** ANDY

County: WASECA, MN (Sheet 1)

NGS ACRN: DQ5411 Get Map
NGS Quad / Sta Num : 43093414/
USGS Quad: WALDORF

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	28	106 N	24 W	435725.87	934332.80	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2016	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 2 IN.	BAR MAG IN DRILL HOLE

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 30 FT)

Disk Type
METAL ROD (WITH REMOVABLE ID DISK)

Mon. Agency
MNDT

Description: (2016) **Stamping:** ANDY 2016

2.3 MILES NORTHWEST OF WALDORF, 2.0 MILES NORTHWEST ALONG TRUNK HIGHWAY 83 FROM THE JUNCTION OF TRUNK HIGHWAY 83 AND COUNTY ROAD 4 IN WALDORF, AT TRUNK HIGHWAY 83 MILEPOINT 5.0, 59.0 FEET NORTHEAST OF TRUNK HIGHWAY 83, 28.0 FEET NORTHEAST OF MILEPOST 5, 1.5 FEET SOUTHWEST OF A WITNESS POST.

Station Pair: DENA - WASECA, MN

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1067.035	0.016	325.233	0.005	2/1	2019	00000938

Geoid Separations(ft): GEOID18 = -95.275 12B = -95.272 09 = -95.197 03 = -95.092

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Geodetic Positions Longitude	County (Feet) X	County (Feet) Y	County (Meters) X	County (Meters) Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Project Info Reference
NAD83(2011)	43 57 25.86510	93 43 32.80496	286926.873	145993.219	87455.4860	44498.822	296.202	C	2025	H23BLUE
NAD83(1996)	43 57 25.86456	93 43 32.80495	286926.873	145993.164	87455.4860	44498.806			2025	H23BLUE

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/ANDY-DQ5411-3NE-19APR2021.jpg	NE	Apr 19, 2021
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/ANDY-DQ5411-2-19APR2021.jpg		Apr 19, 2021
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/ANDY-DQ5411-1-19APR2021.jpg		Apr 19, 2021

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_105278.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_105278.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: B 23 **NGS Name:** B 23

County: WASECA, MN (Sheet 1)

NGS ACRN: OO0479 Get Map
NGS Quad / Sta Num : 43093144/
USGS Quad: NEW RICHLAND

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	32	106 N	22 W	435607.00	932949.00	2	

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1933	1963	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	BENCH MARK DISK	NGS

Description: (2010) **Stamping:** B-23 1933

3.0 MILES SOUTH ALONG THE MINNEAPOLIS AND ST. LOUIS RAILROAD FROM OTISCO, 1742.4 FEET SOUTH OF MILEPOST 97, 56.0 FEET NORTHEAST OF 260TH AVENUE CROSSING, 49.0 FEET EAST OF THE EAST RAIL, 27.0 FEET NORTH OF THE CENTERLINE OF 260TH AVENUE, 7.0 FEET NORTH OF A FENCE CORNER, 2.0 FEET EAST OF A NORTH-AND-SOUTH FENCE.

Leveling-Derived Orthometric Heights (Elevations)

Vertical Datum	Orthometric (Feet) Height	Accuracy	Orthometric (Meters) Height	Accuracy	Survey Order/(Class)	Project Info Year	Reference
NAVD88	1152.222	0.016	351.198	0.005	2/0	1991	00000025
NGVD29	1152.143	0.016	351.174	0.005	2	1935	CUTLER-VERT

Geoid Separations(ft): GEOID18 = -95.210 12B = -95.207 09 = -95.138 03 = -95.003

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33241.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33241.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: BABCOCK **NGS Name:** BABCOCK

County: WASECA, MN (Sheet 1)

NGS ACRN: DP5031 Get Map
NGS Quad / Sta Num : 44093233/
USGS Quad: MERIDEN

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	21	107 N	22 W	440324.94	932915.98	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2014	2018	GOOD	Horz=YES Vert=YES	YES		RECESSED 3 IN.	BAR MAG IN DRILL HOLE

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 25 FT)

Disk Type
METAL ROD (WITH REMOVABLE ID DISK)

Mon. Agency
MNDT

Description: (2014) **Stamping:** BABCOCK 2014

1.8 MILES SOUTHEAST OF WASECA, 0.45 MILE SOUTHEAST ALONG TRUNK HIGHWAY 14 FROM THE JUNCTION OF TRUNK HIGHWAY 14 AND TRUNK HIGHWAY 13 IN WASECA, AT TRUNK HIGHWAY 14 MILEPOINT 161.1, 50.2 FEET SOUTHWEST OF EASTBOUND TRUNK HIGHWAY 14, 1.5 FEET NORTHEAST OF A WITNESS POST.

Station Pair: ETHAN - WASECA, MN

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1148.508	0.016	350.066	0.005	2/1	2016	00000870

Geoid Separations(ft): GEOID18 = -94.176 12B = -94.183 09 = -94.101 03 = -93.953

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Geodetic Positions Longitude	County (Feet) X	County (Feet) Y	County (Meters) X	County (Meters) Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Project Info Reference
NAD83(2011)	44 03 24.93643	93 29 15.97778	349854.806	181829.812	106635.958	55421.838	321.361		2014	GPS3043
NAD83(1996)	44 03 24.93629	93 29 15.97787	349854.799	181829.798	106635.956	55421.833	321.428	C	2014	HNEW14

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/BABCOCK-DP5031-3SW-01AUG2018.jpg	SW	Aug 1, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/BABCOCK-DP5031-2-01AUG2018.jpg		Aug 1, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/BABCOCK-DP5031-1-01AUG2018.jpg		Aug 1, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_101491.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_101491.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: BECKER **NGS Name:** BECKER

County: WASECA, MN (Sheet 1)

NGS ACRN: DQ6347 Get Map
NGS Quad / Sta Num : 44093321/
USGS Quad: WATERVILLE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	5	108 N	22 W	441055.52	933026.35	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2016	2020	GOOD	Horz=YES Vert=YES	YES		RECESSED 2 IN.	BAR MAG IN DRILL HOLE

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 32 FT)

Disk Type
METAL ROD (WITH REMOVABLE ID DISK)

Mon. Agency
MNDT

Description: (2016) **Stamping:** BECKER 2016

4.0 MILES SOUTHEAST OF WATERVILLE, 3.4 MILES SOUTHEAST ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 60 IN WATERVILLE, AT TRUNK HIGHWAY 13 MILEPOINT 39.1, 57.0 FEET EAST OF TRUNK HIGHWAY 13, 114.0 FEET NORTH OF COUNTRY ROAD 7 (430TH AVENUE), 24.9 FEET SOUTH OF AN ENTRANCE, 6.7 FEET WEST OF CABLE BOX NUMBER AH 10 A, 1.5 FEET WEST OF A WITNESS POST.

Station Pair: SCHWARTZ - WASECA, MN

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Accuracy	Orthometric (Meters) Height	Accuracy	Survey Order/(Class)	Project Info Year	Reference
NAVD88	1120.168	0.016	341.428	0.005	2/1	2020	00000949

Geoid Separations(ft): GEOID18 = -93.320 12B = -93.327 09 = -93.245 03 = -93.061

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Longitude	County (Feet) X	Y	County (Meters) X	Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Reference
NAD83(2011)	44 10 55.52218	93 30 26.35346	345042.266	227495.158	105169.093	69340.663	313.012		2020	GPS3368
NAD83(1996)	44 10 55.52208	93 30 26.35373	345042.246	227495.148	105169.087	69340.660	313.070	C	2020	HTH13

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/BECKER-DQ6347-3E-10MAR2020.jpg	E	Mar 10, 2020
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/BECKER-DQ6347-2-10MAR2020.jpg		Mar 10, 2020
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/BECKER-DQ6347-1-10MAR2020.jpg		Mar 10, 2020

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_105742.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_105742.pdf

BISCUIT MNDT

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: BISCUIT MNDT **NGS Name:** BISCUIT

County: WASECA, MN (Sheet 1)

NGS ACRN: AI6550 Get Map
NGS Quad / Sta Num : 44093322/
USGS Quad: WASECA

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	32	108 N	23 W	440633.66	933722.09		C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1998	2014	DESTROYED	Horz=NO Vert=NO	NO		FLUSH	MARKER W/BAR MAGNET

Monument Type
UNKNOWN

Disk Type
SURVEY DISK

Mon. Agency
MNDT

Description: (1998) **Stamping:** BISCUIT 1998

4.5 MILES EAST OF JANESVILLE, 4.4 MILES EAST ALONG TRUNK HIGHWAY 14 FROM THE JUNCTION OF TRUNK HIGHWAY 14 AND COUNTY ROAD 3 (MAIN STREET) IN JANESVILLE TO TRUNK HIGHWAY 14 MILEPOINT 151.8, THEN 0.35 MILE NORTH ON COUNTY ROAD 17 (73RD STREET), 56.0 FEET WEST OF COUNTY ROAD 17 (73RD STREET), 78.9 FEET NORTHWEST OF A CABLE MARKER NORTH, 13.1 FEET EAST OF A POWER POLE, 12.0 FEET NORTH OF A FIELD ENTRANCE SOUTH, 6.0 FEET SOUTH OF COUNTY ROAD 53 EXTENDED, 3.4 FEET EAST OF A WITNESS POST.

Station Notes
THE DISK WAS TURNED IN TO THE OFFICE.

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -94.567 12B = -94.570 09 = -94.498 03 = -94.324

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Longitude	County (Feet) X	Y	County (Meters) X	Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Reference
NAD83(2011)	44 06 33.65791	93 37 22.09126	314519.041	201215.488	95865.5960	61330.603	320.446		2012	GPS2800
NAD83(2007)	44 06 33.65790	93 37 22.09204	314518.984	201215.488	95865.5780	61330.603	320.470		2007	GPS2300
NAD83(1996)	44 06 33.65755	93 37 22.09166	314519.012	201215.452	95865.5870	61330.592	320.519	C	2000	GPS1453

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_36689.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_36689.pdf

BISCUIT MNDT RESET

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: BISCUIT MNDT RESET
NGS Name: BISCUIT RESET

County: WASECA, MN (Sheet 1)

NGS ACRN: DP5034 Get Map
NGS Quad / Sta Num : 44093322/
USGS Quad: WASECA

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	32	108 N	23 W	440633.66	933722.09	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2014	2018	GOOD	Horz=YES Vert=YES	YES		RECESSED 3 IN.	BAR MAG IN DRILL HOLE

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 66 FT)

Disk Type
METAL ROD (WITH REMOVABLE ID DISK)

Mon. Agency
MNDT

Description: (2014)

Stamping: BISCUIT 1998 2014

4.5 MILES EAST OF JANESVILLE, 4.4 MILES EAST ALONG TRUNK HIGHWAY 14 FROM THE JUNCTION OF TRUNK HIGHWAY 14 AND COUNTY ROAD 3 (MAIN STREET) IN JANESVILLE TO TRUNK HIGHWAY 14 MILEPOINT 151.8, THEN 0.35 MILE NORTH ON COUNTY ROAD 17 (73RD STREET), 56.0 FEET WEST OF COUNTY ROAD 17 (73RD STREET), 12.0 FEET NORTH OF A FIELD ENTRANCE SOUTH, 13.1 FEET EAST OF A POWER POLE, 78.9 FEET NORTHWEST OF A CABLE MARKER NORTH, 6.0 FEET SOUTH OF COUNTY ROAD 53 EXTENDED, 3.4 FEET EAST OF A WITNESS POST.

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Accuracy	Orthometric (Meters) Height	Accuracy	Survey Order/(Class)	Project Info Year	Reference
NAVD88	1145.677	0.016	349.203	0.005	2/1	2016	00000870

Geoid Separations(ft): GEOID18 = -94.567 12B = -94.570 09 = -94.498 03 = -94.324

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Longitude	County (Feet) X	Y	County (Meters) X	Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Reference
NAD83(2011)	44 06 33.65804	93 37 22.09159	314519.017	201215.501	95865.5880	61330.608	320.385		2014	GPS3043
NAD83(1996)	44 06 33.65781	93 37 22.09200	314518.987	201215.478	95865.5790	61330.601	320.458	C	2014	HNEW14

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/BISCUIT_RESET-DP5034-3W-01AUG2018.jpg	W	Aug 1, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/BISCUIT_RESET-DP5034-2-01AUG2018.jpg		Aug 1, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/BISCUIT_RESET-DP5034-1-01AUG2018.jpg		Aug 1, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_101436.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_101436.pdf

BLOOM

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: BLOOM **NGS Name:** BLOOM

County: WASECA, MN (Sheet 1)

NGS ACRN: DR3030 Get Map
NGS Quad / Sta Num : 44093322/
USGS Quad: WASECA

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	32	108 N	22 W	440634.19	933025.26	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2018	2020	GOOD	Horz=YES Vert=YES	YES		RECESSED 3 IN.	BAR MAG IN DRILL HOLE

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 27 FT)

Disk Type
METAL ROD (WITH REMOVABLE ID DISK)

Mon. Agency
MNDT

Description: (2018) **Stamping:** BLOOM 2018

2.0 MILES NORTH OF WASECA, 3.85 MILES NORTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 14 IN WASECA, AT TRUNK HIGHWAY 13 MILEPOINT 34.1, 40.9 FEET EAST OF TRUNK HIGHWAY 13, 49.7 FEET NORTH OF A FIELD ENTRANCE, 1.0 FOOT WEST OF A WITNESS POST.

Station Pair: 8102 K - WASECA, MN

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1132.412	0.016	345.160	0.005	2/1	2020	00000949

Geoid Separations(ft): GEOID18 = -93.904 12B = -93.914 09 = -93.829 03 = -93.665

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Geodetic Positions Longitude	County (Feet) X	County (Feet) Y	County (Meters) X	County (Meters) Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Project Info Reference
NAD83(2011)	44 06 34.18818	93 30 25.25620	344932.778	201030.116	105135.721	61274.102	316.555		2020	GPS3368
NAD83(1996)	44 06 34.18813	93 30 25.25646	344932.759	201030.111	105135.715	61274.101	316.612	C	2020	HTH13

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/BLOOM-DR3030-3E-10MAR2020.jpg	E	Mar 10, 2020
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/BLOOM-DR3030-2-10MAR2020.jpg		Mar 10, 2020
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/BLOOM-DR3030-1-10MAR2020.jpg		Mar 10, 2020

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_109126.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_109126.pdf

BLOOMING GROVE C

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: BLOOMING GROVE C
NGS Name: BLOOMING GROVE C

County: WASECA, MN (Sheet 1)

NGS ACRN: DH3112 Get Map
NGS Quad / Sta Num : 44093234/
USGS Quad: MORRISTOWN

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	21	108 N	22 W	440909.15	932826.40		C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2003	2021	GOOD	Horz=YES Vert=YES	YES		FLUSH	MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	SURVEY DISK	MN-161

Description: (2004) **Stamping:** 2003 BLOOMING GROVE-C

5.25 MILES NORTHEAST OF WASECA, 1.65 MILES EAST ALONG COUNTY ROAD 22 FROM THE JUNCTION OF COUNTY ROAD 22 AND TRUNK HIGHWAY 13 (THE JUNCTION IS 5.0 MILES NORTH OF WASECA), 44.5 FEET SOUTH OF COUNTY ROAD 22, 19.0 FEET WEST OF A FIELD ENTRANCE, 9.0 FEET SOUTHEAST OF A WITNESS POST.

Station Notes

THE CONCRETE IS CRACKED ON ONE SIDE BUT STILL SOLID.

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -93.304 12B = -93.307 09 = -93.231 03 = -93.061

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Longitude	County (Feet) X	Y	County (Meters) X	Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Reference
NAD83(2011)	44 09 09.15101	93 28 26.39973	353710.942	216662.362	107811.311	66038.820	323.222		2012	GPS2800
NAD83(2007)	44 09 09.15093	93 28 26.40053	353710.883	216662.354	107811.293	66038.818	323.235		2007	GPS2300
NAD83(1996)	44 09 09.15037	93 28 26.39984	353710.933	216662.297	107811.308	66038.800	323.295	C	2005	GPS2088

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/BLOOMING_GROVE_C-DH3112-3S-14APR2021.jpg	S	Apr 14, 2021
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/BLOOMING_GROVE_C-DH3112-2-14APR2021.jpg		Apr 14, 2021
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/BLOOMING_GROVE_C-DH3112-1-14APR2021.jpg		Apr 14, 2021

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_50657.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_50657.pdf

BLOOMING GROVE NE

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: BLOOMING GROVE NE
NGS Name: BLOOMING GROVE NE

County: WASECA, MN (Sheet 1)

NGS ACRN: DH3113 Get Map
NGS Quad / Sta Num : 44093234/
USGS Quad: MORRISTOWN

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	12	108 N	22 W	441053.52	932459.51		C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2003	2021	GOOD	Horz=YES Vert=YES	YES		FLUSH	MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	SURVEY DISK	MN-161

Description: (2004) **Stamping:** 2003 BLOOMING GROVE-NE

8.5 MILES NORTHEAST OF WASECA, 7.0 MILES NORTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 14 IN WASECA TO MILEPOINT 39.1, THEN 2.9 MILES EAST ON COUNTY ROAD 7, THEN 1.6 MILES EAST ON COUNTY ROAD 62 (430TH AVENUE), 49.0 FEET SOUTH OF COUNTY ROAD 62 (430TH AVENUE), 22.5 FEET EAST OF A FIELD ENTRANCE, 6.5 FEET WEST OF A POWER POLE, 5.6 FEET WEST OF A WITNESS POST.

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -92.710 12B = -92.710 09 = -92.634 03 = -92.470

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Longitude	County (Feet) X	Y	County (Meters) X	Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Reference
NAD83(2011)	44 10 53.52323	93 24 59.51122	368859.307	227135.245	112428.542	69230.961	313.475		2012	GPS2800
NAD83(2007)	44 10 53.52296	93 24 59.51207	368859.245	227135.218	112428.523	69230.953	313.451		2007	GPS2300
NAD83(1996)	44 10 53.52241	93 24 59.51137	368859.295	227135.162	112428.538	69230.936	313.556	C	2008	GPS2437

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/BLOOMING_GROVE_NE-DH3113-3S-14APR2021.jpg	S	Apr 14, 2021
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/BLOOMING_GROVE_NE-DH3113-2-14APR2021.jpg		Apr 14, 2021
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/BLOOMING_GROVE_NE-DH3113-1-14APR2021.jpg		Apr 14, 2021

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_50658.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_50658.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: BOHM **NGS Name:** BOHM

County: WASECA, MN (Sheet 1)

NGS ACRN: DP6243 Get Map
NGS Quad / Sta Num : 43093144/
USGS Quad: NEW RICHLAND

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	24	105 N	22 W	435240.79	932433.67	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2013	2023	GOOD	Horz=YES Vert=YES	YES		RECESSED 3 IN.	BAR MAG IN DRILL HOLE

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 24 FT)

Disk Type
METAL ROD (WITH REMOVABLE ID DISK)

Mon. Agency
MNDT

Description: (2013) **Stamping:** BOHM 2013

4.3 MILES EAST OF NEW RICHLAND, 4.3 MILES EAST ALONG TRUNK HIGHWAY 30 FROM THE JUNCTION OF TRUNK HIGHWAY 30 AND TRUNK HIGHWAY 13 IN NEW RICHLAND, AT TRUNK HIGHWAY 30 MILEPOINT 172.85, 54.2 FEET SOUTH OF TRUNK HIGHWAY 30, 32.7 FEET EAST OF A FIELD ENTRANCE, 1.5 FEET WEST OF A WITNESS POST.

Station Pair: HABECK - WASECA, MN

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1261.864	0.016	384.617	0.005	2/1	2015	00000851

Geoid Separations(ft): GEOID18 = -95.164 12B = -95.157 09 = -95.108 03 = -94.928

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Geodetic Positions Longitude	County (Feet) X	County (Feet) Y	County (Meters) X	County (Meters) Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Project Info Reference
NAD83(2011)	43 52 40.78895	93 24 33.67026	370081.365	116467.744	112801.026	35499.440	355.630		2024	GPS3701
NAD83(1996)	43 52 40.78876	93 24 33.67047	370081.350	116467.725	112801.021	35499.434	355.684	C	2024	HELLE

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/BOHM-DP6243-3S-24APR2023.jpg	S	Apr 24, 2023
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/BOHM-DP6243-2-24APR2023.jpg		Apr 24, 2023
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/BOHM-DP6243-1-24APR2023.jpg		Apr 24, 2023

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_100308.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_100308.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: BR 81007 NE **NGS Name:** BR 81007 NE

County: WASECA, MN (Sheet 1)

NGS ACRN: DP9096 Get Map
NGS Quad / Sta Num : 44093322/
USGS Quad: WASECA

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	24	107 N	23 W	440330.63	933249.04	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2009	2018	GOOD	Horz=NO Vert=NO	YES	81007	FLUSH	NO MAG MATERIAL

Monument Type	Disk Type	Mon. Agency
BRIDGE ABUTMENT	SURVEY DISK	MNDT

Description: (2014) **Stamping:** BR 81007 NE 2009

2.7 MILES SOUTHWEST OF WASECA, IN AN ABUTMENT IN THE NORTHEAST CORNER OF COUNTY ROAD 27 BRIDGE NUMBER 81007 OVER TRUNK HIGHWAY 14, 2.6 MILES WEST ALONG TRUNK HIGHWAY 14 FROM THE JUNCTION OF TRUNK HIGHWAY 14 AND TRUNK HIGHWAY 13 IN WASECA, AT TRUNK HIGHWAY 14 MILEPOINT 158.05, 22.5 FEET EAST OF COUNTY ROAD 27 (110TH STREET).

Station Notes

IF THE COORDINATES AND/OR ELEVATIONS ARE ESTABLISHED OR PUBLISHED ON THIS GEODETIC CONTROL DISK, THEY SHOULD BE USED WITH CAUTION. THE GEODETIC CONTROL DISK IS LOCATED ON AN INTEGRAL ABUTMENT AND/OR A JOINTLESS BRIDGE AND IS SUBJECT TO MOVEMENT BEYOND GEODETIC TOLERANCES.

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1143.863	0.016	348.650	0.005	2/1	2016	00000870

Geoid Separations(ft): GEOID18 = -94.540 12B = -94.547 09 = -94.475 03 = -94.314

*** No Horizontal Positions in the Database ***

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/BR_81007_NE-DP9096-3S-01AUG2018.jpg	S	Aug 1, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/BR_81007_NE-DP9096-2-01AUG2018.jpg		Aug 1, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/BR_81007_NE-DP9096-1-01AUG2018.jpg		Aug 1, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_101423.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_101423.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: BR 81007 SW

NGS Name: BR 81007 SW

County: WASECA, MN (Sheet 1)

NGS ACRN: DP9095 Get Map
NGS Quad / Sta Num : 44093322/
USGS Quad: WASECA

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	23	107 N	23 W	440328.13	933249.63	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2009	2018	GOOD	Horz=NO Vert=NO	YES	81007	FLUSH	NO MAG MATERIAL

Monument Type	Disk Type	Mon. Agency
BRIDGE ABUTMENT	SURVEY DISK	MNDT

Description: (2014)

Stamping: BR 81007 SW 2009

2.7 MILES SOUTHWEST OF WASECA, IN AN ABUTMENT IN THE SOUTHWEST CORNER OF COUNTY ROAD 27 BRIDGE NUMBER 81007 OVER TRUNK HIGHWAY 14, 2.6 MILES WEST ALONG TRUNK HIGHWAY 14 FROM THE JUNCTION OF TRUNK HIGHWAY 14 AND TRUNK HIGHWAY 13 IN WASECA, AT TRUNK HIGHWAY 14 MILEPOINT 158.05, 22.0 FEET WEST OF COUNTY ROAD 27 (110TH STREET).

Station Notes

IF THE COORDINATES AND/OR ELEVATIONS ARE ESTABLISHED OR PUBLISHED ON THIS GEODETIC CONTROL DISK, THEY SHOULD BE USED WITH CAUTION. THE GEODETIC CONTROL DISK IS LOCATED ON AN INTEGRAL ABUTMENT AND/OR A JOINTLESS BRIDGE AND IS SUBJECT TO MOVEMENT BEYOND GEODETIC TOLERANCES.

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1143.954	0.016	348.678	0.005	2/1	2016	00000870

Geoid Separations(ft): GEOID18 = -94.547 12B = -94.554 09 = -94.481 03 = -94.321

*** No Horizontal Positions in the Database ***

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/BR_81007_SW-DP9095-3N-01AUG2018.jpg	N	Aug 1, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/BR_81007_SW-DP9095-2-01AUG2018.jpg		Aug 1, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/BR_81007_SW-DP9095-1-01AUG2018.jpg		Aug 1, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_101420.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_101420.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: BR 81008 NW

NGS Name: BR 81008 NW

County: WASECA, MN (Sheet 1)

NGS ACRN: Get Map
NGS Quad / Sta Num : 44093233/
USGS Quad: MERIDEN

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	21	107 N	22 W	440315.96	932800.83		3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2009	2018	GOOD	Horz=NO Vert=NO	YES	81008	FLUSH	NO MAG MATERIAL

Monument Type	Disk Type	Mon. Agency
BRIDGE RAILING	SURVEY DISK	MNDT

Description: (2014)

Stamping: BR 81008 NW 2009

2.4 MILES SOUTHEAST OF WASECA, IN A BRIDGE RAILING IN THE NORTHWEST CORNER OF COUNTY ROAD 5 BRIDGE NUMBER 81008 OVER TRUNK HIGHWAY 14, 1.6 MILES EAST ALONG TRUNK HIGHWAY 14 FROM THE JUNCTION OF TRUNK HIGHWAY 14 AND TRUNK HIGHWAY 13 IN WASECA, AT TRUNK HIGHWAY 14 MILEPOST 162.25, 19.0 FEET WEST OF COUNTY ROAD 5 (150TH STREET).

Station Notes

IF THE COORDINATES AND/OR ELEVATIONS ARE ESTABLISHED OR PUBLISHED ON THIS GEODETIC CONTROL DISK, THEY SHOULD BE USED WITH CAUTION. THE GEODETIC CONTROL DISK IS LOCATED ON AN INTEGRAL ABUTMENT AND/OR A JOINTLESS BRIDGE AND IS SUBJECT TO MOVEMENT BEYOND GEODETIC TOLERANCES.

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -94.048 12B = -94.055 09 = -93.970 03 = -93.825

*** No Horizontal Positions in the Database ***

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/BR_81008_NW-3W-02AUG2018.jpg	W	Aug 2, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/BR_81008_NW-2-02AUG2018.jpg		Aug 2, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/BR_81008_NW-1-02AUG2018.jpg		Aug 2, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_101410.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_101410.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: BR 81008 SE **NGS Name:** BR 81008 SE

County: WASECA, MN (Sheet 1)

NGS ACRN: Get Map
NGS Quad / Sta Num : 44093233/
USGS Quad: MERIDEN

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	22	107 N	22 W	440313.85	932800.29		3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2009	2018	GOOD	Horz=NO Vert=NO	YES	81008	FLUSH	NO MAG MATERIAL

Monument Type	Disk Type	Mon. Agency
BRIDGE RAILING	SURVEY DISK	MNDT

Description: (2014) **Stamping:** BR 81008 SE 2009

2.4 MILES SOUTHEAST OF WASECA, IN A BRIDGE RAILING IN THE SOUTHEAST CORNER OF COUNTY ROAD 5 BRIDGE NUMBER 81008 OVER TRUNK HIGHWAY 14, 1.6 MILES EAST ALONG TRUNK HIGHWAY 14 FROM THE JUNCTION OF TRUNK HIGHWAY 14 AND TRUNK HIGHWAY 13 IN WASECA, AT TRUNK HIGHWAY 14 MILEPOINT 162.25, 19.0 FEET EAST OF COUNTY ROAD 5 (150TH STREET).

Station Notes

IF THE COORDINATES AND/OR ELEVATIONS ARE ESTABLISHED OR PUBLISHED ON THIS GEODETIC CONTROL DISK, THEY SHOULD BE USED WITH CAUTION. THE GEODETIC CONTROL DISK IS LOCATED ON AN INTEGRAL ABUTMENT AND/OR A JOINTLESS BRIDGE AND IS SUBJECT TO MOVEMENT BEYOND GEODETIC TOLERANCES.

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -94.052 12B = -94.058 09 = -93.973 03 = -93.832

*** No Horizontal Positions in the Database ***

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/BR_81008_SE-3E-02AUG2018.jpg	E	Aug 2, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/BR_81008_SE-2-02AUG2018.jpg		Aug 2, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/BR_81008_SE-1-02AUG2018.jpg		Aug 2, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_101407.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_101407.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: BR 81009 NE **NGS Name:** BR 81009 NE

County: WASECA, MN (Sheet 1)

NGS ACRN: DP9099 Get Map
NGS Quad / Sta Num : 44093322/
USGS Quad: WASECA

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	19	107 N	22 W	440337.05	933041.81	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2009	2018	GOOD	Horz=NO Vert=NO	YES	81009	FLUSH	NO MAG MATERIAL

Monument Type	Disk Type	Mon. Agency
BRIDGE ABUTMENT	SURVEY DISK	MNDT

Description: (2014) **Stamping:** BR 81009 NE 2009

1.0 MILE SOUTH OF WASECA, IN AN ABUTMENT IN THE NORTHEAST CORNER OF WESTBOUND TRUNK HIGHWAY 14 BRIDGE NUMBER 81009 OVER 128TH STREET, 0.75 MILE WEST ALONG TRUNK HIGHWAY 14 FROM THE JUNCTION OF TRUNK HIGHWAY 14 AND TRUNK HIGHWAY 13 IN WASECA, AT TRUNK HIGHWAY 14 MILEPOINT 159.85, 26.0 FEET NORTH OF WESTBOUND TRUNK HIGHWAY 14.

Station Notes

IF THE COORDINATES AND/OR ELEVATIONS ARE ESTABLISHED OR PUBLISHED ON THIS GEODETIC CONTROL DISK, THEY SHOULD BE USED WITH CAUTION. THE GEODETIC CONTROL DISK IS LOCATED ON AN INTEGRAL ABUTMENT AND/OR A JOINTLESS BRIDGE AND IS SUBJECT TO MOVEMENT BEYOND GEODETIC TOLERANCES.

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1189.620	0.016	362.597	0.005	2/1	2016	00000870

Geoid Separations(ft): GEOID18 = -94.311 12B = -94.317 09 = -94.242 03 = -94.088

*** No Horizontal Positions in the Database ***

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/BR_81009_NE-DP9099-3W-01AUG2018.jpg	W	Aug 1, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/BR_81009_NE-DP9099-2-01AUG2018.jpg		Aug 1, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/BR_81009_NE-DP9099-1-01AUG2018.jpg		Aug 1, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_101416.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_101416.pdf

BR 81010 SW

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: BR 81010 SW **NGS Name:** BR 81010 SW

County: WASECA, MN (Sheet 1)

NGS ACRN: DP9098 Get Map
NGS Quad / Sta Num : 44093322/
USGS Quad: WASECA

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	19	107 N	22 W	440335.69	933043.93	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2009	2018	GOOD	Horz=NO Vert=NO	YES	81010	FLUSH	NO MAG MATERIAL

Monument Type	Disk Type	Mon. Agency
BRIDGE ABUTMENT	SURVEY DISK	MNDT

Description: (2014) **Stamping:** BR 81010 SW 2009

1.0 MILE SOUTH OF WASECA, IN AN ABUTMENT IN THE SOUTHWEST CORNER OF EASTBOUND TRUNK HIGHWAY 14 BRIDGE NUMBER 81010 OVER 128TH STREET, 0.8 MILE WEST ALONG TRUNK HIGHWAY 14 FROM THE JUNCTION OF TRUNK HIGHWAY 14 AND TRUNK HIGHWAY 13 IN WASECA, AT TRUNK HIGHWAY 14 MILEPOINT 159.8, 26.3 FEET SOUTH OF EASTBOUND TRUNK HIGHWAY 14.

Station Notes

IF THE COORDINATES AND/OR ELEVATIONS ARE ESTABLISHED OR PUBLISHED ON THIS GEODETIC CONTROL DISK, THEY SHOULD BE USED WITH CAUTION. THE GEODETIC CONTROL DISK IS LOCATED ON AN INTEGRAL ABUTMENT AND/OR A JOINTLESS BRIDGE AND IS SUBJECT TO MOVEMENT BEYOND GEODETIC TOLERANCES.

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1189.693	0.016	362.619	0.005	2/1	2016	00000870

Geoid Separations(ft): GEOID18 = -94.317 12B = -94.324 09 = -94.248 03 = -94.094

*** No Horizontal Positions in the Database ***

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/BR_81010_SW-DP9098-3E-01AUG2018.jpg	E	Aug 1, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/BR_81010_SW-DP9098-2-01AUG2018.jpg		Aug 1, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/BR_81010_SW-DP9098-1-01AUG2018.jpg		Aug 1, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_101417.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_101417.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: BR 81013 NE **NGS Name:** BR 81013 NE

County: WASECA, MN (Sheet 1)

NGS ACRN: DP9102 Get Map
NGS Quad / Sta Num : 44093233/
USGS Quad: MERIDEN

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	10	107 N	22 W	440337.04	932943.09	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2009	2018	GOOD	Horz=NO Vert=NO	YES	81013	FLUSH	NO MAG MATERIAL

Monument Type	Disk Type	Mon. Agency
BRIDGE ABUTMENT	SURVEY DISK	MNDT

Description: (2014) **Stamping:** BR 81013 NE 2009

IN WASECA, IN AN ABUTMENT IN THE NORTHEAST CORNER OF WESTBOUND TRUNK HIGHWAY 14 BRIDGE NUMBER 81013 OVER TRUNK HIGHWAY 13, AT THE JUNCTION OF TRUNK HIGHWAY 14 AND TRUNK HIGHWAY 13 IN WASECA, AT TRUNK HIGHWAY 14 MILEPOINT 160.7, 26.8 FEET NORTH OF WESTBOUND TRUNK HIGHWAY 14.

Station Notes

IF THE COORDINATES AND/OR ELEVATIONS ARE ESTABLISHED OR PUBLISHED ON THIS GEODETIC CONTROL DISK, THEY SHOULD BE USED WITH CAUTION. THE GEODETIC CONTROL DISK IS LOCATED ON AN INTEGRAL ABUTMENT AND/OR A JOINTLESS BRIDGE AND IS SUBJECT TO MOVEMENT BEYOND GEODETIC TOLERANCES.

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1160.300	0.016	353.660	0.005	2/1	2016	00000870

Geoid Separations(ft): GEOID18 = -94.203 12B = -94.209 09 = -94.127 03 = -93.979

*** No Horizontal Positions in the Database ***

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/BR_81013_NE-DP9102-3W-01AUG2018.jpg	W	Aug 1, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/BR_81013_NE-DP9102-2-01AUG2018.jpg		Aug 1, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/BR_81013_NE-DP9102-1-01AUG2018.jpg		Aug 1, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_101411.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_101411.pdf

BR 81014 SW

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: BR 81014 SW **NGS Name:** BR 81014 SW

County: WASECA, MN (Sheet 1)

NGS ACRN: DP9101 Get Map
NGS Quad / Sta Num : 44093233/
USGS Quad: MERIDEN

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	20	107 N	22 W	440335.68	932945.75	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2009	2018	GOOD	Horz=NO Vert=NO	YES	81014	FLUSH	NO MAG MATERIAL

Monument Type	Disk Type	Mon. Agency
BRIDGE ABUTMENT	SURVEY DISK	MNDT

Description: (2014) **Stamping:** BR 81014 SW 2009

IN WASECA, IN AN ABUTMENT IN THE SOUTHWEST CORNER OF EASTBOUND TRUNK HIGHWAY 14 BRIDGE NUMBER 81014 OVER TRUNK HIGHWAY 13, AT THE JUNCTION OF TRUNK HIGHWAY 14 AND TRUNK HIGHWAY 13 IN WASECA, AT TRUNK HIGHWAY 14 MILEPOINT 160.65, 27.0 FEET SOUTH OF EASTBOUND TRUNK HIGHWAY 14.

Station Notes

IF THE COORDINATES AND/OR ELEVATIONS ARE ESTABLISHED OR PUBLISHED ON THIS GEODETIC CONTROL DISK, THEY SHOULD BE USED WITH CAUTION. THE GEODETIC CONTROL DISK IS LOCATED ON AN INTEGRAL ABUTMENT AND/OR A JOINTLESS BRIDGE AND IS SUBJECT TO MOVEMENT BEYOND GEODETIC TOLERANCES.

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1159.916	0.016	353.543	0.005	2/1	2016	00000870

Geoid Separations(ft): GEOID18 = -94.209 12B = -94.216 09 = -94.137 03 = -93.986

*** No Horizontal Positions in the Database ***

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/BR_81014_SW-DP9101-3E-01AUG2018.jpg	E	Aug 1, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/BR_81014_SW-DP9101-2-01AUG2018.jpg		Aug 1, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/BR_81014_SW-DP9101-1-01AUG2018.jpg		Aug 1, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_101412.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_101412.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: BR 81016 SE **NGS Name:** BR 81016 SE

County: WASECA, MN (Sheet 1)

NGS ACRN: DP9103 Get Map
NGS Quad / Sta Num : 44093233/
USGS Quad: MERIDEN

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	24	107 N	22 W	440329.70	932458.79	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2009	2018	GOOD	Horz=NO Vert=NO	YES	81016	FLUSH	NO MAG MATERIAL

Monument Type	Disk Type	Mon. Agency
BRIDGE ABUTMENT	SURVEY DISK	MNDT

Description: (2014) **Stamping:** BR 81016 SE 2009

4.7 MILES EAST-SOUTHEAST OF WASECA, IN AN ABUTMENT IN THE SOUTHEAST CORNER OF 175TH STREET BRIDGE NUMBER 81016 OVER TRUNK HIGHWAY 14, 4.15 MILES EAST ALONG TRUNK HIGHWAY 14 FROM THE JUNCTION OF TRUNK HIGHWAY 14 AND TRUNK HIGHWAY 13 IN WASECA, AT TRUNK HIGHWAY 14 MILEPOINT 164.8, 18.5 FEET EAST OF 175TH STREET.

Station Notes

IF THE COORDINATES AND/OR ELEVATIONS ARE ESTABLISHED OR PUBLISHED ON THIS GEODETIC CONTROL DISK, THEY SHOULD BE USED WITH CAUTION. THE GEODETIC CONTROL DISK IS LOCATED ON AN INTEGRAL ABUTMENT AND/OR A JOINTLESS BRIDGE AND IS SUBJECT TO MOVEMENT BEYOND GEODETIC TOLERANCES.

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1156.064	0.016	352.369	0.005	2/1	2016	00000870

Geoid Separations(ft): GEOID18 = -93.687 12B = -93.687 09 = -93.602 03 = -93.458

*** No Horizontal Positions in the Database ***

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/BR_81016_SE-DP9103-3E-02AUG2018.jpg	E	Aug 2, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/BR_81016_SE-DP9103-2-02AUG2018.jpg		Aug 2, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/BR_81016_SE-DP9103-1-02AUG2018.jpg		Aug 2, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_101406.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_101406.pdf

BRASE MNDT

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: BRASE MNDT **NGS Name:** BRASE

County: WASECA, MN (Sheet 1)

NGS ACRN: AI6552 Get Map
NGS Quad / Sta Num : 44093233/
USGS Quad: MERIDEN

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	23	107 N	22 W	440331.02	932607.98	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1998	2018	DESTROYED	Horz=NO Vert=NO	YES		FLUSH	MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
UNKNOWN	SURVEY DISK	MNDT

Description: (1998) **Stamping:** BRASE 1998

3.5 MILES EAST-SOUTHEAST OF WASECA, 4.8 MILES EAST ALONG TRUNK HIGHWAY 14 FROM THE JUNCTION OF TRUNK HIGHWAY 14 AND TRUNK HIGHWAY 13 IN WASECA TO TRUNK HIGHWAY 14 MILEPOINT 162.60, THEN 0.7 MILE SOUTH ON 175TH STREET, THEN 0.25 MILE EAST ON 358TH AVENUE, THEN 1.05 MILES SOUTH ON 178TH STREET, THEN 0.2 MILE WEST ON 348TH STREET, THEN 0.25 MILE SOUTH ON 175TH STREET, THEN 0.95 MILE WEST ON 345TH AVENUE, 23.0 FEET SOUTH OF 345TH AVENUE, 261.0 FEET EAST OF 165TH STREET, 2.8 FEET NORTH OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Elevations)

Vertical Datum	Orthometric (Feet) Height	Accuracy	Orthometric (Meters) Height	Accuracy	Survey Order/(Class)	Project Info Year	Reference
NAVD88	1128.410	0.016	343.940	0.005	2/1	2004	00000464
NGVD29	1128.374	0.016	343.929	0.005	2/1	2001	VJANE

Geoid Separations(ft): GEOID18 = -93.802 12B = -93.809 09 = -93.724 03 = -93.576

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Longitude	County (Feet) X	Y	County (Meters) X	Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Reference
NAD83(2011)	44 03 31.02121	93 26 07.97653	363587.962	182355.259	110821.833	55581.994	315.348		2012	GPS2800
NAD83(2007)	44 03 31.02121	93 26 07.97731	363587.905	182355.260	110821.815	55581.994	315.371		2007	GPS2300
NAD83(1996)	44 03 31.02075	93 26 07.97666	363587.952	182355.213	110821.830	55581.980	315.423	C	2002	GPS1746

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_36691.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_36691.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: BUDACH MNDT **NGS Name:** BUDACH

County: WASECA, MN (Sheet 1)

NGS ACRN: OO0769 Get Map
NGS Quad / Sta Num : 43093144/
USGS Quad: NEW RICHLAND

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	26	105 N	22 W	435237.69	932557.29	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1978	2023	GOOD	Horz=YES Vert=YES	YES		RECESSED 10 IN.	BAR MAG IN DRILL HOLE

Monument Type
CONCRETE MONUMENT (CAST-IN-PLACE)

Disk Type
HORIZONTAL CONTROL DISK

Mon. Agency
MNDT

Description: (2008) **Stamping:** BUDACH 1978

3.0 MILES EAST-SOUTHEAST OF NEW RICHLAND, 3.0 MILES EAST ALONG TRUNK HIGHWAY 30 FROM THE JUNCTION OF TRUNK HIGHWAY 30 AND TRUNK HIGHWAY 13 IN NEW RICHLAND TO TRUNK HIGHWAY 30 MILEPOINT 171.50, THEN 1.0 MILE SOUTH ON COUNTY ROAD 63 (170TH STREET), THEN 0.3 MILE WEST ON COUNTY ROAD 58 (220TH AVENUE), 19.0 FEET SOUTH OF COUNTY ROAD 58 (220TH AVENUE), 36.98 FEET NORTHEAST OF BUDACH RM 2, 1.9 FEET NORTH OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Elevations)

Vertical Datum	Orthometric (Feet) Height	Accuracy	Orthometric (Meters) Height	Accuracy	Survey Order/(Class)	Project Info Year	Reference
NAVD88	1250.408	0.016	381.125	0.005	2/1	2015	00000851
NGVD29	1250.342	0.016	381.105	0.005	2/1	1992	UNCHECKD

Geoid Separations(ft): GEOID18 = -95.308 12B = -95.305 09 = -95.256 03 = -95.079

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Longitude	County (Feet) X	Y	County (Meters) X	Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Reference
NAD83(2011)	43 52 37.69018	93 25 57.28594	363954.760	116191.408	110933.633	35415.212	352.081		2024	GPS3701
NAD83(2007)	43 52 37.69044	93 25 57.28646	363954.722	116191.435	110933.621	35415.220	352.104		2007	GPS2300
NAD83(1996)	43 52 37.68984	93 25 57.28582	363954.768	116191.374	110933.635	35415.202	352.142	C	2024	HELLE
NAD83(1986)	43 52 37.67832	93 25 57.28547	363954.787	116190.207	110933.641	35414.846		2	1986	17289
NAD27	43 52 37.81173	93 25 56.50324						2	1980	16297

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/BUDACH-OO0769-3S-24APR2023.jpg	S	Apr 24, 2023
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/BUDACH-OO0769-2-24APR2023.jpg		Apr 24, 2023
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/BUDACH-OO0769-1-24APR2023.jpg		Apr 24, 2023

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33242.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33242.pdf

BUDACH RM 1

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: BUDACH RM 1 **NGS Name:** BUDACH RM 1

County: WASECA, MN (Sheet 1)

NGS ACRN: OO0768 Get Map
NGS Quad / Sta Num : 43093144/
USGS Quad: NEW RICHLAND

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	26	105 N	22 W	435237.43	932556.89	2	

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1978	2018	DESTROYED	Horz=NO Vert=NO	NO		FLUSH	STEEL ROD IMBED IN MON

Monument Type
CONCRETE MONUMENT (CAST-IN-PLACE)

Disk Type
REFERENCE MARK DISK

Mon. Agency
MNDT

Description: (1978) **Stamping:** BUDACH NO 1 1978

3.25 MILES EAST-SOUTHEAST OF NEW RICHLAND, 2.0 MILES EAST ALONG TRUNK HIGHWAY 30 FROM THE JUNCTION OF TRUNK HIGHWAY 30 AND TRUNK HIGHWAY 13, THEN 1.0 MILE SOUTH ON 160TH STREET, THEN 0.7 MILE EAST ON COUNTY ROAD 58 (220TH AVENUE), 46.0 FEET SOUTH OF COUNTY ROAD 58, 109.0 FEET WEST OF A FARM DRIVE NORTH EXTENDED, 3.7 FEET WEST OF A TELEPHONE POLE, 57.8 FEET WEST OF BUDACH RM 2, 59.8 FEET EAST OF A WITNESS POST.

Station Notes
THE DISK WAS TURNED IN TO THE OFFICE.

Leveling-Derived Orthometric Heights (Elevations)

Vertical Datum	Orthometric (Feet) Height	Accuracy	Orthometric (Meters) Height	Accuracy	Survey Order/(Class)	Project Info Year	Reference
NAVD88	1251.976	0.016	381.603	0.005	2/1	1991	00000025
NGVD29	1251.897	0.016	381.579	0.005	2	1980	L24529

Geoid Separations(ft): GEOID18 = -95.308 12B = -95.305 09 = -95.259 03 = -95.079

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33243.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33243.pdf

BUDACH RM 2

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: BUDACH RM 2 **NGS Name:** BUDACH RM 2

County: WASECA, MN (Sheet 1)

NGS ACRN: OO0770 Get Map
NGS Quad / Sta Num : 43093144/
USGS Quad: NEW RICHLAND

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	26	105 N	22 W	435237.46	932557.67	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1978	2018	GOOD	Horz=YES Vert=YES	YES		RECESSED 6 IN.	STEEL ROD IMBED IN MON

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	REFERENCE MARK DISK	MNDT

Description: (1978) **Stamping:** BUDACH NO 2 1978

3.0 MILES EAST-SOUTHEAST OF NEW RICHLAND, 3.0 MILES EAST ALONG TRUNK HIGHWAY 30 FROM THE JUNCTION OF TRUNK HIGHWAY 30 AND TRUNK HIGHWAY 13 IN NEW RICHLAND TO TRUNK HIGHWAY 30 MILEPOINT 171.50, THEN 1.0 MILE SOUTH ON COUNTY ROAD 63 (170TH STREET), THEN 0.3 MILE WEST ON COUNTY ROAD 58 (220TH AVENUE), 43.0 FEET SOUTH OF COUNTY ROAD 58 (220TH AVENUE), 168.0 FEET WEST OF DRIVEWAY NORTH EXTENDED NUMBER 16741, 36.98 FEET SOUTHWEST OF STATION BUDACH, 2.0 FEET EAST OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Elevations)

Vertical Datum	Orthometric (Feet) Height	Accuracy	Orthometric (Meters) Height	Accuracy	Survey Order/(Class)	Project Info Year	Reference
NAVD88	1251.412	0.016	381.431	0.005	2/1	2015	00000851
NGVD29	1251.333	0.016	381.407	0.005	2/1	1992	UNCHECKD

Geoid Separations(ft): GEOID18 = -95.311 12B = -95.308 09 = -95.259 03 = -95.079

*** No Horizontal Positions in the Database ***

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/BUDACH_RM_2-OO0770-3S-30JUL2018.jpg	S	Jul 30, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/BUDACH_RM_2-OO0770-2-30JUL2018.jpg		Jul 30, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/BUDACH_RM_2-OO0770-1-30JUL2018.jpg		Jul 30, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33244.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33244.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: C 23 **NGS Name:** C 23

County: WASECA, MN (Sheet 1)

NGS ACRN: OO0480 Get Map
NGS Quad / Sta Num : 43093144/
USGS Quad: NEW RICHLAND

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	17	105 N	22 W	435342.39	932934.60	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1933	2009	GOOD	Horz=NO Vert=NO	YES		RECESSED 3 IN.	STEEL SPIKE ADJ TO MON

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	BENCH MARK DISK	NGS

Description: (2008) **Stamping:** 1193.912 C 23 1933

IN NEW RICHLAND, 0.05 MILE EAST OF THE JUNCTION OF BROADWAY AND FIRST STREET, 19.4 FEET NORTH OF THE NORTH CURB ON FIRST STREET, 32.3 FEET WEST OF THE WEST RAIL OF A RAILROAD, 64.6 FEET EAST-NORTHEAST OF A POWER POLE, 19.8 FEET NORTH-NORTHWEST OF A POWER POLE, 17.5 FEET WEST OF THE WEST RAIL OF A SPUR TRACK, 9.7 FEET WEST OF A WITNESS POST.

Station Notes

THE SURVEY MARK IS ON RAILROAD PROPERTY AND HAS BEEN ABANDONED FOR MNDOT GEODETIC USE.

Leveling-Derived Orthometric Heights (Elevations)

Vertical Datum	Orthometric (Feet) Height	Accuracy	Orthometric (Meters) Height	Accuracy	Survey Order/(Class)	Project Info Year	Reference
NAVD88	1183.967	0.016	360.874	0.005	2/1	2011	00000681
NGVD29	1183.912	0.016	360.857	0.005	2/0	1992	UNCHECKD

Geoid Separations(ft): GEOID18 = -95.498 12B = -95.489 09 = -95.430 03 = -95.285

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Longitude	County (Feet) X	Y	County (Meters) X	Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Reference
NAD83(2011)	43 53 42.39062	93 29 34.59655	348082.898	122848.529	106095.880	37444.306	331.768		2012	GPS2800
NAD83(2007)	43 53 42.39072	93 29 34.59731	348082.843	122848.539	106095.863	37444.310	331.790		2007	GPS2300
NAD83(1996)	43 53 42.39022	93 29 34.59687	348082.874	122848.488	106095.872	37444.294	331.863	C	2008	HMANC

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/C_23-OO0480-3E-10JUN2008.jpg	E	Jun 10, 2008
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/C_23-OO0480-2-10JUN2008.jpg		Jun 10, 2008
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/C_23-OO0480-1-10JUN2008.jpg		Jun 10, 2008

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33245.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33245.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: CHAMBERS **NGS Name:** CHAMBERS

County: WASECA, MN (Sheet 1)

NGS ACRN: DQ6332 Get Map
NGS Quad / Sta Num : 44093324/
USGS Quad: ELYSIAN

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	5	108 N	23 W	441145.76	933735.65	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2016	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 2 IN.	BAR MAG IN DRILL HOLE

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 52 FT)

Disk Type
METAL ROD (WITH REMOVABLE ID DISK)

Mon. Agency
MNDT

Description: (2016) **Stamping:** CHAMBERS 2016

3.0 MILES SOUTHWEST OF WATERVILLE, 3.85 MILES SOUTHWEST AND WEST ALONG TRUNK HIGHWAY 60 FROM THE JUNCTION OF TRUNK HIGHWAY 60 AND TRUNK HIGHWAY 13 IN WATERVILLE, AT TRUNK HIGHWAY 60 MILEPOINT 128.75, 60.4 FEET SOUTH OF TRUNK HIGHWAY 60, 28.2 FEET WEST OF A FIELD ENTRANCE, 5.0 FEET EAST OF A WITNESS POST.

Station Pair: WRASE - LE SUEUR, MN

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1067.199	0.016	325.283	0.005	2/1	2019	00000938

Geoid Separations(ft): GEOID18 = -94.094 12B = -94.094 09 = -94.025 03 = -93.815

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Geodetic Positions Longitude	County (Feet) X	County (Feet) Y	County (Meters) X	County (Meters) Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Project Info Reference
NAD83(2011)	44 11 45.75991	93 37 35.65229	313801.672	232829.255	95646.9410	70966.499	296.588	3	2021	GPSBM

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/CHAMBERS-DQ6332-3S-16APR2024.jpg	S	Apr 16, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/CHAMBERS-DQ6332-2-16APR2024.jpg		Apr 16, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/CHAMBERS-DQ6332-1-16APR2024.jpg		Apr 16, 2024

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_105751.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_105751.pdf

CHARLE

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: CHARLE **NGS Name:** CHARLE

County: WASECA, MN (Sheet 1)

NGS ACRN: DR3040 Get Map
NGS Quad / Sta Num : 43093144/
USGS Quad: NEW RICHLAND

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	32	106 N	22 W	435625.71	932930.48	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2018	2023	GOOD	Horz=YES Vert=YES	YES		RECESSED 3 IN.	BAR MAG IN DRILL HOLE

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 43 FT)

Disk Type
METAL ROD (WITH REMOVABLE ID DISK)

Mon. Agency
MNDT

Description: (2018) **Stamping:** CHARLE 2018

3.2 MILES NORTH OF NEW RICHLAND, 3.5 MILES NORTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 30 IN NEW RICHLAND, AT TRUNK HIGHWAY 13 MILEPOINT 21.05, 62.9 FEET WEST OF TRUNK HIGHWAY 13, 1.0 FOOT EAST OF A WITNESS POST.

Station Pair: FRED - WASECA, MN

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1145.503	0.016	349.150	0.005	2/1	2020	00000949

Geoid Separations(ft): GEOID18 = -95.141 12B = -95.141 09 = -95.069 03 = -94.934

*** No Horizontal Positions in the Database ***

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/CHARLE-DR3040-3W-24APR2023.jpg	W	Apr 24, 2023
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/CHARLE-DR3040-2-24APR2023.jpg		Apr 24, 2023
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/CHARLE-DR3040-1-24APR2023.jpg		Apr 24, 2023

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_109127.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_109127.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: CLEAR **NGS Name:** CLEAR

County: WASECA, MN (Sheet 1)

NGS ACRN: DR3033 Get Map
NGS Quad / Sta Num : 44093233/
USGS Quad: MERIDEN

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	29	107 N	22 W	440252.73	932949.64	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2018	2018	GOOD	Horz=YES Vert=YES	YES		RECESSED 3 IN.	BAR MAG IN DRILL HOLE

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 27 FT)

Disk Type
METAL ROD (WITH REMOVABLE ID DISK)

Mon. Agency
MNDT

Description: (2018) **Stamping:** CLEAR 2018

2.3 MILES SOUTH OF WASECA, 0.85 MILE SOUTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 14 IN WASECA, AT TRUNK HIGHWAY 13 MILEPOINT 29.4, 62.0 FEET WEST OF TRUNK HIGHWAY 13, 59.4 FEET NORTH OF A FIELD ENTRANCE, 1.0 FOOT EAST OF A WITNESS POST.

Station Pair: 8101 X - WASECA, MN

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1129.450	0.016	344.257	0.005	2/1	2020	00000949

Geoid Separations(ft): GEOID18 = -94.311 12B = -94.317 09 = -94.235 03 = -94.088

*** No Horizontal Positions in the Database ***

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/CLEAR-DR3033-3W-09AUG2018.jpg	W	Aug 9, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/CLEAR-DR3033-2-09AUG2018.jpg		Aug 9, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/CLEAR-DR3033-1-09AUG2018.jpg		Aug 9, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_109128.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_109128.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: CONN **NGS Name:** CONN

County: WASECA, MN (Sheet 1)

NGS ACRN: DR3037 Get Map
NGS Quad / Sta Num : 43093144/
USGS Quad: NEW RICHLAND

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	17	106 N	22 W	435929.19	932948.87	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2018	2018	GOOD	Horz=YES Vert=YES	YES		RECESSED 3 IN.	BAR MAG IN DRILL HOLE

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 29 FT)

Disk Type
METAL ROD (WITH REMOVABLE ID DISK)

Mon. Agency
MNDT

Description: (2018) **Stamping:** CONN 2018

6.1 MILES SOUTH OF WASECA, 4.75 MILES SOUTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 14 IN WASECA, AT TRUNK HIGHWAY 13 MILEPOINT 25.5, 61.4 FEET WEST OF TRUNK HIGHWAY 13, 1.0 FOOT WEST OF A WITNESS POST.

Station Pair: EAST - WASECA, MN

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1145.122	0.016	349.034	0.005	2/1	2020	00000949

Geoid Separations(ft): GEOID18 = -94.757 12B = -94.760 09 = -94.675 03 = -94.550

*** No Horizontal Positions in the Database ***

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/CONN-DR3037-3W-08AUG2018.jpg	W	Aug 8, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/CONN-DR3037-2-08AUG2018.jpg		Aug 8, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/CONN-DR3037-1-08AUG2018.jpg		Aug 8, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_109129.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_109129.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: COSH **NGS Name:** COSH

County: WASECA, MN (Sheet 1)

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	20	107 N	22 W	440350.30	933005.08		

NGS ACRN: Get Map
NGS Quad / Sta Num : 44093322/
USGS Quad: WASECA

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2023	2023	GOOD	Horz=YES Vert=YES	YES		RECESSED 1 IN.	BAR MAG IN DRILL HOLE

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 334 FT)

Disk Type
METAL ROD (WITH REMOVABLE ID DISK)

Mon. Agency
MNDT

Description: (2023) **Stamping:** COSH 2023

IN WASECA, 0.60 MILE NORTH AND WEST ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 14 IN WASECA, TO TRUNK HIGHWAY 13 MILEPOINT 30.80, THEN 0.10 MILE SOUTH ON 5TH STREET SOUTHEAST, THEN 125.0 FEET EAST ON THE ENTRANCE TO THE WASECA HIGHWAY DEPARTMENT ROAD, 159.5 FEET EAST OF 154TH AVENUE SOUTHEAST EXTENDED, 116.9 FEET SOUTH-SOUTHEAST OF THE SOUTHWEST CORNER OF THE HIGHWAY DEPARTMENT BUILD, 66.4 FEET WEST OF A LIGHT POLE, 33.8 FEET SOUTH OF THE COUNTY HIGHWAY DEPARTMENT ENTRANCE, 1.5 FEET NORTHWEST OF A WITNESS POST.

*** No 1st or 2nd Order Vertical Positions in the Database ***

No Geoid Separations Available

*** No Horizontal Positions in the Database ***

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/COSH-3SE-21AUG2023.jpg	SE	Aug 21, 2023
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/COSH-2-21AUG2023.jpg		Aug 21, 2023
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/COSH-1-21AUG2023.jpg		Aug 21, 2023

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_111033.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_111033.pdf

CREAMERY SMOKESTACK

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: CREAMERY SMOKESTACK **NGS Name:** CREAMERY SMOKESTACK

County: WASECA, MN (Sheet 1)

NGS ACRN: CJ3991 Get Map
NGS Quad / Sta Num : 44093234/
USGS Quad: MORRISTOWN

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	14	108 N	22 W	440950.00	932630.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
	2018	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
SEE DESCRIPTIVE TEXT	STACK	UNK

Description: (2010)

Stamping:

4.4 MILES SOUTH-SOUTHWEST OF MORRISTOWN, 1.0 MILE SOUTH ALONG 150TH STREET FROM THE JUNCTION OF 150TH STREET AND COUNTY ROAD 62, THEN 1.3 MILES EAST ON 420TH AVENUE.

Station Notes

THE CREAMERY IS STILL IN THE LOCATION, BUT THE SMOKESTACK HAS BEEN REMOVED.

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -92.989 12B = -92.985 09 = -92.916 03 = -92.752

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_67375.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_67375.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: D 23 **NGS Name:** D 23

County: WASECA, MN (Sheet 1)

NGS ACRN: OO0481 Get Map
NGS Quad / Sta Num : 43093143/
USGS Quad: HARTLAND

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	33	105 N	22 W	435053.34	932907.78	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1933	2023	GOOD	Horz=YES Vert=YES	YES		PROJECTS 1 IN.	BAR MAG IN DRILL HOLE

Monument Type
CONCRETE MONUMENT (CAST-IN-PLACE)

Disk Type
BENCH MARK DISK

Mon. Agency
NGS

Description: (2018) **Stamping:** D 23 1933 1216.405

2.8 MILES SOUTH OF NEW RICHLAND, 3.0 MILES SOUTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 30 IN NEW RICHLAND TO TRUNK HIGHWAY 13 MILEPOINT 15.55, THEN 0.1 MILE WEST ON COUNTY ROAD 70 (200TH AVENUE), AT THE RAILROAD CROSSING ON COUNTY ROAD 70, 30.5 FEET NORTH OF COUNTY ROAD 70, 43.3 FEET EAST OF THE EAST RAIL OF AN EXEMPT RAILROAD, 0.6 FOOT SOUTH OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Elevations)

Vertical Datum	Orthometric (Feet) Height	Accuracy	Orthometric (Meters) Height	Accuracy	Survey Order/(Class)	Project Info Year	Reference
NAVD88	1216.510	0.016	370.793	0.005	2/1	2020	00000949
NGVD29	1216.405	0.016	370.761	0.005	2/0	1992	UNCHECKD

Geoid Separations(ft): GEOID18 = -95.777 12B = -95.771 09 = -95.722 03 = -95.551

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Longitude	County (Feet) X	Y	County (Meters) X	Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Reference
NAD83(2011)	43 50 53.34441	93 29 07.78383	349928.215	105716.915	106658.333	32222.580	341.605		2012	GPS2800
NAD83(2007)	43 50 53.34465	93 29 07.78462	349928.158	105716.940	106658.316	32222.588	341.631		2007	GPS2300
NAD83(1996)	43 50 53.34419	93 29 07.78388	349928.212	105716.893	106658.332	32222.574	341.690	C	2008	HMANC

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/D_23-OO0481-3N-24APR2023.jpg	N	Apr 24, 2023
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/D_23-OO0481-2-24APR2023.jpg		Apr 24, 2023
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/D_23-OO0481-1-24APR2023.jpg		Apr 24, 2023

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33246.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33246.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: DEGNER **NGS Name:** DEGNER

County: WASECA, MN (Sheet 1)

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	21	105 N	22 W	435329.93	932833.45	2	C

NGS ACRN: DP6238 Get Map
NGS Quad / Sta Num : 43093144/
USGS Quad: NEW RICHLAND

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2013	2025	GOOD	Horz=YES Vert=YES	YES		RECESSED 3 IN.	BAR MAG IN DRILL HOLE

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 35 FT)

Disk Type
METAL ROD (WITH REMOVABLE ID DISK)

Mon. Agency
MNDT

Description: (2013) **Stamping:** DEGNER 2013

1.0 MILE EAST OF NEW RICHLAND, 0.55 MILE EAST ALONG TRUNK HIGHWAY 30 FROM THE JUNCTION OF TRUNK HIGHWAY 30 AND TRUNK HIGHWAY 13 IN NEW RICHLAND, AT TRUNK HIGHWAY 30 MILEPOINT 169.0, 28.0 FEET SOUTH OF TRUNK HIGHWAY 30, 37.3 FEET WEST OF MILEPOST NUMBER 169, 1.5 FEET WEST OF A WITNESS POST.

Station Pair: DEUBLER - WASECA, MN

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1192.363	0.016	363.433	0.005	2/1	2015	00000851

Geoid Separations(ft): GEOID18 = -95.439 12B = -95.433 09 = -95.377 03 = -95.223

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Geodetic Positions Longitude	County (Feet) X	County (Feet) Y	County (Meters) X	County (Meters) Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Project Info Reference
NAD83(2011)	43 53 29.92587	93 28 33.44648	352552.123	121555.487	107458.102	37050.187	334.357		2024	GPS3701
NAD83(1996)	43 53 29.92571	93 28 33.44668	352552.108	121555.471	107458.097	37050.182	334.419	C	2024	HELLE

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/DEGNER-DP6238-3S-17SEP2025.jpg	S	Sep 17, 2025
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/DEGNER-DP6238-2-17SEP2025.jpg		Sep 17, 2025
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/DEGNER-DP6238-1-17SEP2025.jpg		Sep 17, 2025

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_100330.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_100330.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: DELORES **NGS Name:** DELORES

County: WASECA, MN (Sheet 1)

NGS ACRN: DQ5415 Get Map
NGS Quad / Sta Num : 43093414/
USGS Quad: WALDORF

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	10	105 N	24 W	435509.28	934152.14	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2016	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 2 IN.	BAR MAG IN DRILL HOLE

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 27 FT)

Disk Type
METAL ROD (WITH REMOVABLE ID DISK)

Mon. Agency
MNDT

Description: (2016) **Stamping:** DELORES 2016

1.1 MILES SOUTH OF WALDORF, 0.7 MILE SOUTH ALONG TRUNK HIGHWAY 83 FROM THE JUNCTION OF TRUNK HIGHWAY 83 AND COUNTY ROAD 3 (MAIN STREET) IN WALDORF, AT TRUNK HIGHWAY 83 MILEPOINT 1.9, 53.0 FEET WEST OF TRUNK HIGHWAY 83, 25.2 FEET NORTHEAST OF A POWER POLE, 1.5 FEET EAST OF A WITNESS POST.

Station Pair: RUSSEL - WASECA, MN

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1073.909	0.016	327.328	0.005	2/1	2019	00000938

Geoid Separations(ft): GEOID18 = -95.538 12B = -95.531 09 = -95.459 03 = -95.344

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Geodetic Positions Longitude	County (Feet) X	County (Feet) Y	County (Meters) X	County (Meters) Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Project Info Reference
NAD83(2011)	43 55 09.27583	93 41 52.14198	294159.181	132091.058	89659.8980	40261.435	298.198	C	2025	H23BLUE
NAD83(1996)	43 55 09.27525	93 41 52.14196	294159.182	1320910000	89659.8980	40261.417			2025	H23BLUE

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/DELORES-DQ5415-3W-23MAY2016.jpg	W	May 23, 2016
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/DELORES-DQ5415-2-23MAY2016.jpg		May 23, 2016
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/DELORES-DQ5415-1-23MAY2016.jpg		May 23, 2016

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_105284.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_105284.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: DENA **NGS Name:** DENA

County: WASECA, MN (Sheet 1)

NGS ACRN: DQ5410 Get Map
NGS Quad / Sta Num : 43093414/
USGS Quad: WALDORF

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	29	106 N	24 W	435742.23	934350.72	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2016	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 3 IN.	BAR MAG IN DRILL HOLE

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 24 FT)

Disk Type
METAL ROD (WITH REMOVABLE ID DISK)

Mon. Agency
MNDT

Description: (2016) **Stamping:** DENA 2016

2.5 MILES NORTHWEST OF WALDORF, 2.4 MILES NORTHWEST ALONG TRUNK HIGHWAY 83 FROM THE JUNCTION OF TRUNK HIGHWAY 83 AND COUNTY ROAD 4 IN WALDORF, AT TRUNK HIGHWAY 83 MILEPOINT 5.4, 55.3 FEET NORTHEAST OF TRUNK HIGHWAY 83, 1.5 FEET SOUTHWEST OF A WITNESS POST.

Station Pair: ANDY - WASECA, MN

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1059.453	0.016	322.922	0.005	2/1	2019	00000938

Geoid Separations(ft): GEOID18 = -95.239 12B = -95.233 09 = -95.157 03 = -95.052

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Geodetic Positions Longitude	County (Feet) X	County (Feet) Y	County (Meters) X	County (Meters) Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Project Info Reference
NAD83(2011)	43 57 42.22886	93 43 50.72267	285632.584	147663.128	87060.9860	45007.811	293.890	C	2025	H23BLUE
NAD83(1996)	43 57 42.22832	93 43 50.72266	285632.584	147663.073	87060.9860	45007.795			2025	H23BLUE

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/DENA-DQ5410-3NE-17MAY2016.jpg	NE	May 17, 2016
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/DENA-DQ5410-2-17MAY2016.jpg		May 17, 2016
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/DENA-DQ5410-1-17MAY2016.jpg		May 17, 2016

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_105285.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_105285.pdf

DEUBLER

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: DEUBLER **NGS Name:** DEUBLER

County: WASECA, MN (Sheet 1)

NGS ACRN: DP6237 Get Map
NGS Quad / Sta Num : 43093144/
USGS Quad: NEW RICHLAND

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	16	105 N	22 W	435330.86	932902.27	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2013	2025	GOOD	Horz=YES Vert=YES	YES		FLUSH	BAR MAG IN DRILL HOLE

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 35 FT)

Disk Type
METAL ROD (WITH REMOVABLE ID DISK)

Mon. Agency
MNDT

Description: (2013) **Stamping:** DEUBLER 2013

0.5 MILE EAST OF NEW RICHLAND, 0.15 MILE EAST ALONG TRUNK HIGHWAY 30 FROM THE JUNCTION OF TRUNK HIGHWAY 30 AND TRUNK HIGHWAY 13 IN NEW RICHLAND, AT TRUNK HIGHWAY 30 MILEPOINT 168.6, 64.8 FEET NORTH OF TRUNK HIGHWAY 30, 22.8 FEET EAST OF A FIELD ENTRANCE, 10.0 FEET SOUTH OF A RIGHT-OF-WAY AND A WITNESS POST.

Station Pair: DEGNER - WASECA, MN

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1182.170	0.016	360.326	0.005	2/1	2020	00000949

Geoid Separations(ft): GEOID18 = -95.479 12B = -95.472 09 = -95.413 03 = -95.262

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Geodetic Positions Longitude	County (Feet) X	County (Feet) Y	County (Meters) X	County (Meters) Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Project Info Reference
NAD83(2011)	43 53 30.86431	93 29 02.26567	350442.335	121664.931	106815.037	37083.545	331.231		2024	GPS3701
NAD83(1996)	43 53 30.86414	93 29 02.26587	350442.320	121664.914	106815.033	37083.540	331.293	C	2024	HELLE

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/DEUBLER-DP6237-3N-17SEP2025.jpg	N	Sep 17, 2025
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/DEUBLER-DP6237-2-17SEP2025.jpg		Sep 17, 2025
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/DEUBLER-DP6237-1-17SEP2025.jpg		Sep 17, 2025

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_100311.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_100311.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: EAST **NGS Name:** EAST

County: WASECA, MN (Sheet 1)

NGS ACRN: DR3036 Get Map
NGS Quad / Sta Num : 43093144/
USGS Quad: NEW RICHLAND

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	8	106 N	22 W	435950.64	932948.40	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2018	2018	GOOD	Horz=YES Vert=YES	YES		RECESSED 3 IN.	BAR MAG IN DRILL HOLE

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 47 FT)

Disk Type
METAL ROD (WITH REMOVABLE ID DISK)

Mon. Agency
MNDT

Description: (2018) **Stamping:** EAST 2018

5.7 MILES SOUTH OF WASECA, 4.35 MILES SOUTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 14 IN WASECA, AT TRUNK HIGHWAY 13 MILEPOINT 25.9, 36.6 FEET WEST OF TRUNK HIGHWAY 13, 24.4 FEET NORTH OF A FIELD ENTRANCE, 1.0 FOOT EAST OF A WITNESS POST.

Station Pair: CONN - WASECA, MN

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1097.075	0.016	334.389	0.005	2/1	2020	00000949

Geoid Separations(ft): GEOID18 = -94.711 12B = -94.714 09 = -94.626 03 = -94.501

*** No Horizontal Positions in the Database ***

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/EAST-DR3036-3W-08AUG2018.jpg	W	Aug 8, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/EAST-DR3036-2-08AUG2018.jpg		Aug 8, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/EAST-DR3036-1-08AUG2018.jpg		Aug 8, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_109130.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_109130.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: ET 100 T USGS **NGS Name:** ET 100 T

County: WASECA, MN (Sheet 1)

NGS ACRN: PP2839 Get Map
NGS Quad / Sta Num : 44093233/
USGS Quad: MERIDEN

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	27	108 N	22 W	440725.27	932732.93		3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1960	2018	GOOD	Horz=NO Vert=NO	YES		FLUSH	STEEL SPIKE IMBED IN MON

Monument Type
CONCRETE POST (PREFABRICATED)

Disk Type
BENCH MARK DISK

Mon. Agency
USGS

Description: (1960) **Stamping:** 100 T 1960 1160

3.7 MILES NORTHEAST OF WASECA, 0.75 MILE NORTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND COUNTY ROAD 10 IN WASECA (THE JUNCTION IS 2.0 MILES NORTH OF WASECA) TO TRUNK HIGHWAY 13 MILEPOINT 35.05, THEN 2.4 MILES EAST ON 390TH AVENUE, 32.0 FEET NORTH ON 390TH AVENUE, 135.0 FEET SOUTHWEST OF THE SOUTHWEST CORNER OF A BARN, 135.0 FEET SOUTHWEST OF THE SOUTHWEST LARGE BARN. NO WITNESS POST.

Station Notes
THE SURVEY MARK IS ON PRIVATE PROPERTY AND HAS BEEN ABANDONED FOR MNDOT GEODETIC USE.

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -93.435 12B = -93.445 09 = -93.363 03 = -93.199

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Longitude	County (Feet) X	Y	County (Meters) X	Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Reference
NAD83(1996)	44 07 25.26973	93 27 32.94402	357539.205	206116.619	108978.168	62824.471	325.639	3	1999	17648
NAD83(1986)	44 07 25.25733	93 27 32.94405	357539.194	206115.364	108978.164	62824.089		3	1986	17289
NAD27	44 07 25.39792	93 27 32.15281						3	1982	16847

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/ET_100_T-PP2839-3N-26JUL2018.jpg	N	Jul 26, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/ET_100_T-PP2839-2-26JUL2018.jpg		Jul 26, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/ET_100_T-PP2839-1-26JUL2018.jpg		Jul 26, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33247.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33247.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: ET 101 T USGS **NGS Name:** ET 101 T

County: WASECA, MN (Sheet 1)

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	32	108 N	22 W	440724.52	933024.82	2	C

NGS ACRN: PP2896 Get Map
NGS Quad / Sta Num : 44093322/
USGS Quad: WASECA

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1960	2020	GOOD	Horz=YES Vert=YES	YES		PROJECTS 2 IN.	STEEL SPIKE ADJ TO MON

Monument Type
CONCRETE MONUMENT (CAST-IN-PLACE)

Disk Type
BENCH MARK DISK

Mon. Agency
USGS

Description: (2004) **Stamping:** ET 1172 101 T 1960

3.5 MILES NORTH OF WASECA, 2.75 MILES NORTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND COUNTY ROAD 13 IN WASECA, AT TRUNK HIGHWAY 13 MILEPOINT 35.05, 70.0 FEET EAST OF TRUNK HIGHWAY 13, 104.2 FEET SOUTH OF 390TH AVENUE, 1.7 FEET NORTH OF A WITNESS POST.

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1171.848	0.016	357.180	0.005	2/1	2020	00000949

Geoid Separations(ft): GEOID18 = -93.796 12B = -93.802 09 = -93.720 03 = -93.553

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Geodetic Positions Longitude	County (Feet) X	County (Feet) Y	County (Meters) X	County (Meters) Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Project Info Reference
NAD83(2011)	44 07 24.52458	93 30 24.82328	345000.847	206127.267	105156.469	62827.717	328.606		2020	GPS3368
NAD83(1996)	44 07 24.52452	93 30 24.82354	345000.828	206127.261	105156.463	62827.715	328.663	C	2020	HTH13
NAD83(1986)	44 07 24.50488	93 30 24.83481	344999.992	206125.278	105156.208	62827.110		3	1986	17289
NAD27	44 07 24.64772	93 30 24.03755						3	1982	16847

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/ET_101_T-PP2896-3E-10MAR2020.jpg	E	Mar 10, 2020
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/ET_101_T-PP2896-2-10MAR2020.jpg		Mar 10, 2020
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/ET_101_T-PP2896-1-10MAR2020.jpg		Mar 10, 2020

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33248.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33248.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: ET 12 JS USGS **NGS Name:** ET 12 JS

County: WASECA, MN (Sheet 1)

NGS ACRN: OO0748 Get Map
NGS Quad / Sta Num : 43093414/
USGS Quad: WALDORF

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	20	105 N	23 W	435329.30	933736.06	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1965	2013	DESTROYED	Horz=NO Vert=NO	NO		PROJECTS 3 IN.	STEEL ROD IMBED IN MON

Monument Type	Disk Type	Mon. Agency
UNKNOWN	SURVEY DISK	USGS

Description: (1979) **Stamping:** ET 12 JS 1965

6.5 MILES WEST OF NEW RICHLAND, 4.79 MILES SOUTHEAST OF WALDORF, 3.05 MILES SOUTH ALONG TRUNK HIGHWAY 83 FROM THE JUNCTION OF TRUNK HIGHWAY 83 AND COUNTY ROAD 4 (35TH STREET) IN WALDORF, THEN 3.5 MILES EAST ALONG TRUNK HIGHWAY 30 TO THE INTERSECTION WITH COUNTY ROAD 11, AT TRUNK HIGHWAY 30 MILEPOINT 161.45, 167.0 FEET EAST OF TRUNK HIGHWAY 30, 4.0 FEET WEST OF A POWER POLE, 1.5 FEET EAST OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Elevations)

Vertical Datum	Orthometric (Feet) Height	Accuracy	Orthometric (Meters) Height	Accuracy	Survey Order/(Class)	Project Info Year	Reference
NAVD88	1146.956	0.016	349.593	0.005	2/1	1991	00000025
NGVD29	1146.848	0.016	349.560	0.005	2	1980	L24529

Geoid Separations(ft): GEOID18 = -95.771 12B = -95.761 09 = -95.695 03 = -95.571

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Longitude	County (Feet) X	Y	County (Meters) X	Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Reference
NAD83(1996)	43 53 29.29813	93 37 36.05984	312816.016	121797.722	95346.5130	37124.020	320.520	3	1999	17648
NAD83(1986)	43 53 29.28325	93 37 36.05940	312816.036	121796.215	95346.5180	37123.561		3	1986	17289
NAD27	43 53 29.44673	93 37 35.25741						3	1981	16434

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33249.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33249.pdf

ET 13 JS USGS

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: ET 13 JS USGS **NGS Name:** ET 13 JS

County: WASECA, MN (Sheet 1)

NGS ACRN: OO1216 Get Map
NGS Quad / Sta Num : 43093411/
USGS Quad: OTISCO

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	19	105 N	22 W	435237.98	933035.63		3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1965	2008	DESTROYED	Horz=NO Vert=NO	NO		PROJECTS 5 IN.	SEE DESCRIPTION

Monument Type
CONCRETE MONUMENT (CAST-IN-PLACE)

Disk Type
TRAVERSE STATION DISK

Mon. Agency
USGS

Description: (1965) **Stamping:** ET 13 JS 1965

1.25 MILES SOUTH AND 0.5 MILE WEST OF NEW RICHLAND, 1.0 MILE WEST ON TRUNK HIGHWAY 30 FROM THE JUNCTION OF TRUNK HIGHWAY 30 AND TRUNK HIGHWAY 13 IN NEW RICHLAND, THEN 1.0 MILE SOUTH ON COUNTY ROAD 1 (130TH STREET), THEN 0.1 MILE WEST ON 220TH AVENUE, 305.0 FEET WEST OF A DRIVE NORTH, 32.0 FEET NORTH OF AN EAST-WEST GRAVEL ROAD, 3.0 FEET WEST OF A TELEPHONE POLE.

Station Notes
THE TIES FALL IN A CULTIVATED FIELD.

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -95.689 12B = -95.682 09 = -95.623 03 = -95.479

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Longitude	County (Feet) X	Y	County (Meters) X	Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Reference
NAD83(1996)	43 52 37.97883	93 30 35.62811	343566.878	116357.743	104719.394	35465.911	338.950	3	1999	17648
NAD83(1986)	43 52 37.96647	93 30 35.62699	343566.951	116356.491	104719.416	35465.529		3	1986	17289
NAD27	43 52 38.11967	93 30 34.84292						3	1981	16434

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33250.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33250.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: ET 24 WDM USGS

NGS Name: ET 24 WDM

County: WASECA, MN (Sheet 1)

NGS ACRN: PP2838 Get Map
NGS Quad / Sta Num : 44093233/
USGS Quad: MERIDEN

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	5	106 N	22 W	440031.62	932948.24		3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1960	2018	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type
CONCRETE MONUMENT (CAST-IN-PLACE)

Disk Type
TRAVERSE STATION DISK

Mon. Agency
USGS

Description: (1960)

Stamping: ET 24 WDM 1960

4.8 MILES SOUTH AND 0.5 MILE EAST OF WASECA, 5.2 MILES SOUTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 14, 217.0 FEET SOUTH-SOUTHWEST OF A FIELD ROAD WEST TO A GRAVEL QUARRY, 49.0 FEET WEST OF TRUNK HIGHWAY13, 35.0 FEET SOUTH OF A TELEPHONE POLE, 2.5 FEET EAST OF A FENCE, ON THE BROW OF A SMALL CUT ON THE WEST SIDE OF THE HIGHWAY.

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -94.619 12B = -94.623 09 = -94.534 03 = -94.406

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Longitude	County (Feet) X	Y	County (Meters) X	Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Reference
NAD83(1996)	44 00 31.61937	93 29 48.24174	347375.200	164295.368	105880.173	50077.328	318.275	3	1999	17648
NAD83(1986)	44 00 31.60639	93 29 48.24125	347375.227	164294.053	105880.181	50076.928		3	1986	17289
NAD27	44 00 31.74767	93 29 47.45462						3	1982	16847

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33251.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33251.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: ET 8 EDJ USGS

NGS Name: ET 8 EDJ

County: WASECA, MN (Sheet 1)

NGS ACRN: PP2906 Get Map
NGS Quad / Sta Num : 44093324/
USGS Quad: ELYSIAN

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	30	108 N	23 W	440751.85	933835.46		3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1963	2018	GOOD	Horz=YES Vert=YES	YES		FLUSH	STEEL ROD IMBED IN MON

Monument Type
CONCRETE POST (PREFABRICATED)

Disk Type
SURVEY DISK

Mon. Agency
USGS

Description: (1963)

Stamping: ET 8 EDJ 1963

3.3 MILES EAST OF JANESVILLE, 2.7 MILES EAST ALONG COUNTY ROAD 19 FROM THE JUNCTION OF COUNTY ROAD 19 AND COUNTY ROAD 3 IN JANESVILLE, THEN 0.5 MILE NORTH ALONG 63RD STREET, 18.0 FEET NORTH OF 395TH STREET EXTENDED, 22.0 FEET WEST OF 63RD STREET EXTENDED, 211.36 FEET WEST OF ET 8 EDJ USGS RM 1.

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -94.524 12B = -94.527 09 = -94.455 03 = -94.271

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Longitude	County (Feet) X	Y	County (Meters) X	Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Reference
NAD83(1996)	44 07 51.86076	93 38 35.44959	309236.433	209181.188	94255.4530	63758.554	311.327	3	1999	17648
NAD83(1986)	44 07 51.85512	93 38 35.44890	309236.478	209180.617	94255.4670	63758.380		3	1986	17289
NAD27	44 07 51.99694	93 38 34.64286						3	1982	16847

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/ET_8_EDJ-PP2906-3N-01AUG2018.jpg	N	Aug 1, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/ET_8_EDJ-PP2906-2-01AUG2018.jpg		Aug 1, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/ET_8_EDJ-PP2906-1-01AUG2018.jpg		Aug 1, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33252.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33252.pdf

ET 8 EDJ USGS AZ MK

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: ET 8 EDJ USGS AZ MK

NGS Name: ET 8 EDJ AZ MK

County: WASECA, MN (Sheet 1)

NGS ACRN: CJ4077 Get Map
NGS Quad / Sta Num : 44093324/
USGS Quad: ELYSIAN

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	30	108 N	23 W	440739.00	933836.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1963	2014	DESTROYED	Horz=NO Vert=NO	NO		FLUSH	SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
UNKNOWN	AZIMUTH MARK DISK	USGS

Description: (1964)

Stamping: ET 8 EDJ 1963 AZ

3.35 MILES NORTHEAST OF JANESVILLE, 2.7 MILES EAST ON COUNTY ROAD 19 FROM THE JUNCTION OF COUNTY ROAD 19 AND EAST ELYSIAN LAKE ROAD, THEN 0.3 MILE NORTH ON 63RD STREET, AT THE CREST OF A SMALL RIDGE, 25.0 FEET WEST AND 13.0 FEET SOUTH OF A NORTH-SOUTH ROAD, AT A FIELD ENTRANCE.

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -94.540 12B = -94.544 09 = -94.472 03 = -94.288

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_67379.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_67379.pdf

ET 8 EDJ USGS RM 1

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: ET 8 EDJ USGS RM 1 **NGS Name:** ET 8 EDJ RM 1

County: WASECA, MN (Sheet 1)

NGS ACRN: CJ4078 Get Map
NGS Quad / Sta Num : 44093324/
USGS Quad: ELYSIAN

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	30	108 N	23 W	440751.43	933832.62		3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1963	2018	GOOD	Horz=NO Vert=YES	YES		RECESSED 2 IN.	STEEL ROD IMBED IN MON

Monument Type
CONCRETE MONUMENT (CAST-IN-PLACE)

Disk Type
REFERENCE MARK DISK

Mon. Agency
USGS

Description: (1963) **Stamping:** ET 8 EDJ 1963 RM 1

3.35 MILES EAST OF JANESVILLE, 2.7 MILES EAST ALONG COUNTY ROAD 19 FROM THE JUNCTION OF COUNTY ROAD 19 AND COUNTY ROAD 3 IN JANESVILLE, THEN 0.5 MILE NORTH ALONG 63RD STREET, THEN 0.05 MILE EAST ALONG 395TH AVENUE, 31.0 FEET SOUTH OF 395TH AVENUE, 211.36 FEET EAST-SOUTHEAST OF STATION ET 8 EDJ USGS, 4.5 FEET NORTH-NORTHWEST OF A POWER POLE WITH A GUY WIRE, 1.4 FEET NORTH OF A WITNESS POST.

Station Notes

DUE TO THE PROXIMITY TO A POWER POLE, THIS SURVEY MARK HAS BEEN ABANDONED FOR MNDOT GEODETIC HORIZONTAL SURVEYS.

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -94.521 12B = -94.524 09 = -94.452 03 = -94.268

*** No Horizontal Positions in the Database ***

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/ET_8_EDJ_RM_1-CJ4078-3S-01AUG2018.jpg	S	Aug 1, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/ET_8_EDJ_RM_1-CJ4078-2-01AUG2018.jpg		Aug 1, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/ET_8_EDJ_RM_1-CJ4078-1-01AUG2018.jpg		Aug 1, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_67380.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_67380.pdf

ET 9 EDJ USGS

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: ET 9 EDJ USGS
NGS Name: ET 9 EDJ RESET

County: WASECA, MN (Sheet 1)

NGS ACRN: PP2899 Get Map
NGS Quad / Sta Num : 44093322/
USGS Quad: WASECA

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	32	107 N	23 W	440120.60	933650.55		3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1964	2018	DESTROYED	Horz=NO Vert=NO	NO		PROJECTS 6 IN.	SEE DESCRIPTION

Monument Type
CONCRETE MONUMENT (CAST-IN-PLACE)

Disk Type
TRAVERSE STATION DISK

Mon. Agency
USGS

Description: (1964)

Stamping: ET 9 EDJ 1963 RESET 1964

4.0 MILES SOUTH AND 5.25 MILES WEST OF WASECA, 1.3 MILES WEST-NORTHWEST ON TRUNK HIGHWAY 14 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 14, THEN 0.7 MILE WEST ON COUNTY ROAD 2, THEN 2.0 MILES SOUTH ON COUNTY ROAD 27, THEN 1.9 MILES WEST ON COUNTY ROAD 9, THEN 1.0 MILE CONTINUED SOUTH ON COUNTY ROAD 9, THEN 0.4 MILE CONTINUED WEST ON COUNTY ROAD 9, THEN 1.1 MILES CONTINUED SOUTH ON COUNTY ROAD 9, THEN 0.8 MILE WEST ON 320TH AVENUE, 45.0 FEET NORTH OF A GRAVEL ROAD, 12.0 FEET EAST OF A PRIVATE ROAD NORTH.

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -95.029 12B = -95.029 09 = -94.954 03 = -94.819

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Longitude	County (Feet) X	Y	County (Meters) X	Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Reference
NAD83(1996)	44 01 20.60138	93 36 50.55083	316552.216	169494.499	96485.3090	51662.027	288.658	3	1999	17648
NAD83(1986)	44 01 20.59475	93 36 50.55292	316552.058	169493.829	96485.2600	51661.822		3	1986	17289
NAD27	44 01 20.73469	93 36 49.74758						3	1982	16847

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33253.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33253.pdf

ET 9 EDJ USGS RM 1 RESET

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: ET 9 EDJ USGS RM 1 RESET
NGS Name: ET 9 EDJ RM 1 RESET

County: WASECA, MN (Sheet 1)

NGS ACRN: CJ4079 Get Map
NGS Quad / Sta Num : 44093322/
USGS Quad: WASECA

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	32	107 N	23 W	440120.51	933647.67		3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1964	2018	GOOD	Horz=NO Vert=YES	YES		FLUSH	STEEL ROD IMBED IN MON

Monument Type
CONCRETE MONUMENT (CAST-IN-PLACE)

Disk Type
REFERENCE MARK DISK

Mon. Agency
USGS

Description: (1964)

Stamping: ET 9 EDJ 1 1963 RESET 1964

6.8 MILES SOUTHWEST OF WASECA, 0.25 MILE WEST ALONG TRUNK HIGHWAY 14 FROM THE JUNCTION OF TRUNK HIGHWAY 14 AND TRUNK HIGHWAY 13 IN WASECA, THEN 1.0 MILE SOUTH ON COUNTY ROAD 4 (128TH STREET), THEN 5.45 MILES WEST AND SOUTH ON COUNTY ROAD 9 (340TH STREET), 47.0 FEET NORTH OF COUNTY ROAD 9 (320TH AVENUE), 3.0 FEET SOUTHWEST OF A POWER POLE, 1.0 FOOT SOUTH OF A WITNESS POST.

Station Notes

DUE TO TREE COVER, THIS SURVEY MARK HAS BEEN ABANDONED FOR MNDOT GEODETIC HORIZONTAL SURVEYS.

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -95.026 12B = -95.029 09 = -94.951 03 = -94.819

*** No Horizontal Positions in the Database ***

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/ET_9_EDJ_RM_1_RESET-CJ4079-3N-31JUL2018.jpg	N	Jul 31, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/ET_9_EDJ_RM_1_RESET-CJ4079-2-31JUL2018.jpg		Jul 31, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/ET_9_EDJ_RM_1_RESET-CJ4079-1-31JUL2018.jpg		Jul 31, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_67381.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_67381.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: ETHAN **NGS Name:** ETHAN

County: WASECA, MN (Sheet 1)

NGS ACRN: DP5037 Get Map
NGS Quad / Sta Num : 44093233/
USGS Quad: MERIDEN

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	20	107 N	22 W	440335.41	932938.92	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2014	2018	GOOD	Horz=YES Vert=YES	YES		RECESSED 2 IN.	BAR MAG IN DRILL HOLE

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 15 FT)

Disk Type
METAL ROD (WITH REMOVABLE ID DISK)

Mon. Agency
MNDT

Description: (2014) **Stamping:** ETHAN 2014

1.5 MILES SOUTH OF WASECA, 0.05 MILE EAST ALONG TRUNK HIGHWAY 14 FROM THE JUNCTION OF TRUNK HIGHWAY 14 AND TRUNK HIGHWAY 13 IN WASECA, AT TRUNK HIGHWAY 14 MILEPOINT 160.7, 33.4 FEET SOUTH OF AN EASTBOUND TRUNK HIGHWAY 14 FOG LINE, 104.3 FEET EAST OF A WEATHER AND CAMERA STATION FIRE NUMBER 34502, 3.2 FEET NORTH OF A WITNESS POST.

Station Pair: BABCOCK - WASECA, MN

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Accuracy	Orthometric (Meters) Height	Accuracy	Survey Order/(Class)	Project Info Year	Reference
NAVD88	1153.643	0.016	351.631	0.005	2/1	2020	00000949

Geoid Separations(ft): GEOID18 = -94.196 12B = -94.203 09 = -94.124 03 = -93.976

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Longitude	County (Feet) X	Y	County (Meters) X	Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Reference
NAD83(2011)	44 03 35.40750	93 29 38.92112	348186.738	182901.835	106127.530	55748.591	322.927		2014	GPS3043
NAD83(1996)	44 03 35.40734	93 29 38.92122	348186.731	182901.819	106127.528	55748.586	322.994	C	2014	HNEW14

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/ETHAN-DP5037-3S-01AUG2018.jpg	S	Aug 1, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/ETHAN-DP5037-2-01AUG2018.jpg		Aug 1, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/ETHAN-DP5037-1-01AUG2018.jpg		Aug 1, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_101494.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_101494.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: FRED

NGS Name: FRED

County: WASECA, MN (Sheet 1)

NGS ACRN: DR3039 Get Map
NGS Quad / Sta Num : 43093144/
USGS Quad: NEW RICHLAND

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	32	106 N	22 W	435641.71	932930.36	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2018	2023	GOOD	Horz=YES Vert=YES	YES		RECESSED 5 IN.	BAR MAG IN DRILL HOLE

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 43 FT)

Disk Type
METAL ROD (WITH REMOVABLE ID DISK)

Mon. Agency
MNDT

Description: (2018)

Stamping: FRED 2018

3.4 MILES NORTH OF NEW RICHLAND, 3.75 MILES NORTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 30 IN NEW RICHLAND, AT TRUNK HIGHWAY 13 MILEPOINT 22.2, 58.1 FEET WEST OF TRUNK HIGHWAY 13, 26.0 FEET NORTH OF A FIELD ENTRANCE, 1.0 FOOT EAST OF A WITNESS POST.

Station Pair: CHARLE - WASECA, MN

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1128.771	0.016	344.050	0.005	2/1	2020	00000949

Geoid Separations(ft): GEOID18 = -95.105 12B = -95.105 09 = -95.033 03 = -94.898

*** No Horizontal Positions in the Database ***

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/FRED-DR3039-3W-24APR2023.jpg	W	Apr 24, 2023
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/FRED-DR3039-2-24APR2023.jpg		Apr 24, 2023
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/FRED-DR3039-1-24APR2023.jpg		Apr 24, 2023

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_109131.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_109131.pdf

FREEDOM NE

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: FREEDOM NE
NGS Name: FREEDOM NE

County: WASECA, MN (Sheet 1)

NGS ACRN: DH3114 Get Map
NGS Quad / Sta Num : 44093323/
USGS Quad: JANESVILLE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	12	106 N	24 W	440027.34	933856.54		C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2003	2024	GOOD	Horz=YES Vert=YES	YES		FLUSH	STEEL ROD IMBED IN MON

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	SURVEY DISK	MN-161

Description: (2004) **Stamping:** FREEDOM-NE 2003

5.6 MILES NORTHEAST OF WALDORF, 5.45 MILES NORTH ALONG COUNTY ROAD 3 FROM THE JUNCTION OF COUNTY ROAD 3 AND TRUNK HIGHWAY 83 IN WALDORF, THEN 2.4 MILES EAST ON 310TH AVENUE, 33.2 FEET SOUTH OF 310TH AVENUE, 58.2 FEET WEST OF A POWER POLE, 26.1 FEET EAST OF A FIELD ENTRANCE, THEN 2.4 MILES EAST ON 310TH AVENUE, 1.0 FOOT NORTH OF A WITNESS POST.

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -95.147 12B = -95.147 09 = -95.065 03 = -94.954

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Longitude	County (Feet) X	Y	County (Meters) X	Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Reference
NAD83(2011)	44 00 27.33642	93 38 56.53954	307298.464	164180.542	93664.7590	50042.329	293.722	C	2025	H23BLUE
NAD83(2007)	44 00 27.33645	93 38 56.54032	307298.407	164180.545	93664.7420	50042.330	293.746		2007	GPS2300
NAD83(1996)	44 00 27.33609	93 38 56.53948	307298.468	164180.508	93664.7600	50042.319	293.794	C	2005	GPS2088

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/FREEDOM_NE-DH3114-3S-09OCT2019.jpg	S	Oct 9, 2019
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/FREEDOM_NE-DH3114-2-09OCT2019.jpg		Oct 9, 2019
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/FREEDOM_NE-DH3114-1-09OCT2019.jpg		Oct 9, 2019

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_50672.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_50672.pdf

FREEDOM SW

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: FREEDOM SW **NGS Name:** FREEDOM SW

County: WASECA, MN (Sheet 1)

NGS ACRN: DH3115 Get Map
NGS Quad / Sta Num : 43093441/
USGS Quad: MAPLETON NE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	31	106 N	24 W	435606.37	934604.16		C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2003	2022	GOOD	Horz=YES Vert=YES	YES		FLUSH	STEEL ROD IMBED IN MON

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	SURVEY DISK	MN-161

Description: (2004) **Stamping:** 2003 FREEDOM-SW

3.5 MILES WEST OF WALDORF, 3.5 MILES WEST ALONG COUNTY ROAD 4 (260TH AVENUE) FROM THE JUNCTION OF COUNTY ROAD 4 AND TRUNK HIGHWAY 83 IN WALDORF, 40.0 FEET NORTH OF COUNTY ROAD 4 (260TH AVENUE), 48.1 FEET EAST OF COUNTY ROAD 14 (WEST COUNTY LINE ROAD), 20.2 FEET SOUTHEAST OF THE POWER POLES, 19.0 FEET WEST OF A FIELD ENTRANCE, 14.0 FEET EAST OF A WITNESS POST.

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -95.197 12B = -95.190 09 = -95.115 03 = -94.997

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Longitude	County (Feet) X	Y	County (Meters) X	Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Reference
NAD83(2011)	43 56 06.36819	93 46 04.16225	275772.310	138054.792	84055.5680	42079.185	292.023		2012	GPS2800
NAD83(2007)	43 56 06.36819	93 46 04.16301	275772.254	138054.793	84055.5510	42079.185	292.047		2007	GPS2300
NAD83(1996)	43 56 06.36760	93 46 04.16224	275772.310	138054.733	84055.5680	42079.167	292.094	C	2005	GPS2088

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/FREEDOM_SW-DH3115-3N-30AUG2022.jpg	N	Aug 30, 2022
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/FREEDOM_SW-DH3115-2-30AUG2022.jpg		Aug 30, 2022
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/FREEDOM_SW-DH3115-1-30AUG2022.jpg		Aug 30, 2022

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_50668.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_50668.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: FUSS **NGS Name:** FUSS

County: WASECA, MN (Sheet 1)

NGS ACRN: DR3028 Get Map
NGS Quad / Sta Num : 44093321/
USGS Quad: WATERVILLE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	17	108 N	22 W	440910.67	933025.09	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2018	2020	GOOD	Horz=YES Vert=YES	YES		RECESSED 3 IN.	BAR MAG IN DRILL HOLE

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 33 FT)

Disk Type
METAL ROD (WITH REMOVABLE ID DISK)

Mon. Agency
MNDT

Description: (2018) **Stamping:** FUSS 2018

5.0 MILES NORTH OF WASECA, 6.85 MILES NORTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 14 IN WASECA, AT TRUNK HIGHWAY 13 MILEPOINT 37.1, 65.5 FEET EAST OF TRUNK HIGHWAY 13, 81.7 FEET NORTH OF COUNTY ROAD 22(410TH AVENUE), 1.0 FOOT WEST OF A WITNESS POST.

Station Pair: 8102 HP - WASECA, MN

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1143.584	0.016	348.565	0.005	2/1	2020	00000949

Geoid Separations(ft): GEOID18 = -93.563 12B = -93.566 09 = -93.487 03 = -93.310

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Geodetic Positions Longitude	County (Feet) X	County (Feet) Y	County (Meters) X	County (Meters) Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Project Info Reference
NAD83(2011)	44 09 10.66966	93 30 25.08918	345058.393	216876.364	105174.009	66104.048	320.063		2020	GPS3368
NAD83(1996)	44 09 10.66956	93 30 25.08946	345058.373	216876.355	105174.002	66104.045	320.121	C	2020	HTH13

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/FUSS-DR3028-3E-10MAR2020.jpg	E	Mar 10, 2020
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/FUSS-DR3028-2-10MAR2020.jpg		Mar 10, 2020
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/FUSS-DR3028-1-10MAR2020.jpg		Mar 10, 2020

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_109132.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_109132.pdf

Geodetic Data Sheet (Brief)
GSID Station # 33254

GAITER MNDT

04/28/2026
Sheet Help

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: GAITER MNDT
NGS Name: GAITER

County: WASECA, MN (Sheet 1)

NGS ACRN: PP2825 Get Map
NGS Quad / Sta Num : 44093233/1069
USGS Quad: MERIDEN

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	21	107 N	22 W	440330.56	932808.93	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1970	2018	GOOD	Horz=NO Vert=YES	YES		FLUSH	BAR MAG IN DRILL HOLE

Monument Type
CONCRETE MONUMENT (CAST-IN-PLACE)

Disk Type
TRAVERSE STATION DISK

Mon. Agency
MNDT

Description: (1970)

Stamping: GAITER 1970

2.0 MILES SOUTHEAST OF WASECA, 0.35 MILE NORTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 14 IN WASECA, THEN 0.10 MILE NORTHEAST ON 8TH STREET SOUTHEAST, THEN 0.7 MILE SOUTHEAST ON 139TH AVENUE, THEN 0.9 MILE EAST ON 345TH AVENUE, 51.5 FEET SOUTH OF 345TH AVENUE/14TH STREET, 137.38 FEET SOUTH-SOUTHWEST OF GAITER MNDT RM 1, 90.46 FEET WEST OF GAITER MNDT RM 2, 3.4 FEET EAST OF A WITNESS POST.

Station Notes

DUE TO TREE COVER, THIS SURVEY MARK HAS BEEN ABANDONED FOR MNDOT GEODETIC HORIZONTAL SURVEYS.

Leveling-Derived Orthometric Heights (Elevations)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1167.599	0.016	355.885	0.005	2/1	2016	00000870
NGVD29	1167.557	0.016	355.872	0.005	2/1	2001	VJANE

Geoid Separations(ft): GEOID18 = -94.032 12B = -94.039 09 = -93.953 03 = -93.809

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Geodetic Positions Longitude	County (Feet) X	County (Feet) Y	County (Meters) X	County (Meters) Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Project Info Reference
NAD83(2011)	44 03 30.56114	93 28 08.93424	354754.644	182366.047	108129.432	55585.282	327.215		2012	GPS2800
NAD83(2007)	44 03 30.56115	93 28 08.93500	354754.588	182366.048	108129.415	55585.283	327.238		2007	GPS2300
NAD83(1996)	44 03 30.56095	93 28 08.93424	354754.644	182366.028	108129.432	55585.276	327.285	C	2000	GPS1453
NAD83(1986)	44 03 30.54721	93 28 08.93553	354754.540	182364.637	108129.400	55584.853		2	1986	17289
NAD27	44 03 30.68171	93 28 08.14856						2	1977	16059

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/GAITER-PP2825-3S-02AUG2018.jpg	S	Aug 2, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/GAITER-PP2825-2-02AUG2018.jpg		Aug 2, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/GAITER-PP2825-1-02AUG2018.jpg		Aug 2, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33254.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33254.pdf

GAITER MNDT AZ MK

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: GAITER MNDT AZ MK **NGS Name:** GAITER AZ MK

County: WASECA, MN (Sheet 1)

NGS ACRN: PP2824 Get Map
NGS Quad / Sta Num : 44093233/
USGS Quad: MERIDEN

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	22	107 N	22 W	440305.68	932732.16	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1970	2018	GOOD	Horz=YES Vert=YES	YES		PROJECTS 3 IN.	BAR MAG IN DRILL HOLE

Monument Type
CONCRETE MONUMENT (CAST-IN-PLACE)

Disk Type
AZIMUTH MARK DISK

Mon. Agency
MNDT

Description: (1970) **Stamping:** GAITER 1970

2.5 MILES SOUTHEAST OF WASECA, 0.35 MILE NORTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 14 IN WASECA, THEN 0.10 MILE NORTHEAST ON 8TH STREET SOUTHEAST, THEN 0.7 MILE SOUTHEAST ON 14TH STREET/139TH STREET, THEN 1.0 MILE EAST ON 345TH AVENUE, THEN 0.4 MILE SOUTH ON 150TH STREET, THEN 0.4 MILE EAST ON 340TH AVENUE, 51.5 FEET NORTH OF 340TH AVENUE, 10.1 FEET EAST OF HIGH TENSION POWER POLE NUMBER 81, 2.6 FEET WEST OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Elevations)

Vertical Datum	Orthometric (Feet) Height	Accuracy	Orthometric (Meters) Height	Accuracy	Survey Order/(Class)	Project Info Year	Reference
NAVD88	1160.864	0.016	353.832	0.005	2/1	2016	00000870
NGVD29	1160.821	0.016	353.819	0.005	2/1	2001	VJANE

Geoid Separations(ft): GEOID18 = -94.016 12B = -94.022 09 = -93.934 03 = -93.796

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Longitude	County (Feet) X	Y	County (Meters) X	Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Reference
NAD83(2011)	44 03 05.68278	93 27 32.16525	357423.158	179828.908	108942.796	54811.961	325.169		2014	GPS3043
NAD83(2007)	44 03 05.68278	93 27 32.16602	357423.101	179828.909	108942.779	54811.961	325.192		2007	GPS2300
NAD83(1996)	44 03 05.68246	93 27 32.16532	357423.152	179828.876	108942.795	54811.951	325.242	C	2014	HNEW14
NAD83(1986)	44 03 05.66865	93 27 32.16626	357423.075	179827.478	108942.771	54811.525		3	1986	17289
NAD27	44 03 05.80337	93 27 31.37992						3	1977	16059

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/GAITER_AZ_MK-PP2824-3N-02AUG2018.jpg	N	Aug 2, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/GAITER_AZ_MK-PP2824-2-02AUG2018.jpg		Aug 2, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/GAITER_AZ_MK-PP2824-1-02AUG2018.jpg		Aug 2, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33255.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33255.pdf

GAITER MNDT RM 1

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: GAITER MNDT RM 1 **NGS Name:** GAITER RM 1

County: WASECA, MN (Sheet 1)

NGS ACRN: CJ3519 Get Map
NGS Quad / Sta Num : 44093233/1069
USGS Quad: MERIDEN

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	21	107 N	22 W	440331.54	932807.64	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1970	2018	GOOD	Horz=YES Vert=YES	YES		PROJECTS 4 IN.	BAR MAG IN DRILL HOLE

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	REFERENCE MARK DISK	MNDT

Description: (1970) **Stamping:** GAITER NO 1 1970

2.0 MILES SOUTHEAST OF WASECA, 0.35 MILE NORTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 14 IN WASECA, THEN 0.10 MILE NORTHEAST ON 8TH STREET SOUTHEAST, THEN 0.7 MILE SOUTHEAST ON 14TH STREET/139TH STREET, THEN 0.9 MILE EAST ON 345TH AVENUE, 137.38 FEET NORTH-NORTHEAST OF STATION GAITER, 48.0 FEET NORTH OF 14TH STREET/345TH AVENUE, 96.1 FEET NORTH OF GAITER MNDT RM 2, 6.0 FEET SOUTHWEST OF HIGH TENSION POLE NUMBER 63, 2.0 FEET NORTH OF A WITNESS POST.

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Accuracy	Orthometric (Meters) Height	Accuracy	Survey Order/(Class)	Project Info Year	Reference
NAVD88	1167.219	0.016	355.769	0.005	2/1	2016	00000870

Geoid Separations(ft): GEOID18 = -94.029 12B = -94.035 09 = -93.947 03 = -93.806

*** No Horizontal Positions in the Database ***

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/GAITER_RM_1-CJ3519-3N-02AUG2018.jpg	N	Aug 2, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/GAITER_RM_1-CJ3519-2-02AUG2018.jpg		Aug 2, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/GAITER_RM_1-CJ3519-1-02AUG2018.jpg		Aug 2, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_67383.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_67383.pdf

Geodetic Data Sheet (Brief)
GSID Station # 67384

GAITER MNDT RM 2

04/28/2026
Sheet Help

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: GAITER MNDT RM 2
NGS Name: GAITER RM 2

County: WASECA, MN (Sheet 1)

NGS ACRN: CJ3520 Get Map
NGS Quad / Sta Num : 44093233/1069
USGS Quad: MERIDEN

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	21	107 N	22 W	440330.59	932807.69	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1970	2018	GOOD	Horz=NO Vert=YES	YES		PROJECTS 4 IN.	BAR MAG IN DRILL HOLE

Monument Type
CONCRETE MONUMENT (CAST-IN-PLACE)

Disk Type
REFERENCE MARK DISK

Mon. Agency
MNDT

Description: (1970)

Stamping: GAITER NO 2 1970

2.0 MILES SOUTHEAST OF WASECA, 0.35 MILE NORTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 14 IN WASECA, THEN 0.10 MILE NORTHEAST ON 8TH STREET SOUTHEAST, THEN 0.7 MILE SOUTHEAST ON 14TH STREET/139TH STREET, THEN 0.9 MILE EAST ON 345TH AVENUE, 90.46 FEET EAST OF STATION GAITER, 48.5 FEET SOUTH OF 14TH STREET/345TH AVENUE, 96.1 FEET SOUTH OF GAITER MNDT RM 1, 26.5 FEET WEST OF DRIVEWAY NUMBER 14900, 5.9 FEET WEST OF A POWER POLE, 2.5 FEET SOUTH OF A WITNESS POST.

Station Notes

DUE TO TREE COVER, THIS SURVEY MARK HAS BEEN ABANDONED FOR MNDOT GEODETIC HORIZONTAL SURVEYS.

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Accuracy	Orthometric (Meters) Height	Accuracy	Survey Order/(Class)	Project Info Year	Reference
NAVD88	1167.937	0.016	355.988	0.005	2/1	2016	00000870

Geoid Separations(ft): GEOID18 = -94.029 12B = -94.039 09 = -93.950 03 = -93.806

*** No Horizontal Positions in the Database ***

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/GAITER_RM_2-CJ3520-3S-02AUG2018.jpg	S	Aug 2, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/GAITER_RM_2-CJ3520-2-02AUG2018.jpg		Aug 2, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/GAITER_RM_2-CJ3520-1-02AUG2018.jpg		Aug 2, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_67384.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_67384.pdf

GEHRING

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: GEHRING **NGS Name:** GEHRING

County: WASECA, MN (Sheet 1)

NGS ACRN: DP5039 Get Map
NGS Quad / Sta Num : 44093233/
USGS Quad: MERIDEN

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	24	107 N	22 W	440330.59	932511.86	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2014	2018	GOOD	Horz=YES Vert=YES	YES		RECESSED 2 IN.	BAR MAG IN DRILL HOLE

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 44 FT)

Disk Type
METAL ROD (WITH REMOVABLE ID DISK)

Mon. Agency
MNDT

Description: (2014) **Stamping:** GEHRING 2014

4.6 MILES EAST-SOUTHEAST OF WASECA, 4.0 MILES EAST ALONG TRUNK HIGHWAY 14 FROM THE JUNCTION OF TRUNK HIGHWAY 14 AND TRUNK HIGHWAY 13 IN WASECA, AT TRUNK HIGHWAY 14 MILEPOINT 164.65, 33.7 FEET SOUTH OF EASTBOUND TRUNK HIGHWAY 14, 1.5 FEET NORTH OF A WITNESS POST.

Station Pair: WOLCOTT - WASECA, MN

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1129.811	0.016	344.367	0.005	2/1	2016	00000870

Geoid Separations(ft): GEOID18 = -93.707 12B = -93.707 09 = -93.622 03 = -93.478

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Geodetic Positions Longitude	County (Feet) X	County (Feet) Y	County (Meters) X	County (Meters) Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Project Info Reference
NAD83(2011)	44 03 30.59472	93 25 11.86022	367685.632	182286.673	112070.805	55561.089	315.801		2014	GPS3043
NAD83(1996)	44 03 30.59451	93 25 11.86038	367685.620	182286.652	112070.801	55561.083	315.870	C	2014	HNEW14

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/GEHRING-DP5039-3S-02AUG2018.jpg	S	Aug 2, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/GEHRING-DP5039-2-02AUG2018.jpg		Aug 2, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/GEHRING-DP5039-1-02AUG2018.jpg		Aug 2, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_101483.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_101483.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: GIBSON **NGS Name:** GIBSON

County: WASECA, MN (Sheet 1)

NGS ACRN: DP5040 Get Map
NGS Quad / Sta Num : 44093323/
USGS Quad: JANESVILLE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	36	108 N	24 W	440636.93	933848.67	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2014	2018	GOOD	Horz=YES Vert=YES	YES		RECESSED 2 IN.	BAR MAG IN DRILL HOLE

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 29 FT)

Disk Type
METAL ROD (WITH REMOVABLE ID DISK)

Mon. Agency
MNDT

Description: (2014) **Stamping:** GIBSON 2014

3.0 MILES EAST OF JANESVILLE, 3.0 MILES EAST ALONG TRUNK HIGHWAY 14 FROM THE JUNCTION OF TRUNK HIGHWAY 14 AND COUNTY ROAD 3 IN JANESVILLE, AT TRUNK HIGHWAY 14 MILEPOINT 150.8, 24.6 FEET SOUTH OF AN EASTBOUND TRUNK HIGHWAY 14 FOG LINE, 1.5 FEET NORTH OF A WITNESS POST.

Station Pair: VOSS - WASECA, MN

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1099.489	0.016	335.125	0.005	2/1	2016	00000870

Geoid Separations(ft): GEOID18 = -94.629 12B = -94.632 09 = -94.560 03 = -94.390

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Geodetic Positions Longitude	County (Feet) X	County (Feet) Y	County (Meters) X	County (Meters) Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Project Info Reference
NAD83(2011)	44 06 36.93029	93 38 48.66924	308205.068	201601.876	93941.0930	61448.375	306.286		2014	GPS3043
NAD83(1996)	44 06 36.93007	93 38 48.66966	308205.037	201601.854	93941.0830	61448.368	306.356	C	2014	HNEW14

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/GIBSON-DP5040-3S-01AUG2018.jpg	S	Aug 1, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/GIBSON-DP5040-2-01AUG2018.jpg		Aug 1, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/GIBSON-DP5040-1-01AUG2018.jpg		Aug 1, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_101489.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_101489.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: HABECK **NGS Name:** HABECK

County: WASECA, MN (Sheet 1)

NGS ACRN: DP6242 Get Map
NGS Quad / Sta Num : 43093144/
USGS Quad: NEW RICHLAND

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	24	105 N	22 W	435253.88	932451.20	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2013	2023	GOOD	Horz=YES Vert=YES	YES		RECESSED 3 IN.	BAR MAG IN DRILL HOLE

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 39 FT)

Disk Type
METAL ROD (WITH REMOVABLE ID DISK)

Mon. Agency
MNDT

Description: (2013) **Stamping:** HABECK 2013

3.8 MILES EAST OF NEW RICHLAND, 3.95 MILES EAST ALONG TRUNK HIGHWAY 30 FROM THE JUNCTION OF TRUNK HIGHWAY 30 AND TRUNK HIGHWAY 13 IN NEW RICHLAND, AT TRUNK HIGHWAY 30 MILEPOINT 172.45, 88.8 FEET SOUTHWEST OF TRUNK HIGHWAY 30, 97.3 FEET SOUTHEAST OF A FIELD ENTRANCE, 1.5 FEET NORTHWEST OF A WITNESS POST.

Station Pair: BOHM - WASECA, MN

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Accuracy	Orthometric (Meters) Height	Accuracy	Survey Order/(Class)	Project Info Year	Reference
NAVD88	1233.426	0.016	375.949	0.005	2/1	2015	00000851

Geoid Separations(ft): GEOID18 = -95.164 12B = -95.161 09 = -95.108 03 = -94.931

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Longitude	County (Feet) X	Y	County (Meters) X	Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Reference
NAD83(2011)	43 52 53.87987	93 24 51.20196	368805.209	117801.078	112412.053	35905.840	346.953		2024	GPS3701
NAD83(1996)	43 52 53.87969	93 24 51.20217	368805.193	117801.060	112412.048	35905.835	347.008	C	2024	HELLE

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/HABECK-DP6242-3SW-24APR2023.jpg	SW	Apr 24, 2023
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/HABECK-DP6242-2-24APR2023.jpg		Apr 24, 2023
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/HABECK-DP6242-1-24APR2023.jpg		Apr 24, 2023

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_100313.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_100313.pdf

Geodetic Data Sheet (Brief)
GSID Station # 39835

HANES MNDT

04/28/2026
Sheet Help

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: HANES MNDT
NGS Name: HANES

County: WASECA, MN (Sheet 1)

NGS ACRN: DF8230 Get Map
NGS Quad / Sta Num : 44093321/
USGS Quad: WATERVILLE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	1	108 N	23 W	441145.82	933140.35	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1999	2016	DESTROYED	Horz=NO Vert=NO	YES		RECESSED 2 IN.	MARKER W/BAR MAGNET

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (<10 FT) (DEPTH 5 FT)

Disk Type
SURVEY DISK

Mon. Agency
MNDT

Description: (2004)

Stamping: HANES 1999

2.0 MILES SOUTHEAST OF WATERVILLE, 2.0 MILES SOUTHEAST ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 60 IN WATERVILLE TO TRUNK HIGHWAY 13 MILEPOINT 40.55, THEN 0.05 MILE SOUTH ON COUNTY ROAD 73, THEN 0.05 MILE WEST ON 440TH AVENUE, 32.0 FEET SOUTH OF 440TH AVENUE, 237.0 FEET WEST OF COUNTY ROAD 73, 7.3 FEET WEST-NORTHWEST OF A POWER POLE, 7.1 FEET WEST OF A WITNESS POST.

Station Notes

THE DISK WAS TURNED IN TO THE OFFICE. THE ROD DEPTH IS UNKNOWN.

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1056.235	0.016	321.941	0.005	2/1	2011	00000689

Geoid Separations(ft): GEOID18 = -93.382 12B = -93.386 09 = -93.304 03 = -93.113

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Geodetic Positions Longitude	County (Feet) X	County (Feet) Y	County (Meters) X	County (Meters) Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Project Info Reference
NAD83(2011)	44 11 45.82382	93 31 40.35209	339687.476	232628.382	103536.950	70905.273	293.480		2012	GPS2800
NAD83(2007)	44 11 45.82377	93 31 40.35290	339687.417	232628.377	103536.932	70905.271	293.502		2007	GPS2300
NAD83(1996)	44 11 45.82336	93 31 40.35238	339687.455	232628.335	103536.943	70905.258	293.552	C	2008	GPS2437

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/HANES-DF8230-3S-01JUN2004.jpg	S	Jun 1, 2004
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/HANES-DF8230-2-01JUN2004.jpg		Jun 1, 2004
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/HANES-DF8230-1-01JUN2004.jpg		Jun 1, 2004

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_39835.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_39835.pdf

HANES MNDT RESET

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: HANES MNDT RESET
NGS Name: HANES RESET

County: WASECA, MN (Sheet 1)

NGS ACRN: DQ6344 Get Map
NGS Quad / Sta Num : 44093321/
USGS Quad: WATERVILLE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	1	108 N	23 W	441145.82	933140.35	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2016	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 5 IN.	BAR MAG IN DRILL HOLE

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (<10 FT) (DEPTH 10 FT)

Disk Type
METAL ROD (WITH REMOVABLE ID DISK)

Mon. Agency
MNDT

Description: (2016)

Stamping: HANES 1999 2016

2.0 MILES SOUTHEAST OF WATERVILLE, 2.0 MILES SOUTHEAST ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 60 IN WATERVILLE TO TRUNK HIGHWAY 13 MILEPOINT 40.55, THEN 0.05 MILE SOUTH ON COUNTY ROAD 73, THEN 0.05 MILE WEST ON 440TH AVENUE, 32.0 FEET SOUTH OF 440TH AVENUE, 7.3 FEET WEST-NORTHWEST OF A POWER POLE, 7.1 FEET WEST OF A WITNESS POST.

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1056.146	0.016	321.914	0.005	2/1	2019	00000938

Geoid Separations(ft): GEOID18 = -93.382 12B = -93.386 09 = -93.304 03 = -93.113

*** No Horizontal Positions in the Database ***

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/HANES_RESET-DQ6344-3S-16APR2024.jpg	S	Apr 16, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/HANES_RESET-DQ6344-2-16APR2024.jpg		Apr 16, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/HANES_RESET-DQ6344-1-16APR2024.jpg		Apr 16, 2024

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_105602.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_105602.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: HD 4 **NGS Name:** HD 4

County: WASECA, MN (Sheet 1)

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	33	105 N	24 W	435141.00	934338.00		

NGS ACRN: Get Map
NGS Quad / Sta Num : 43093413/
USGS Quad: MATAWAN

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1966	2018	DESTROYED	Horz=NO Vert=NO	NO	81503		SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
BRIDGE CURB	SURVEY DISK	MNDT

Description: (2010) **Stamping:**

8.0 MILES NORTH OF WELLS, 5.0 MILES SOUTH AND 1.5 MILES WEST OF WALDORF, IN THE SOUTHEAST CORNER OF 20TH STREET BRIDGE NUMBER 81503 OVER THE COBB RIVER, 1.5 MILES WEST ALONG TRUNK HIGHWAY 30 FROM THE JUNCTION OF TRUNK HIGHWAY 30 AND TRUNK HIGHWAY 83, 3.0 MILES SOUTH OF WALDORF, THEN 2.1 MILES SOUTH ON 20TH STREET, 14.5 FEET EAST OF 20TH STREET, IN A CONCRETE CURB OF THE EAST BRIDGE RAILING.

Station Notes
THE YEAR SET IS APPROXIMATE.

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -95.653 12B = -95.643 09 = -95.577 03 = -95.436

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33256.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33256.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: HD 5 **NGS Name:** HD 5

County: WASECA, MN (Sheet 1)

NGS ACRN: OO0745 Get Map
NGS Quad / Sta Num : 43093414/
USGS Quad: WALDORF

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	24	105 N	24 W	435330.00	933924.00	2	

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1967	2013	DESTROYED	Horz=NO Vert=NO	NO	3388		NO MAG MATERIAL

Monument Type	Disk Type	Mon. Agency
UNKNOWN	BENCH MARK DISK	MNDT

Description: (1967) **Stamping:** HD 5 1967 1117

5.0 MILES SOUTHEAST OF WALDORF, IN THE SOUTHEAST ABUTMENT OF TRUNK HIGHWAY 30 BRIDGE NUMBER 3388 OVER A DITCH, 2.05 MILES EAST OF THE JUNCTION OF TRUNK HIGHWAY 83 AND TRUNK HIGHWAY 30, AT TRUNK HIGHWAY 30 MILEPOINT 160.0, 17.3 FEET SOUTH OF TRUNK HIGHWAY 30.

Leveling-Derived Orthometric Heights (Elevations)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1117.324	0.016	340.561	0.005	2/1	1991	00000025
NGVD29	1117.216	0.016	340.528	0.005	2	1980	L24529

Geoid Separations(ft): GEOID18 = -95.741 12B = -95.731 09 = -95.666 03 = -95.538

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33257.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33257.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: HOEHN **NGS Name:** HOEHN

County: WASECA, MN (Sheet 1)

NGS ACRN: DP5041 Get Map
NGS Quad / Sta Num : 44093323/
USGS Quad: JANESVILLE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	33	108 N	24 W	440636.55	934303.96	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2014	2018	GOOD	Horz=YES Vert=YES	YES		RECESSED 2 IN.	BAR MAG IN DRILL HOLE

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 34 FT)

Disk Type
METAL ROD (WITH REMOVABLE ID DISK)

Mon. Agency
MNDT

Description: (2014) **Stamping:** HOEHN 2014

IN JANESVILLE, 0.5 MILE WEST ALONG TRUNK HIGHWAY 14 FROM THE JUNCTION OF TRUNK HIGHWAY 14 AND COUNTY ROAD 3 IN JANESVILLE, AT TRUNK HIGHWAY 14 MILEPOINT 147.30, 89.0 FEET NORTH OF WESTBOUND TRUNK HIGHWAY 14, 14.0 FEET EAST OF 25TH STREET EXTENDED, 35.0 FEET WEST-NORTHWEST OF A RIGHT-OF-WAY POST, 1.5 FEET SOUTH OF A WITNESS POST.

Station Pair: JONES - WASECA, MN

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Accuracy	Orthometric (Meters) Height	Accuracy	Survey Order/(Class)	Project Info Year	Reference
NAVD88	1032.163	0.016	314.604	0.005	2/1	2016	00000870

Geoid Separations(ft): GEOID18 = -94.675 12B = -94.678 09 = -94.600 03 = -94.442

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Longitude	County (Feet) X	Y	County (Meters) X	Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Reference
NAD83(2011)	44 06 36.54727	93 43 03.95843	289578.651	201736.021	88263.7490	61489.262	285.743		2014	GPS3043
NAD83(1996)	44 06 36.54705	93 43 03.95877	289578.626	201735.999	88263.7420	61489.256	285.808	C	2014	HNEW14

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/HOEHN-DP5041-3N-01AUG2018.jpg	N	Aug 1, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/HOEHN-DP5041-2-01AUG2018.jpg		Aug 1, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/HOEHN-DP5041-1-01AUG2018.jpg		Aug 1, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_101495.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_101495.pdf

IOSCO C

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: IOSCO C

NGS Name: IOSCO C

County: WASECA, MN (Sheet 1)

NGS ACRN: DH3116 Get Map
NGS Quad / Sta Num : 44093321/
USGS Quad: WATERVILLE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	22	108 N	23 W	440858.18	933515.34		C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2003	2018	GOOD	Horz=YES Vert=YES	YES		FLUSH	BAR MAG IN DRILL HOLE

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	SURVEY DISK	MN-161

Description: (2004) **Stamping:** IOSCO-C 2003

6.25 MILES NORTHWEST OF WASECA, 5.25 MILES NORTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND COUNTY ROAD 14 (ELM STREET) IN WASECA, THEN 4.5 MILES WEST AND NORTH ON COUNTY ROAD 22, THEN 0.75 MILE SOUTH ON 90TH STREET, 29.0 FEET EAST OF 90TH STREET, 16.0 FEET NORTH OF A FIELD ENTRANCE, 56.5 FEET EAST OF A POWER POLE.

Station Notes

NO WITNESS POST, THE SURVEY MARK IS IN A MOWED AREA.

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -94.183 12B = -94.180 09 = -94.111 03 = -93.924

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Longitude	County (Feet) X	Y	County (Meters) X	Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Reference
NAD83(2011)	44 08 58.17860	93 35 15.34238	323885.995	215773.268	98720.6490	65767.824	325.825		2014	GPS3043
NAD83(2007)	44 08 58.17858	93 35 15.34316	323885.938	215773.266	98720.6310	65767.823	325.849		2007	GPS2300
NAD83(1996)	44 08 58.17823	93 35 15.34266	323885.974	215773.230	98720.6420	65767.812	325.896	C	2014	HNEW14

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/IOSCO_C-DH3116-3E-01AUG2018.jpg	E	Aug 1, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/IOSCO_C-DH3116-2-01AUG2018.jpg		Aug 1, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/IOSCO_C-DH3116-1-01AUG2018.jpg		Aug 1, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_50656.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_50656.pdf

IOSCO MNDT

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: IOSCO MNDT
NGS Name: IOSCO

County: WASECA, MN (Sheet 1)

NGS ACRN: AI6553 Get Map
NGS Quad / Sta Num : 44093323/
USGS Quad: JANESVILLE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	4	107 N	24 W	440606.92	934228.07		C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1998	2014	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 15 FT)	SURVEY DISK	MNDT

Description: (2000) **Stamping:** IOSCO 1998

1.0 MILE SOUTH OF JANESVILLE, 1.0 MILE SOUTH ALONG COUNTY ROAD 3 (MAIN STREET) FROM THE JUNCTION OF TRUNK HIGHWAY 14 AND COUNTY ROAD 3 IN JANESVILLE, 43.0 FEET WEST OF COUNTY ROAD 3 (MAIN STREET), 15.0 FEET SOUTH OF A FIELD ENTRANCE, 11.6 FEET NORTH-NORTHEAST OF A POWER POLE, 6.6 FEET NORTH OF A WITNESS POST.

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -94.711 12B = -94.721 09 = -94.642 03 = -94.485

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Longitude	County (Feet) X	Y	County (Meters) X	Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Reference
NAD83(2011)	44 06 06.92164	93 42 28.07143	292168.201	198710.736	89053.0460	60567.154	294.439		2012	GPS2800
NAD83(2007)	44 06 06.92162	93 42 28.07221	292168.144	198710.735	89053.0280	60567.153	294.464		2007	GPS2300
NAD83(1996)	44 06 06.92125	93 42 28.07168	292168.182	198710.697	89053.0400	60567.142	294.509	C	2000	GPS1453

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_36701.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_36701.pdf

IOSCO MNDT RESET

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: IOSCO MNDT RESET
NGS Name: IOSCO RESET

County: WASECA, MN (Sheet 1)

NGS ACRN: DP5042 Get Map
NGS Quad / Sta Num : 44093323/
USGS Quad: JANESVILLE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	4	107 N	24 W	440606.92	934228.07	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2014	2018	GOOD	Horz=YES Vert=YES	YES		RECESSED 4 IN.	BAR MAG IN DRILL HOLE

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 15 FT)

Disk Type
METAL ROD (WITH REMOVABLE ID DISK)

Mon. Agency
MNDT

Description: (2014)

Stamping: IOSCO 1998 2014

1.0 MILE SOUTH OF JANESVILLE, 1.0 MILE SOUTH ALONG COUNTY ROAD 3 (MAIN STREET) FROM THE JUNCTION OF TRUNK HIGHWAY 14 AND COUNTY ROAD 3 IN JANESVILLE, 43.0 FEET WEST OF COUNTY ROAD 3 (MAIN STREET), 15.0 FEET SOUTH OF A FIELD ENTRANCE, 11.6 FEET NORTH-NORTHEAST OF A POWER POLE, 5.5 FEET NORTH OF A WITNESS POST.

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1060.506	0.016	323.243	0.005	2/1	2016	00000870

Geoid Separations(ft): GEOID18 = -94.711 12B = -94.721 09 = -94.642 03 = -94.485

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Geodetic Positions Longitude	County (Feet) X	County (Feet) Y	County (Meters) X	County (Meters) Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Project Info Reference
NAD83(2011)	44 06 06.92009	93 42 28.07257	292168.116	198710.580	89053.0200	60567.106	294.382		2014	GPS3043
NAD83(1996)	44 06 06.91986	93 42 28.07292	292168.091	198710.557	89053.0120	60567.099	294.447	C	2014	HNEW14

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/IOSCO_RESET-DP5042-3W-01AUG2018.jpg	W	Aug 1, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/IOSCO_RESET-DP5042-2-01AUG2018.jpg		Aug 1, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/IOSCO_RESET-DP5042-1-01AUG2018.jpg		Aug 1, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_101447.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_101447.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: JANESVILLE

NGS Name: JANESVILLE

County: WASECA, MN (Sheet 1)

NGS ACRN: PP1723 Get Map
NGS Quad / Sta Num : 44093323/
USGS Quad: JANESVILLE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	34	108 N	24 W	440703.00	934227.00	2	

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1933	1938	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
CONCRETE MAT FOUNDATION (NON-PAVEMENT)	BENCH MARK DISK	NGS

Description: (2010) **Stamping:** JANESVILLE 1933

IN JANESVILLE, ON THE EAST SIDE OF COUNTY ROAD 3 (MAIN STREET) ABOUT 300.0 FEET NORTH OF TRUNK HIGHWAY 14, IN A CIVIL WAR MEMORIAL MONUMENT AT THE JANESVILLE FIRE STATION, IN THE SOUTHEAST CORNER OF THE CONCRETE BLOCK SUPPORTING THE MONUMENT.

Leveling-Derived Orthometric Heights (Elevations)

Vertical Datum	Orthometric (Feet) Height	Accuracy	Orthometric (Meters) Height	Accuracy	Survey Order/(Class)	Project Info Year	Reference
NAVD88	1071.084	0.016	326.467	0.005	2/0	1991	00000025
NGVD29	1070.953	0.016	326.427	0.005	2	1935	CUTLER-VERT

Geoid Separations(ft): GEOID18 = -94.655 12B = -94.659 09 = -94.580 03 = -94.419

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_54356.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_54356.pdf

JANESVILLE C

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: JANESVILLE C
NGS Name: JANESVILLE C

County: WASECA, MN (Sheet 1)

NGS ACRN: DH3117 Get Map
NGS Quad / Sta Num : 44093324/
USGS Quad: ELYSIAN

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	14	108 N	24 W	440923.11	934106.65		C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2003	2021	GOOD	Horz=YES Vert=YES	YES		FLUSH	STEEL ROD IMBED IN MON

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	SURVEY DISK	MN-161

Description: (2004) **Stamping:** 2003 JANESVILLE-C

2.5 MILES NORTHEAST OF JANESVILLE, 3.95 MILES NORTH AND EAST ALONG COUNTY ROAD 3 FROM THE JUNCTION OF COUNTY ROAD 3 AND TRUNK HIGHWAY 14 IN JANESVILLE, THEN 0.25 MILE EAST ON 412TH AVENUE, 15.0 FEET NORTH OF 412TH AVENUE, 7.0 FEET EAST OF A POWER POLE, 4.6 FEET EAST-SOUTHEAST OF A WITNESS POST.

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -94.488 12B = -94.491 09 = -94.419 03 = -94.229

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Longitude	County (Feet) X	Y	County (Meters) X	Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Reference
NAD83(2011)	44 09 23.10808	93 41 06.65226	298294.555	218521.311	90920.3620	66605.429	300.145		2012	GPS2800
NAD83(2007)	44 09 23.10806	93 41 06.65305	298294.498	218521.309	90920.3450	66605.428	300.170		2007	GPS2300
NAD83(1996)	44 09 23.10769	93 41 06.65251	298294.537	218521.272	90920.3570	66605.417	300.211	C	2005	GPS2088

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/JANESVILLE_C-DH3117-3N-19APR2021.jpg	N	Apr 19, 2021
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/JANESVILLE_C-DH3117-2-19APR2021.jpg		Apr 19, 2021
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/JANESVILLE_C-DH3117-1-19APR2021.jpg		Apr 19, 2021

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_50655.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_50655.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: JANESVILLE MNDT **NGS Name:** JANESVILLE

County: WASECA, MN (Sheet 1)

NGS ACRN: PP2901 Get Map
NGS Quad / Sta Num : 44093323/1015
USGS Quad: JANESVILLE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	10	107 N	24 W	440516.10	934205.43		C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1970	2018	GOOD	Horz=YES Vert=YES	YES		FLUSH	STEEL SPIKE IMBED IN MON

Monument Type
CONCRETE MONUMENT (CAST-IN-PLACE)

Disk Type
TRAVERSE STATION DISK

Mon. Agency
MNDT

Description: (2003) **Stamping:** JANESVILLE 1970

2.0 MILES SOUTH OF JANESVILLE, NEAR A RADIO TOWER, 1.5 MILES SOUTH ALONG COUNTY ROAD 3 FROM THE JUNCTION OF COUNTY ROAD 3 AND TRUNK HIGHWAY 14 IN JANESVILLE, THEN 0.30 MILE EAST ON 365TH AVENUE, 154.5 FEET NORTH OF 365TH AVENUE, 104.17 FEET EAST OF JANESVILLE MNDT RM 2, 64.10 FEET NORTH-NORTHEAST OF JANESVILLE MNDT RM 1, 54.8 FEET EAST-NORTHEAST OF A FENCE CORNER AROUND A TOWER, 16.0 FEET EAST OF AN ENTRANCE, 3.7 FEET SOUTH OF A WITNESS POST.

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -94.770 12B = -94.777 09 = -94.701 03 = -94.550

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Longitude	County (Feet) X	Y	County (Meters) X	Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Reference
NAD83(2011)	44 05 16.09658	93 42 05.43061	293771.333	193548.213	89541.6810	58993.613	299.336		2012	GPS2800
NAD83(2007)	44 05 16.09656	93 42 05.43139	293771.276	193548.212	89541.6640	58993.613	299.361		2007	GPS2300
NAD83(1996)	44 05 16.09627	93 42 05.43109	293771.298	193548.182	89541.6710	58993.604	299.410	C	2005	GPS2088
NAD83(1986)	44 05 16.09140	93 42 05.42845	293771.486	193547.687	89541.7280	58993.453		2	1986	17289
NAD27	44 05 16.21095	93 42 04.62114						2	1977	16059

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/JANESVILLE-PP2901-3E-31JUL2018.jpg	E	Jul 31, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/JANESVILLE-PP2901-2-31JUL2018.jpg		Jul 31, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/JANESVILLE-PP2901-1-31JUL2018.jpg		Jul 31, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33258.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33258.pdf

JANESVILLE MNDT AZ MK

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: JANESVILLE MNDT AZ MK **NGS Name:** JANESVILLE AZ MK

County: WASECA, MN (Sheet 1)

NGS ACRN: PP2900 Get Map
NGS Quad / Sta Num : 44093323/
USGS Quad: JANESVILLE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	15	107 N	24 W	440448.33	934121.01		3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1970	2018	DESTROYED	Horz=NO Vert=NO	NO		PROJECTS 4 IN.	SEE DESCRIPTION

Monument Type
CONCRETE MONUMENT (CAST-IN-PLACE)

Disk Type
AZIMUTH MARK DISK

Mon. Agency
MNDT

Description: (1970) **Stamping:** JANESVILLE 1970

2.5 MILES SOUTH OF JANESVILLE, 2.0 MILES SOUTH ALONG COUNTY ROAD 3 FROM THE JUNCTION OF COUNTY ROAD 3 AND TRUNK HIGHWAY 14 IN JANESVILLE, THEN 0.9 MILE EAST ON COUNTY ROAD 2 (360TH AVENUE), 46.5 FEET SOUTH OF A ROAD, 102.0 FEET WEST OF A FARM DRIVEWAY, 3.5 FEET NORTHEAST OF A TELEPHONE POLE, 2.5 FEET WEST OF A WITNESS POST.

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -94.810 12B = -94.813 09 = -94.737 03 = -94.590

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Longitude	County (Feet) X	Y	County (Meters) X	Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Reference
NAD83(1996)	44 04 48.33118	93 41 21.01287	296986.958	190705.975	90521.8060	58127.297	299.229	3	1999	17648
NAD83(1986)	44 04 48.32477	93 41 21.01183	296987.027	190705.325	90521.8270	58127.099		3	1986	17289
NAD27	44 04 48.44496	93 41 20.20491						3	1977	16059

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33259.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33259.pdf

JANESVILLE MNDT RM 1

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: JANESVILLE MNDT RM 1 **NGS Name:** JANESVILLE RM 1

County: WASECA, MN (Sheet 1)

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	10	107 N	24 W	440515.54	934205.84		3

NGS ACRN: CJ3643 Get Map
NGS Quad / Sta Num : 44093323/1015
USGS Quad: JANESVILLE

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1970	2018	GOOD	Horz=NO Vert=YES	YES		RECESSED 12 IN.	BAR MAG IN DRILL HOLE

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	REFERENCE MARK DISK	MNDT

Description: (1970) **Stamping:** JANESVILLE NO 1 1970

2.0 MILES SOUTH OF JANESVILLE, NEAR A RADIO TOWER, 1.5 MILES SOUTH ALONG COUNTY ROAD 3 FROM THE JUNCTION OF COUNTY ROAD 3 AND TRUNK HIGHWAY 14 IN JANESVILLE, THEN 0.3 MILE EAST ALONG 365TH AVENUE, 97.0 FEET NORTH OF 365TH AVENUE, 91.7 FEET SOUTHEAST OF JANESVILLE MNDT RM 2, 64.1 FEET SOUTH-SOUTHWEST OF STATION JANESVILLE MNDT, 23.5 FEET EAST OF THE NORTHEAST CORNER OF A METAL SHED, 16.0 FEET WEST OF AN ENTRANCE, 6.0 FEET NORTH OF AN ENTRANCE TO A METAL SHED.

Station Notes

THE SURVEY MARK IS UNSUITABLE FOR MNDOT GEODETIC HORIZONTAL SURVEYS (THE SURVEY MARK IS IN THE MIDDLE OF A ROAD AND IS RECESSED 12 INCHES).

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -94.770 12B = -94.777 09 = -94.701 03 = -94.550

*** No Horizontal Positions in the Database ***

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/JANESVILLE_RM_1-CJ3643-3W-31JUL2018.jpg	W	Jul 31, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/JANESVILLE_RM_1-CJ3643-2-31JUL2018.jpg		Jul 31, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/JANESVILLE_RM_1-CJ3643-1-31JUL2018.jpg		Jul 31, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_67386.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_67386.pdf

JANESVILLE MNDT RM 2

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: JANESVILLE MNDT RM 2 **NGS Name:** JANESVILLE RM 2

County: WASECA, MN (Sheet 1)

NGS ACRN: CJ8087 Get Map
NGS Quad / Sta Num : 44093323/1015
USGS Quad: JANESVILLE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	10	107 N	24 W	440516.07	934206.86		3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1970	2018	GOOD	Horz=NO Vert=YES	YES		RECESSED 12 IN.	BAR MAG IN DRILL HOLE

Monument Type
CONCRETE MONUMENT (CAST-IN-PLACE)

Disk Type
REFERENCE MARK DISK

Mon. Agency
MNDT

Description: (1970) **Stamping:** JANESVILLE NO 2 1970

2.0 MILES SOUTH OF JANESVILLE, NEAR A RADIO TOWER, 1.5 MILES SOUTH ALONG COUNTY ROAD 3 FROM THE JUNCTION OF COUNTY ROAD 3 AND TRUNK HIGHWAY 14 IN JANESVILLE, THEN 0.3 MILE EAST ALONG 365TH AVENUE, 150.0 FEET NORTH OF 365TH AVENUE, 104.2 FEET WEST OF STATION JANESVILLE MNDT, 91.7 FEET NORTHWEST OF JANESVILLE MNDT RM 1, 1.5 FEET SOUTH OF A WITNESS POST.

Station Notes
THE MARK IS INSIDE THE FENCE AROUND THE TOWER. TO ACCESS MARK, CALL 507-304-6240.

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -94.770 12B = -94.777 09 = -94.701 03 = -94.550

*** No Horizontal Positions in the Database ***

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/JANESVILLE_RM_2-CJ8087-3W-01AUG2018.jpg	W	Aug 1, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/JANESVILLE_RM_2-CJ8087-2-01AUG2018.jpg		Aug 1, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/JANESVILLE_RM_2-CJ8087-1-01AUG2018.jpg		Aug 1, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_67387.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_67387.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: JANESVILLE NW **NGS Name:** JANESVILLE NW

County: WASECA, MN (Sheet 1)

NGS ACRN: DH3118 Get Map
NGS Quad / Sta Num : 44093331/
USGS Quad: MADISON LAKE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	18	108 N	24 W	440948.40	934604.58		C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2003	2022	GOOD	Horz=YES Vert=YES	YES		RECESSED 3 IN.	STEEL ROD IMBED IN MON

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	SURVEY DISK	MN-161

Description: (2004) **Stamping:** JANESVILLE-NW 2003

4.3 MILES NORTHWEST OF JANESVILLE, 4.0 MILES NORTHWEST ALONG TRUNK HIGHWAY 14 FROM THE JUNCTION OF TRUNK HIGHWAY 14 AND COUNTY ROAD 3 IN JANESVILLE TO TRUNK HIGHWAY 14 MILEPOINT 143.75, THEN 1.75 MILES NORTH ON COUNTY ROAD 37 (WEST COUNTY LINE ROAD), 38.5 FEET EAST OF COUNTY ROAD 37 (WEST COUNTY LINE ROAD), 8.5 FEET NORTH OF COUNTY ROAD 17 EXTENDED, 66.5 FEET NORTH OF A TELEPHONE PEDESTAL, 12.5 FEET SOUTH OF A WITNESS POST.

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -94.370 12B = -94.370 09 = -94.291 03 = -94.121

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Longitude	County (Feet) X	Y	County (Meters) X	Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Reference
NAD83(2011)	44 09 48.39573	93 46 04.58458	276600.681	221295.364	84308.0560	67450.962	295.589		2014	GPS3043
NAD83(2007)	44 09 48.39571	93 46 04.58537	276600.623	221295.363	84308.0390	67450.961	295.613		2007	GPS2300
NAD83(1996)	44 09 48.39526	93 46 04.58462	276600.677	221295.316	84308.0550	67450.947	295.656	C	2014	HNEW14

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/JANESVILLE_NW-DH3118-3E-03AUG2022.jpg	E	Aug 3, 2022
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/JANESVILLE_NW-DH3118-2-03AUG2022.jpg		Aug 3, 2022
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/JANESVILLE_NW-DH3118-1-03AUG2022.jpg		Aug 3, 2022

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_50654.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_50654.pdf

JANESVILLE RESET

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: JANESVILLE RESET **NGS Name:** JANESVILLE RESET

County: WASECA, MN (Sheet 1)

NGS ACRN: PP1724 Get Map
NGS Quad / Sta Num : 44093323/
USGS Quad: JANESVILLE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	33	108 N	24 W	440702.84	934227.91	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1941	2018	GOOD	Horz=NO Vert=YES	YES		PROJECTS 6 IN.	NO MAG MATERIAL

Monument Type	Disk Type	Mon. Agency
CONCRETE FOUNDATION	BENCH MARK DISK	NGS

Description: (2010) **Stamping:** JANESVILLE RESET 1941 1069.210

IN JANESVILLE, ON THE JANESVILLE PUBLIC LIBRARY GROUNDS, IN THE NORTH CORNER OF A FOOTING FOR A SOLDIERS MONUMENT, 0.10 MILE NORTH ALONG COUNTY ROAD 3 (MAIN STREET) FROM TRUNK HIGHWAY 14 IN JANESVILLE, 49.0 FEET WEST OF COUNTY ROAD 3 (MAIN STREET), 48.0 FEET NORTH OF 2ND STREET, 6.7 FEET SOUTHEAST OF THE JANESVILLE PUBLIC LIBRARY.

Station Notes

THE SURVEY MARK IS UNSUITABLE FOR MNDOT GEODETIC HORIZONTAL SURVEYS (CANNOT SET UP A TRIPOD ON THE MARK).

Leveling-Derived Orthometric Heights (Elevations)

Vertical Datum	Orthometric (Feet) Height	Accuracy	Orthometric (Meters) Height	Accuracy	Survey Order/(Class)	Project Info Year	Reference
NAVD88	1069.378	0.016	325.947	0.005	2/1	2016	00000870
NGVD29	1069.210	0.016	325.896	0.005	2	1942	L62 MINN

Geoid Separations(ft): GEOID18 = -94.655 12B = -94.659 09 = -94.580 03 = -94.419

*** No Horizontal Positions in the Database ***

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/JANESVILLE_RESET-PP1724-3W-01AUG2018.jpg	W	Aug 1, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/JANESVILLE_RESET-PP1724-2-01AUG2018.jpg		Aug 1, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/JANESVILLE_RESET-PP1724-1-01AUG2018.jpg		Aug 1, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33260.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33260.pdf

Geodetic Data Sheet (Brief)
GSID Station # 101493

JONES

04/28/2026
Sheet Help

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: JONES
NGS Name: JONES

County: WASECA, MN (Sheet 1)

NGS ACRN: DP5043 Get Map
NGS Quad / Sta Num : 44093323/
USGS Quad: JANESVILLE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	33	108 N	24 W	440629.05	934227.96	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2014	2018	GOOD	Horz=YES Vert=YES	YES		RECESSED 2 IN.	BAR MAG IN DRILL HOLE

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 19 FT)

Disk Type
METAL ROD (WITH REMOVABLE ID DISK)

Mon. Agency
MNDT

Description: (2014)
Stamping: JONES 2014

IN JANESVILLE, AT THE JUNCTION OF TRUNK HIGHWAY 14 AND COUNTY ROAD 3 IN JANESVILLE, AT TRUNK HIGHWAY 14 MILEPOINT 147.75, 204.0 FEET SOUTH-SOUTHWEST OF EASTBOUND TRUNK HIGHWAY 14, 197.0 FEET NORTH OF AN EXIT RAMP FROM EASTBOUND TRUNK HIGHWAY 14 TO COUNTY ROAD 3, 27.8 FEET WEST OF SOUTHBOUND COUNTY ROAD 3, 1.5 FEET EAST OF A WITNESS POST.

Station Pair: HOEHN - WASECA, MN

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Accuracy	Orthometric (Meters) Height	Accuracy	Survey Order/(Class)	Project Info Year	Reference
NAVD88	1079.932	0.016	329.164	0.005	2/1	2016	00000870

Geoid Separations(ft): GEOID18 = -94.688 12B = -94.695 09 = -94.616 03 = -94.458

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Longitude	County (Feet) X	Y	County (Meters) X	Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Reference
NAD83(2011)	44 06 29.04493	93 42 27.96241	292197.648	200950.951	89062.0210	61249.972	300.299		2014	GPS3043
NAD83(1996)	44 06 29.04471	93 42 27.96279	292197.620	200950.929	89062.0130	61249.966	300.364	C	2014	HNEW14

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/JONES-DP5043-3W-01AUG2018.jpg	W	Aug 1, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/JONES-DP5043-2-01AUG2018.jpg		Aug 1, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/JONES-DP5043-1-01AUG2018.jpg		Aug 1, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_101493.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_101493.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: K 23 **NGS Name:** K 23

County: WASECA, MN (Sheet 1)

NGS ACRN: PP1755 Get Map
NGS Quad / Sta Num : 44093233/
USGS Quad: MERIDEN

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	17	107 N	22 W	440425.00	932949.00	2	

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1933	1988	GOOD	Horz=NO Vert=NO	NO		PROJECTS 3 IN.	SEE DESCRIPTION

Monument Type
CONCRETE MONUMENT (CAST-IN-PLACE)

Disk Type
BENCH MARK DISK

Mon. Agency
NGS

Description: (1988) **Stamping:** K 23 1162.908 1933

IN WASECA, 0.55 MILE EAST ALONG TRUNK HIGHWAY 14 FROM THE JUNCTION OF TRUNK HIGHWAY 14 AND TRUNK HIGHWAY 13, THEN 0.25 MILE SOUTH ON 8TH STREET SOUTHEAST, IN THE SOUTHWEST QUADRANT OF 8TH STREET SOUTHEAST AND A RAILROAD CROSSING, 50.0 FEET WEST OF 8TH STREET, 45.0 FEET SOUTH OF THE SOUTH RAIL OF THE RAILROAD TRACKS, 34.5 FEET NORTHEAST OF THE NORTHEAST CORNER OF HOUSE NUMBER 600, 16.0 FEET WEST OF THE WEST EDGE OF A SIDEWALK.

Station Notes
THE SURVEY MARK IS ON RAILROAD PROPERTY AND HAS BEEN ABANDONED FOR MNDOT GEODETIC USE.

Leveling-Derived Orthometric Heights (Elevations)

Vertical Datum	Orthometric (Feet) Height	Accuracy	Orthometric (Meters) Height	Accuracy	Survey Order/(Class)	Project Info Year	Reference
NAVD88	1163.026	0.016	354.491	0.005	2/0	1995	00000135
NGVD29	1162.908	0.016	354.455	0.005	2/0	1992	UNCHECKD

Geoid Separations(ft): GEOID18 = -94.107 12B = -94.114 09 = -94.032 03 = -93.881

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33261.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33261.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: KAIN **NGS Name:** KAIN

County: WASECA, MN (Sheet 1)

NGS ACRN: DP6234 Get Map
NGS Quad / Sta Num : 43093411/
USGS Quad: OTISCO

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	23	105 N	23 W	435329.71	933249.81	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2013	2020	GOOD	Horz=YES Vert=YES	YES		RECESSED 2 IN.	BAR MAG IN DRILL HOLE

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 42 FT)

Disk Type
METAL ROD (WITH REMOVABLE ID DISK)

Mon. Agency
MNDT

Description: (2013) **Stamping:** KAIN 2013

3.0 MILES WEST OF NEW RICHLAND, 3.0 MILES WEST ALONG TRUNK HIGHWAY 30 FROM THE JUNCTION OF TRUNK HIGHWAY 30 AND TRUNK HIGHWAY 13 IN NEW RICHLAND, AT TRUNK HIGHWAY 30 MILEPOINT 165.45, 52.2 FEET SOUTH OF TRUNK HIGHWAY 30, 26.5 FEET WEST OF 110TH STREET, 2.5 FEET NORTH OF A WITNESS POST.

Station Pair: KOFOED - WASECA, MN

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1167.786	0.016	355.942	0.005	2/1	2015	00000851

Geoid Separations(ft): GEOID18 = -95.705 12B = -95.692 09 = -95.633 03 = -95.505

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Geodetic Positions Longitude	County (Feet) X	County (Feet) Y	County (Meters) X	County (Meters) Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Project Info Reference
NAD83(2011)	43 53 29.71317	93 32 49.80677	333778.633	121669.375	101735.931	37084.900	326.764	C	2020	HTH30
NAD83(1996)	43 53 29.71301	93 32 49.80698	333778.617	121669.359	101735.926	37084.895	326.826	C	2020	HTH30

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/KAIN-DP6234-3S-11MAR2020.jpg	S	Mar 11, 2020
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/KAIN-DP6234-2-11MAR2020.jpg		Mar 11, 2020
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/KAIN-DP6234-1-11MAR2020.jpg		Mar 11, 2020

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_100315.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_100315.pdf

Geodetic Data Sheet (Brief)
GSID Station # 33262

KELLING MNDT

04/28/2026
Sheet Help

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: KELLING MNDT
NGS Name: KELLING

County: WASECA, MN (Sheet 1)

NGS ACRN: OO0729 Get Map
NGS Quad / Sta Num : 43093414/
USGS Quad: WALDORF

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	28	106 N	24 W	435750.55	934252.65	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1978	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 12 IN.	BAR MAG IN DRILL HOLE

Monument Type
CONCRETE MONUMENT (CAST-IN-PLACE)

Disk Type
HORIZONTAL CONTROL DISK

Mon. Agency
MNDT

Description: (2016)

Stamping: KELLING 1978

2.0 MILES NORTH-NORTHWEST OF WALDORF, 2.5 MILES NORTH ALONG COUNTY ROAD 3 FROM THE JUNCTION OF COUNTY ROAD 3 AND TRUNK HIGHWAY 83 IN WALDORF, THEN 0.9 MILE WEST ON COUNTY ROAD 31 (280TH AVENUE), 13.5 FEET SOUTH OF COUNTY ROAD 31 (280TH AVENUE), 58.5 FEET EAST OF DRIVEWAY NUMBER 2648, 31.84 FEET NORTHEAST OF KELLING RM 2, 29.14 FEET NORTHWEST OF KELLING RM 1, 32.4 FEET NORTHEAST OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Elevations)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1078.777	0.016	328.812	0.005	2/1	2019	00000938
NGVD29	1078.777	0.016	328.812	0.005	2/1	1992	UNCHECKD

Geoid Separations(ft): GEOID18 = -95.275 12B = -95.275 09 = -95.197 03 = -95.092

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Geodetic Positions Longitude	County (Feet) X	County (Feet) Y	County (Meters) X	County (Meters) Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Project Info Reference
NAD83(2011)	43 57 50.54703	93 42 52.64873	289888.413	148463.918	88358.1650	45251.893	299.793	C	2025	H23BLUE
NAD83(2007)	43 57 50.54705	93 42 52.64949	289888.358	148463.921	88358.1480	45251.894	299.817		2007	GPS2300
NAD83(1996)	43 57 50.54654	93 42 52.64871	289888.414	148463.869	88358.1650	45251.878	299.864	C	2005	GPS2088
NAD83(1986)	43 57 50.54363	93 42 52.64687	289888.546	148463.572	88358.2060	45251.787		2	1986	17289
NAD27	43 57 50.65594	93 42 51.83734						2	1980	16297

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/KELLING-OO0729-3S-09OCT2019.jpg	S	Oct 9, 2019
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/KELLING-OO0729-2-09OCT2019.jpg		Oct 9, 2019
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/KELLING-OO0729-1-09OCT2019.jpg		Oct 9, 2019

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33262.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33262.pdf

KELLING MNDT AZ MK

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: KELLING MNDT AZ MK **NGS Name:** KELLING AZ MK

County: WASECA, MN (Sheet 1)

NGS ACRN: OO0727 Get Map
NGS Quad / Sta Num : 43093414/
USGS Quad: WALDORF

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	20	106 N	24 W	435750.86	934340.78	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1978	2018	GOOD	Horz=NO Vert=YES	YES		RECESSED 8 IN.	BAR MAG IN DRILL HOLE

Monument Type
CONCRETE MONUMENT (CAST-IN-PLACE)

Disk Type
AZIMUTH MARK DISK

Mon. Agency
MNDT

Description: (2016) **Stamping:** KELLING 1978

2.5 MILES NORTHWEST OF WALDORF, 2.6 MILES NORTHWEST ALONG TRUNK HIGHWAY 83 FROM THE JUNCTION OF TRUNK HIGHWAY 83 AND COUNTY ROAD 3 IN WALDORF, THEN 0.4 MILE NORTH ON 20TH STREET, 36.0 FEET WEST OF 20TH STREET, 30.0 FEET NORTH OF COUNTY ROAD 31 (280TH AVENUE), 4.7 FEET SOUTHWEST OF A POWER POLE, 6.8 FEET SOUTHWEST OF A WITNESS POST.

Station Notes

DUE TO THE PROXIMITY TO THE POWER LINES, THIS SURVEY MARK HAS BEEN ABANDONED FOR MNDOT GEODETIC HORIZONTAL SURVEYS.

Leveling-Derived Orthometric Heights (Elevations)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1069.932	0.016	326.116	0.005	2/1	2019	00000938
NGVD29	1069.808	0.016	326.078	0.005	2/1	1992	UNCHECKD

Geoid Separations(ft): GEOID18 = -95.236 12B = -95.233 09 = -95.157 03 = -95.049

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Geodetic Positions Longitude	County (Feet) X	County (Feet) Y	County (Meters) X	County (Meters) Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Project Info Reference
NAD83(1996)	43 57 50.85701	93 43 40.77681	286368.645	148529.654	87285.3380	45271.929	297.198	3	1999	17648
NAD83(1986)	43 57 50.85155	93 43 40.77602	286368.698	148529.100	87285.3540	45271.760		3	1986	17289
NAD27	43 57 50.96364	93 43 39.96500						3	1980	16297

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/KELLING_AZ_MK-OO0727-3N-20APR2016.jpg	N	Apr 20, 2016
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/KELLING_AZ_MK-OO0727-2-20APR2016.jpg		Apr 20, 2016
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/KELLING_AZ_MK-OO0727-1-20APR2016.jpg		Apr 20, 2016

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33263.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33263.pdf

KELLING RM 1

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: KELLING RM 1 **NGS Name:** KELLING RM 1

County: WASECA, MN (Sheet 1)

NGS ACRN: OO0730 Get Map
NGS Quad / Sta Num : 43093414/
USGS Quad: WALDORF

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	28	106 N	24 W	435750.31	934252.43	2	

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1979	2018	DESTROYED	Horz=NO Vert=NO	NO		FLUSH	STEEL ROD IMBED IN MON

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	REFERENCE MARK DISK	MNDT

Description: (1979) **Stamping:** KELLING NO 1 1978

2.2 MILES NORTH-NORTHWEST OF WALDORF, 2.4 MILES NORTH ON COUNTY ROAD 3 FROM THE JUNCTION OF COUNTY ROAD 3 AND TRUNK HIGHWAY 83 IN WALDORF, THEN 0.8 MILE WEST ON COUNTY ROAD 21, 78.0 FEET EAST OF A DRIVE, 39.2 FEET EAST OF A FENCE CORNER, 38.0 FEET SOUTH OF COUNTY ROAD 21, 37.7 FEET EAST OF KELLING RM 2, 16.5 FEET EAST OF A WITNESS POST, 1.4 FEET NORTH OF A FENCE LINE.

Leveling-Derived Orthometric Heights (Elevations)

Vertical Datum	Orthometric (Feet) Height	Accuracy	Orthometric (Meters) Height	Accuracy	Survey Order/(Class)	Project Info Year	Reference
NAVD88	1077.508	0.016	328.425	0.005	2/1	1991	00000025
NGVD29	1077.396	0.016	328.391	0.005	2	1980	L24529

Geoid Separations(ft): GEOID18 = -95.279 12B = -95.275 09 = -95.197 03 = -95.095

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33264.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33264.pdf

KELLING RM 2

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: KELLING RM 2 **NGS Name:** KELLING RM 2

County: WASECA, MN (Sheet 1)

NGS ACRN: OO0728 Get Map
NGS Quad / Sta Num : 43093414/
USGS Quad: WALDORF

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	28	106 N	24 W	435750.31	934252.94	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1978	2018	GOOD	Horz=YES Vert=YES	YES		FLUSH	STEEL ROD IMBED IN MON

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	REFERENCE MARK DISK	MNDT

Description: (2016) **Stamping:** KELLING NO 2 1978

2.2 MILES NORTH-NORTHWEST OF WALDORF, 2.5 MILES NORTH ALONG COUNTY ROAD 3(35TH STREET) FROM THE JUNCTION OF COUNTY ROAD 3 (35TH STREET) AND TRUNK HIGHWAY 83, THEN 0.9 MILE WEST ON COUNTY ROAD 21 (280TH AVENUE), 38.0 FEET SOUTH OF COUNTY ROAD 21 (280TH AVENUE), 41.0 FEET EAST OF DRIVEWAY NUMBER 2648, 1.0 FOOT EAST OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Elevations)

Vertical Datum	Orthometric (Feet) Height	Accuracy	Orthometric (Meters) Height	Accuracy	Survey Order/(Class)	Project Info Year	Reference
NAVD88	1078.121	0.016	328.612	0.005	2/1	2019	00000938
NGVD29	1078.118	0.016	328.611	0.005	2/1	1992	UNCHECKD

Geoid Separations(ft): GEOID18 = -95.279 12B = -95.275 09 = -95.197 03 = -95.092

*** No Horizontal Positions in the Database ***

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/KELLING_RM_2-OO0728-3S-20APR2016.jpg	S	Apr 20, 2016
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/KELLING_RM_2-OO0728-2-20APR2016.jpg		Apr 20, 2016
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/KELLING_RM_2-OO0728-1-20APR2016.jpg		Apr 20, 2016

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33265.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33265.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: KIENLE **NGS Name:** KIENLE

County: WASECA, MN (Sheet 1)

NGS ACRN: DP5044 Get Map
NGS Quad / Sta Num : 44093322/
USGS Quad: WASECA

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	10	107 N	23 W	440537.71	933438.57	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2014	2018	GOOD	Horz=YES Vert=YES	YES		FLUSH	BAR MAG IN DRILL HOLE

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 24 FT)

Disk Type
METAL ROD (WITH REMOVABLE ID DISK)

Mon. Agency
MNDT

Description: (2014) **Stamping:** KIENLE 2014

3.7 MILES NORTHWEST OF WASECA, 6.1 MILES NORTHWEST ALONG TRUNK HIGHWAY 14 FROM THE JUNCTION OF TRUNK HIGHWAYS 14 AND 13 IN WASECA, AT TRUNK HIGHWAY 14 MILEPOINT 154.5, 89.7 FEET SOUTHWEST OF EASTBOUND TRUNK HIGHWAY 14, 25.0 FEET NORTHEAST OF 95TH STREET EXTENDED, 13.9 FEET NORTHEAST OF A RIGHT-OF-WAY POST, 1.6 FEET NORTH OF A WITNESS POST.

Station Pair: WOOD - WASECA, MN

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Accuracy	Orthometric (Meters) Height	Accuracy	Survey Order/(Class)	Project Info Year	Reference
NAVD88	1135.487	0.016	346.097	0.005	2/1	2016	00000870

Geoid Separations(ft): GEOID18 = -94.468 12B = -94.468 09 = -94.399 03 = -94.226

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Longitude	County (Feet) X	Y	County (Meters) X	Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Reference
NAD83(2011)	44 05 37.70572	93 34 38.57262	326404.343	195450.603	99488.2430	59573.463	317.306		2018	GPS3119
NAD83(1996)	44 05 37.70519	93 34 38.57296	326404.318	195450.549	99488.2350	59573.447	317.373	C	2017	HMNCORS

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/KIENLE-DP5044-3SW-01AUG2018.jpg	SW	Aug 1, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/KIENLE-DP5044-2-01AUG2018.jpg		Aug 1, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/KIENLE-DP5044-1-01AUG2018.jpg		Aug 1, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_101479.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_101479.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: KOFOED
NGS Name: KOFOED

County: WASECA, MN (Sheet 1)

NGS ACRN: DP6235 Get Map
NGS Quad / Sta Num : 43093411/
USGS Quad: OTISCO

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	13	105 N	23 W	435330.54	933213.32	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2013	2025	GOOD	Horz=YES Vert=YES	YES		FLUSH	BAR MAG IN DRILL HOLE

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 44 FT)

Disk Type
METAL ROD (WITH REMOVABLE ID DISK)

Mon. Agency
MNDT

Description: (2013)

Stamping: KOFOED 2013

2.5 MILES WEST OF NEW RICHLAND, 2.5 MILES WEST ALONG TRUNK HIGHWAY 30 FROM THE JUNCTION OF TRUNK HIGHWAY 30 AND TRUNK HIGHWAY 13 IN NEW RICHLAND, AT TRUNK HIGHWAY 30 MILEPOINT 165.95, 42.9 FEET NORTH OF TRUNK HIGHWAY 30, 21.8 FEET EAST OF A FIELD ENTRANCE, 63.1 FEET WEST OF A FIELD ENTRANCE, 13.7 FEET SOUTH-SOUTHWEST OF CABLE BOX NUMBER 97000-18, 13.5 FEET SOUTH-SOUTHWEST OF A WITNESS POST.

Station Pair: KAIN - WASECA, MN

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1153.049	0.016	351.450	0.005	2/1	2015	00000851

Geoid Separations(ft): GEOID18 = -95.679 12B = -95.669 09 = -95.607 03 = -95.476

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Geodetic Positions Longitude	County (Feet) X	County (Feet) Y	County (Meters) X	County (Meters) Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Project Info Reference
NAD83(2011)	43 53 30.54175	93 32 13.32065	336451.147	121733.015	102550.515	37104.297	322.283	C	2020	HTH30
NAD83(1996)	43 53 30.54159	93 32 13.32085	336451.132	121732.999	102550.510	37104.292	322.346	C	2020	HTH30

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/KOFOED-DP6235-3N-17SEP2025.jpg	N	Sep 17, 2025
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/KOFOED-DP6235-2-17SEP2025.jpg		Sep 17, 2025
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/KOFOED-DP6235-1-17SEP2025.jpg		Sep 17, 2025

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

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Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_100317.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: L 23 **NGS Name:** L 23

County: WASECA, MN (Sheet 1)

NGS ACRN: PP1518 Get Map
NGS Quad / Sta Num : 44093233/
USGS Quad: MERIDEN

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	14	107 N	22 W	440408.00	932647.00	1	

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1933	1988	GOOD	Horz=NO Vert=NO	NO	RR	FLUSH	SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
WALL - HEAVY RETAINING	BENCH MARK DISK	NGS

Description: (1988) **Stamping:** L 23 1134.755 1933

2.0 MILES EAST OF WASECA NEAR THE SOUTH END OF GOOSE LAKE, 0.8 MILE EAST ALONG TRUNK HIGHWAY 14 FROM THE JUNCTION OF TRUNK HIGHWAY 14 AND TRUNK HIGHWAY 13, 0.3 MILE SOUTH ON COUNTY ROAD 5 (11TH STREET), 0.75 MILE EAST ON COUNTY ROAD 5 (5TH AVENUE), 0.4 MILE SOUTH ON COUNTY ROAD 5 (145TH STREET), THEN 1.5 MILES EAST ON 350TH AVENUE TO A NORTH-SOUTH GRAVEL ROAD (GOOSE LAKE ROAD), THEN 0.2 MILE NORTH, 600.0 FEET WEST OF THE RAILROAD CROSSING OF GOOSE LAKE ROAD, 165.0 FEET SOUTH OF GOOSE LAKE, 80.0 FEET NORTH OF GOOSE LAKE ROAD, 62.5 FEET NORTH-NORTHEAST OF A TELEPHONE CABLE MARKER NUMBER MN 021868, 1.2 FEET EAST OF THE WEST EDGE OF THE TOP COURSE OF A STONE IN A RAILROAD BRIDGE, 0.8 FOOT NORTH OF THE NORTH RAIL OF A RAILROAD, IN THE NORTH WING WALL OF THE EAST ABUTMENT OF A BRIDGE.

Station Notes

THE SURVEY MARK IS ON RAILROAD PROPERTY AND HAS BEEN ABANDONED FOR MNDOT GEODETIC USE.

Leveling-Derived Orthometric Heights (Elevations)

Vertical Datum	Orthometric (Feet) Height	Accuracy	Orthometric (Meters) Height	Accuracy	Survey Order/(Class)	Project Info Year	Reference
NAVD88	1134.817	0.007	345.893	0.002	1	1995	00000135
NGVD29	1134.755	0.016	345.874	0.005	2/0	1992	UNCHECKD

Geoid Separations(ft): GEOID18 = -93.789 12B = -93.799 09 = -93.714 03 = -93.563

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33266.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33266.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: LEO **NGS Name:** LEO

County: WASECA, MN (Sheet 1)

NGS ACRN: DL5472 Get Map
NGS Quad / Sta Num : 43093144/
USGS Quad: NEW RICHLAND

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	20	105 N	22 W	435238.40	932913.51	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2008	2025	GOOD	Horz=YES Vert=YES	YES		RECESSED 2 IN.	BAR MAG IN DRILL HOLE

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 25 FT)

Disk Type
METAL ROD (WITH REMOVABLE ID DISK)

Mon. Agency
MNDT

Description: (2008) **Stamping:** LEO 2008

1.0 MILE SOUTH OF NEW RICHLAND, 1.0 MILE SOUTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 30 IN NEW RICHLAND, AT TRUNK HIGHWAY 13 MILEPOINT 17.70, 63.5 FEET WEST OF TRUNK HIGHWAY 13, 48.3 FEET NORTH OF COUNTY ROAD 58 (220TH AVENUE), 6.6 FEET NORTHEAST OF CABLE PEDESTAL NUMBER 500-2-5100, 1.8 FEET EAST OF A WITNESS POST.

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Accuracy	Orthometric (Meters) Height	Accuracy	Survey Order/(Class)	Project Info Year	Reference
NAVD88	1209.538	0.016	368.668	0.005	2/1	2020	00000949

Geoid Separations(ft): GEOID18 = -95.594 12B = -95.587 09 = -95.535 03 = -95.380

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Longitude	County (Feet) X	Y	County (Meters) X	Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Reference
NAD83(2011)	43 52 38.40279	93 29 13.51374	349581.892	116358.238	106552.774	35466.062	339.532		2012	GPS2800
NAD83(2007)	43 52 38.40310	93 29 13.51472	349581.820	116358.270	106552.752	35466.072	339.553	C	2009	GPS2574
NAD83(1996)	43 52 38.40250	93 29 13.51400	349581.872	116358.209	106552.768	35466.053	339.624	C	2008	HMANC

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/LEO-DL5472-3W-17SEP2025.jpg	W	Sep 17, 2025
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/LEO-DL5472-2-17SEP2025.jpg		Sep 17, 2025
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/LEO-DL5472-1-17SEP2025.jpg		Sep 17, 2025

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_80874.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_80874.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: MATAWAN MNDT **NGS Name:** MATAWAN

County: WASECA, MN (Sheet 1)

NGS ACRN: OO0751 Get Map
NGS Quad / Sta Num : 43093411/
USGS Quad: OTISCO

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	16	105 N	23 W	435330.15	933532.01	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1978	2018	GOOD	Horz=YES Vert=YES	YES		RECESSED 7 IN.	STEEL ROD IMBED IN MON

Monument Type
CONCRETE MONUMENT (CAST-IN-PLACE)

Disk Type
HORIZONTAL CONTROL DISK

Mon. Agency
MNDT

Description: (1994) **Stamping:** MATAWAN 1978

4.5 MILES WEST OF NEW RICHLAND, 5.3 MILES WEST ALONG TRUNK HIGHWAY 30 FROM THE JUNCTION OF TRUNK HIGHWAY 30 AND TRUNK HIGHWAY 13, AT TRUNK HIGHWAY 30 MILEPOINT 163.2, 18.0 FEET NORTH OF TRUNK HIGHWAY 30, 42.7 FEET SOUTHEAST OF MATAWAN RM 2, 41.2 FEET SOUTHWEST OF MATAWAN RM 1, 37.8 FEET SOUTH-SOUTHWEST OF A TELEPHONE POLE, 36.6 FEET SOUTH OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Elevations)

Vertical Datum	Orthometric (Feet) Height	Accuracy	Orthometric (Meters) Height	Accuracy	Survey Order/(Class)	Project Info Year	Reference
NAVD88	1186.172	0.016	361.546	0.005	2/1	2015	00000851
NGVD29	1186.162	0.016	361.543	0.005	2/1	1992	UNCHECKD

Geoid Separations(ft): GEOID18 = -95.768 12B = -95.751 09 = -95.692 03 = -95.571

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Longitude	County (Feet) X	Y	County (Meters) X	Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Reference
NAD83(2011)	43 53 30.14831	93 35 32.00870	321900.959	121807.497	98115.6090	37126.999	332.380		2012	GPS2800
NAD83(2007)	43 53 30.14831	93 35 32.00944	321900.905	121807.498	98115.5920	371270000	332.402		2007	GPS2300
NAD83(1996)	43 53 30.14766	93 35 32.00873	321900.956	121807.432	98115.6080	37126.979	332.501	C	1999	17648
NAD83(1986)	43 53 30.13953	93 35 32.00882	321900.943	121806.608	98115.6040	37126.728		2	1986	17289
NAD27	43 53 30.25839	93 35 31.21032						2	1980	16297

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/MATAWAN-OO0751-3N-26JUL2018.jpg	N	Jul 26, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/MATAWAN-OO0751-2-26JUL2018.jpg		Jul 26, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/MATAWAN-OO0751-1-26JUL2018.jpg		Jul 26, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33267.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33267.pdf

MATAWAN RM 1

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: MATAWAN RM 1 **NGS Name:** MATAWAN RM 1

County: WASECA, MN (Sheet 1)

NGS ACRN: OO0752 Get Map
NGS Quad / Sta Num : 43093411/
USGS Quad: OTISCO

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	16	105 N	23 W	435330.48	933531.69	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1978	2018	GOOD	Horz=YES Vert=YES	YES		RECESSED 4 IN.	STEEL ROD IMBED IN MON

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	REFERENCE MARK DISK	MNDT

Description: (2010) **Stamping:** MATAWAN NO 1 1978

4.5 MILES WEST OF NEW RICHLAND, 5.3 MILES WEST ALONG TRUNK HIGHWAY 30 FROM THE JUNCTION OF TRUNK HIGHWAY 30 AND TRUNK HIGHWAY 13 IN NEW RICHLAND, AT TRUNK HIGHWAY 30 MILEPOINT 163.2, 52.0 FEET NORTH OF TRUNK HIGHWAY 30, 92.0 FEET EAST OF A DRIVEWAY SOUTH EXTENDED NUMBER 8740, 46.8 FEET EAST OF MATAWAN RM 2, 41.2 FEET NORTHEAST OF STATION MATAWAN, 12.0 FEET EAST-SOUTHEAST OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Elevations)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1184.164	0.016	360.934	0.005	2/1	2015	00000851
NGVD29	1184.066	0.016	360.904	0.005	2/1	1992	UNCHECKD

Geoid Separations(ft): GEOID18 = -95.768 12B = -95.751 09 = -95.692 03 = -95.571

*** No Horizontal Positions in the Database ***

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/MATAWAN_RM_1-OO0752-3N-26JUL2018.jpg	N	Jul 26, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/MATAWAN_RM_1-OO0752-2-26JUL2018.jpg		Jul 26, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/MATAWAN_RM_1-OO0752-1-26JUL2018.jpg		Jul 26, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33268.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33268.pdf

MATAWAN RM 2

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: MATAWAN RM 2 **NGS Name:** MATAWAN RM 2

County: WASECA, MN (Sheet 1)

NGS ACRN: OO0750 Get Map
NGS Quad / Sta Num : 43093411/
USGS Quad: OTISCO

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	16	105 N	23 W	435330.50	933532.33	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1978	2020	GOOD	Horz=YES Vert=YES	YES		FLUSH	STEEL ROD IMBED IN MON

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	REFERENCE MARK DISK	MNDT

Description: (2010) **Stamping:** MATAWAN NO 2 1978

4.5 MILES WEST OF NEW RICHLAND, 5.3 MILES WEST ALONG TRUNK HIGHWAY 30 FROM THE JUNCTION OF TRUNK HIGHWAY 30 AND TRUNK HIGHWAY 13 IN NEW RICHLAND, AT TRUNK HIGHWAY 30 MILEPOINT 163.2, 54.2 FEET NORTH OF TRUNK HIGHWAY 30, 46.8 FEET WEST OF MATAWAN RM 1, 44.0 FEET EAST OF A DRIVEWAY SOUTH EXTENDED NUMBER 8740, 42.7 FEET NORTHWEST OF STATION MATAWAN, 32.9 FEET WEST OF A TELEPHONE POLE NUMBER C9, 1.5 FEET NORTH OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Elevations)

Vertical Datum	Orthometric (Feet) Height	Accuracy	Orthometric (Meters) Height	Accuracy	Survey Order/(Class)	Project Info Year	Reference
NAVD88	1183.961	0.016	360.872	0.005	2/1	2015	00000851
NGVD29	1183.843	0.016	360.836	0.005	2/1	1992	UNCHECKD

Geoid Separations(ft): GEOID18 = -95.764 12B = -95.751 09 = -95.692 03 = -95.571

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Longitude	County (Feet) X	Y	County (Meters) X	Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Reference
NAD83(2011)	43 53 30.50008	93 35 32.32604	321878.012	121843.308	98108.6140	37137.915	331.679	C	2020	HTH30
NAD83(1996)	43 53 30.49992	93 35 32.32625	321877.997	121843.292	98108.6100	37137.910	331.741	C	2020	HTH30

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/MATAWAN_RM_2-OO0750-3N-26JUL2018.jpg	N	Jul 26, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/MATAWAN_RM_2-OO0750-2-09MAR2020.jpg		Mar 9, 2020
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/MATAWAN_RM_2-OO0750-1-09MAR2020.jpg		Mar 9, 2020

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33269.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33269.pdf

MNCORS WSCA WASECA ARP

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: MNCORS WSCA WASECA ARP **NGS Name:** WASECA MNCORS ARP

County: WASECA, MN (Sheet 1)

NGS ACRN: DS2960 Get Map
NGS Quad / Sta Num : 44093322/
USGS Quad: WASECA

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	20	107 N	22 W	440351.81	933004.58	3	B

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2004	2024	GOOD	Horz=YES Vert=?	YES			SEE DESCRIPTION

Monument Type
SEE DESCRIPTIVE TEXT

Disk Type
SEE DESCRIPTION

Mon. Agency
MN-161

Description: (2012)

Stamping:

IN WASECA, 1.0 MILE SOUTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 14, THEN 0.1 MILE SOUTH ON 5TH STREET, AT WASECA COUNTY FACILITY. THE ANTENNA IS AFFIXED TO A NUT AND BOLT WELDED TO A STEEL MAST AND ATTACHED TO THE ROOF ON THE SOUTH SIDE OF THE BUILDING.

Station Notes
THE NATIONAL GEODETIC SURVEY (NGS) SITE ID IS MNWA.

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -94.209 12B = -94.216 09 = -94.137 03 = -93.986

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Longitude	County (Feet) X	Y	County (Meters) X	Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Reference
NAD83(2011)	44 03 51.80558	93 30 04.57457	346325.197	184575.588	105560.131	56258.752	328.669		2024	GPS3772
NAD83(1996)	44 03 51.80545	93 30 04.57524	346325.148	184575.575	105560.116	56258.748	328.679	B	2006	HMNCORS

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/WASECA_MNCORS_ARP-DS2960-3NE-02AUG2006.jpg	NE	Aug 2, 2006
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/WASECA_MNCORS_ARP-DS2960-2-02AUG2006.jpg		Aug 2, 2006
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/WASECA_MNCORS_ARP-DS2960-1-12AUG2006.jpg		Aug 12, 2006

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_52126.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_52126.pdf

MNCORS WSCA WASECA L1PC1

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: MNCORS WSCA WASECA L1PC1 **NGS Name:** WASECA CORS L1 PHASE CENTER

County: WASECA, MN (Sheet 1)

NGS ACRN: !95644 Get Map
NGS Quad / Sta Num : 44093322/
USGS Quad: WASECA

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	20	107 N	22 W	440351.81	933004.58		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2004	2008	DESTROYED	Horz=NO Vert=NO	YES			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
SEE DESCRIPTIVE TEXT	SEE DESCRIPTION	MN-161

Description: (2012) **Stamping:**

IN WASECA, 1.0 MILE SOUTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 14, THEN 0.1 MILE SOUTH ON 5TH STREET, AT THE WASECA COUNTY FACILITY, ATTACHED TO THE ROOF ON THE SOUTH SIDE OF A BUILDING. THE STATION IS IN A ZEPHYR GEODETIC ANTENNA SERIAL NUMBER 12354218.

Station Notes

THE NATIONAL GEODETIC SURVEY (NGS) SITE ID IS MNWA.

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -94.209 12B = -94.216 09 = -94.137 03 = -93.986

*** No Horizontal Positions in the Database ***

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/WASECA_CORS_L1_PHASE_CENTER-3N-02AUG2006.jpg	N	Aug 2, 2006
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/WASECA_CORS_L1_PHASE_CENTER-!95644-2-02AUG2006.jpg		Aug 2, 2006
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/WASECA_CORS_L1_PHASE_CENTER-!95644-1-12AUG2006.jpg		Aug 12, 2006

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_95644.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_95644.pdf

MNCORS WSCA WASECA L1PC2

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: MNCORS WSCA WASECA L1PC2 **NGS Name:** WASECA CORS L1 PHASE CENTER

County: WASECA, MN (Sheet 1)

NGS ACRN: !95645 Get Map
NGS Quad / Sta Num : 44093322/
USGS Quad: WASECA

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	20	107 N	22 W	440351.81	933004.58		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2008	2008	GOOD	Horz=YES Vert=?	YES			SEE DESCRIPTION

Monument Type
SEE DESCRIPTIVE TEXT

Disk Type
SEE DESCRIPTION

Mon. Agency
MN-161

Description: (2012)

Stamping:

IN WASECA, 1.0 MILE SOUTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 14, THEN 0.1 MILE SOUTH ON 5TH STREET, AT THE WASECA COUNTY FACILITY, ATTACHED TO THE ROOF ON THE SOUTH SIDE OF A BUILDING. STATION MNCORS WSCA WASECA L1PC2 IS IN A ZEPHYR GEODETIC LF MODEL 2 ANTENNA SERIAL NUMBER 30975462.

Station Notes

THE NATIONAL GEODETIC SURVEY (NGS) SITE ID IS MNWA.

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -94.209 12B = -94.216 09 = -94.137 03 = -93.986

*** No Horizontal Positions in the Database ***

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/WASECA_CORS_L1_PHASE_CENTER-!95645-3NW-14OCT2008.jpg	NW	Oct 14, 2008
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/WASECA_CORS_L1_PHASE_CENTER-!95645-2-14OCT2008.jpg		Oct 14, 2008
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/WASECA_CORS_L1_PHASE_CENTER-!95645-1-14OCT2008.jpg		Oct 14, 2008

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_95645.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_95645.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: MORRIS **NGS Name:** MORRIS

County: WASECA, MN (Sheet 1)

NGS ACRN: PP2841 Get Map
NGS Quad / Sta Num : 44093234/1005
USGS Quad: MORRISTOWN

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	14	108 N	22 W	440950.81	932630.73		1

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1927	2018	GOOD	Horz=NO Vert=NO	YES		RECESSED 12 IN.	NO MAG MATERIAL

Monument Type
CONCRETE MONUMENT (CAST-IN-PLACE)

Disk Type
TRIANGULATION STATION DISK

Mon. Agency
NGS

Description: (1973) **Stamping:** MORRIS 1927

6.5 MILES NORTH-NORTHEAST OF WASECA, 1.0 MILE NORTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND COUNTY ROAD 22 (THE JUNCTION IS 5.0 MILES NORTH OF WASECA) TO TRUNK HIGHWAY 13 MILEPOINT 38.05, THEN 3.22 MILES EAST ON 420TH AVENUE, 1095.0 FEET SOUTH OF 420TH AVENUE, ABOUT 300.0 FEET SOUTH OF A GROVE OF TREES, ON THE HIGHEST POINT IN A CULTIVATED FIELD. NO WITNESS POST.

Station Notes
THE SURVEY MARK IS ON PRIVATE PROPERTY AND HAS BEEN ABANDONED FOR MNDOT GEODETIC USE.

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -92.985 12B = -92.985 09 = -92.916 03 = -92.752

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Longitude	County (Feet) X	Y	County (Meters) X	Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Reference
NAD83(1996)	44 09 50.80981	93 26 30.72856	362171.418	220825.697	110390.069	67307.807	327.275	1	1999	17648
NAD83(1986)	44 09 50.79774	93 26 30.72745	362171.491	220824.474	110390.091	67307.434		1	1986	17289
NAD27	44 09 50.93400	93 26 29.93000						1	1933	01145

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/MORRIS-PP2841-3S-24JUL2018.jpg	S	Jul 24, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/MORRIS-PP2841-2-24JUL2018.jpg		Jul 24, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/MORRIS-PP2841-1-24JUL2018.jpg		Jul 24, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33270.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33270.pdf

MORRIS RM 1

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: MORRIS RM 1 **NGS Name:** MORRIS RM 1

County: WASECA, MN (Sheet 1)

NGS ACRN: CJ8025 Get Map
NGS Quad / Sta Num : 44093234/1005
USGS Quad: MORRISTOWN

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	14	108 N	22 W	440952.39	932631.01		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1927	1973	DESTROYED	Horz=NO Vert=NO	NO		FLUSH	SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	REFERENCE MARK DISK	NGS

Description: **Stamping:** MORRIS NO 1 1927

4.5 MILES SOUTH OF MORRISTOWN, 0.2 MILE SOUTH ON COUNTY ROAD 16 FROM THE JUNCTION OF COUNTY ROAD 16 AND TRUNK HIGHWAY 60 IN MORRISTOWN, THEN 0.2 MILE EAST ON FRANKLIN STREET, THEN 0.6 MILE SOUTH ON COUNTY ROAD 16 (DIVISION STREET), THEN 1.5 MILES CONTINUED SOUTH ON COUNTY ROAD 16 (INDEPENDENCE AVENUE), THEN 2.0 MILES CONTINUED SOUTH ON 160TH STREET, THEN 0.3 MILE EAST ON 420TH AVENUE, ON THE HIGHEST POINT IN A CULTIVATED FIELD, 1000.0 FEET SOUTHEAST OF AN ABANDONED FARM, 1.0 FOOT SOUTH OF A SOUTH FENCE LINE OF A SMALL OAK GROVE.

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -92.989 12B = -92.985 09 = -92.916 03 = -92.752

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_67388.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_67388.pdf

MORRIS RM 2

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: MORRIS RM 2 **NGS Name:** MORRIS RM 2 AZIMUTH

County: WASECA, MN (Sheet 1)

NGS ACRN: CJ8026 Get Map
NGS Quad / Sta Num : 44093234/1005
USGS Quad: MORRISTOWN

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	14	108 N	22 W	440935.00	932648.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1927	1973	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	REFERENCE MARK DISK	NGS

Description: **Stamping:** MORRIS NO 2 1927

4.89 MILES SOUTH OF MORRISTOWN, 0.2 MILE SOUTH ON COUNTY ROAD 16 FROM THE JUNCTION OF COUNTY ROAD 16 AND TRUNK HIGHWAY 60 IN MORRISTOWN, THEN 0.2 MILE EAST ON WEST FRANKLIN STREET, THEN 0.6 MILE SOUTH ON COUNTY ROAD 16 (DIVISION STREET), THEN 1.5 MILES CONTINUED SOUTH ON COUNTY ROAD 16 (INDEPENDENCE AVENUE), THEN 2.6 MILES CONTINUED SOUTH ON 160TH STREET, 23.4 FEET EAST OF THE CENTERLINE OF A NORTH-SOUTH SECTION LINE ROAD.

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -93.054 12B = -93.051 09 = -92.985 03 = -92.818

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_67389.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_67389.pdf

MORRIS RM 3

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: MORRIS RM 3 **NGS Name:** MORRIS RM 3

County: WASECA, MN (Sheet 1)

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	14	108 N	22 W	440950.00	932632.00		

NGS ACRN: CJ8027 Get Map
NGS Quad / Sta Num : 44093234/1005
USGS Quad: MORRISTOWN

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1973	2018	DESTROYED	Horz=NO Vert=NO	YES		PROJECTS 2 IN.	SEE DESCRIPTION

Monument Type
CONCRETE MONUMENT (CAST-IN-PLACE)

Disk Type
REFERENCE MARK DISK

Mon. Agency
NGS

Description: (1973) **Stamping:** MORRIS NO 3 1970

4.62 MILES SOUTH OF MORRISTOWN, 0.2 MILE SOUTH ON COUNTY ROAD 16 FROM THE JUNCTION OF COUNTY ROAD 16 AND TRUNK HIGHWAY 60 IN MORRISTOWN, THEN 0.2 MILE EAST ON WEST FRANKLIN STREET, THEN 0.6 MILE SOUTH ON COUNTY ROAD 16 (DIVISION STREET), THEN 1.5 MILES CONTINUED SOUTH ON COUNTY ROAD 16 (INDEPENDENCE AVENUE), THEN 2.0 MILES CONTINUED SOUTH ON 160TH STREET, THEN 0.2 MILE EAST ON 420TH AVENUE, 0.6 MILE SOUTH OF THE CROSSROADS, 300.0 FEET NORTH OF AN ENTRANCE TO THE DIELSCHNELDER FARMSTEAD, 17.0 FEET WEST OF THE CENTERLINE OF A ROAD, 16.0 FEET EAST-NORTHEAST OF A POWER POLE, 14.6 FEET EAST-NORTHEAST OF A STEEL WITNESS POST.

Station Notes
FOUND CONCRETE IN ONE PIECE BUT THE DISK WAS BROKEN OFF, COULDN'T FIND THE DISK.

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -92.992 12B = -92.989 09 = -92.920 03 = -92.756

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_67390.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_67390.pdf

MORRIS RM 4

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: MORRIS RM 4 **NGS Name:** MORRIS RM 4

County: WASECA, MN (Sheet 1)

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	14	108 N	22 W	440951.00	932632.00		

NGS ACRN: CJ8028 Get Map
NGS Quad / Sta Num : 44093234/1005
USGS Quad: MORRISTOWN

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1973	2018	DESTROYED	Horz=NO Vert=NO	YES		PROJECTS 2 IN.	SEE DESCRIPTION

Monument Type
CONCRETE MONUMENT (CAST-IN-PLACE)

Disk Type
REFERENCE MARK DISK

Mon. Agency
NGS

Description: (1973) **Stamping:** MORRIS NO 4 1970

4.60 MILES SOUTH OF MORRISTOWN, 0.2 MILE SOUTH ON COUNTY ROAD 16 FROM THE JUNCTION OF COUNTY ROAD 16 AND TRUNK HIGHWAY 60 IN MORRISTOWN, THEN 0.2 MILE EAST ON WEST FRANKLIN STREET, THEN 0.6 MILE SOUTH ON COUNTY ROAD 16 (DIVISION STREET), THEN 1.5 MILES CONTINUED SOUTH ON COUNTY ROAD 16 (INDEPENDENCE AVENUE), THEN 2.0 MILES CONTINUED SOUTH ON 160TH STREET, THEN 0.2 MILE EAST ON 420TH AVENUE, 500.0 FEET SOUTH OF THE CROSSROADS, 31.0 FEET WEST OF THE CENTERLINE OF A ROAD, 4.6 FEET SOUTH OF A POWER POLE, 1.9 FEET EAST OF A STEEL WITNESS POST.

Station Notes
FOUND CONCRETE IN ONE PIECE BUT THE DISK WAS BROKEN OFF, COULDN'T FIND THE DISK.

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -92.989 12B = -92.985 09 = -92.916 03 = -92.752

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_67391.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_67391.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: NEW RICHLAND NE
NGS Name: NEW RICHLAND NE

County: WASECA, MN (Sheet 1)

NGS ACRN: DH3119 Get Map
NGS Quad / Sta Num : 43093144/
USGS Quad: NEW RICHLAND

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	2	105 N	22 W	435540.55	932536.45		C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2003	2018	GOOD	Horz=YES Vert=YES	YES		FLUSH	MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	SURVEY DISK	MN-161

Description: (2003) **Stamping:** NEW RICHLAND-NE 2003

4.0 MILES NORTHEAST OF NEW RICHLAND, 3.0 MILES EAST ALONG TRUNK HIGHWAY 30 FROM THE JUNCTION OF TRUNK HIGHWAY 30 AND TRUNK HIGHWAY 13 IN NEW RICHLAND, THEN 1.1 MILES NORTH ALONG COUNTY ROAD 6, THEN 207.0 FEET EAST ALONG COUNTY ROAD 6, THEN 1.6 MILES NORTH ALONG COUNTY ROAD 63, 41.0 FEET WEST OF COUNTY ROAD 63, 28.5 FEET SOUTH OF A FIELD ENTRANCE, 6.5 FEET NORTHEAST OF A POWER POLE, 5.5 FEET WEST OF THE SOUTH END OF A FIELD ENTRANCE CULVERT, 5.0 FEET NORTHEAST OF A WITNESS POST.

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -94.855 12B = -94.855 09 = -94.796 03 = -94.639

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Longitude	County (Feet) X	Y	County (Meters) X	Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Reference
NAD83(2011)	43 55 40.55367	93 25 36.45274	365595.306	134699.230	111433.672	41056.407	341.166		2012	GPS2800
NAD83(2007)	43 55 40.55377	93 25 36.45349	365595.251	134699.240	111433.656	41056.411	341.191		2007	GPS2300
NAD83(1996)	43 55 40.55336	93 25 36.45261	365595.315	134699.198	111433.675	41056.398	341.247	C	2005	GPS2088

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/NEW_RICHLAND_NE-DH3119-3W-01AUG2018.jpg	W	Aug 1, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/NEW_RICHLAND_NE-DH3119-2-01AUG2018.jpg		Aug 1, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/NEW_RICHLAND_NE-DH3119-1-01AUG2018.jpg		Aug 1, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_50666.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_50666.pdf

NEW RICHLAND WATER TANK

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: NEW RICHLAND WATER TANK

NGS Name: NEW RICHLAND WATER TANK

County: WASECA, MN (Sheet 1)

NGS ACRN: CI6019 Get Map
NGS Quad / Sta Num : 43093144/
USGS Quad: NEW RICHLAND

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	17	105 N	22 W	435343.50	932917.53		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1978	2018	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
SEE DESCRIPTIVE TEXT	ELEVATED TANK	MNDT

Description: (1978)

Stamping:

IN THE NORTH PART OF NEW RICHLAND, AT THE CORNER OF 1ST STREET NORTHEAST AND BALSAM AVENUE NORTH, THEN 151.0 FEET EAST ON 1ST STREET NORTHEAST.

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -95.472 12B = -95.466 09 = -95.407 03 = -95.259

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33271.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33271.pdf

OTISCO NE

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: OTISCO NE **NGS Name:** OTISCO NE

County: WASECA, MN (Sheet 1)

NGS ACRN: DH3120 Get Map
NGS Quad / Sta Num : 44093233/
USGS Quad: MERIDEN

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	12	106 N	22 W	440001.23	932515.38		C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2003	2021	GOOD	Horz=YES Vert=YES	YES		RECESSED 6 IN.	MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	SURVEY DISK	MN-161

Description: (2010) **Stamping:** 2003 OTISCO-NE

7.3 MILES SOUTHEAST OF WASECA, 2.2 MILES EAST ALONG COUNTY ROAD 15 FROM THE JUNCTION OF COUNTY ROAD 15 AND TRUNK HIGHWAY 13 (THE JUNCTION IS 7.5 MILES SOUTH OF WASECA), THEN 1.0 MILE NORTH ALONG COUNTY ROAD 5, THEN 2.0 MILES EAST ALONG 305TH AVENUE, AT THE CREST OF A HILL, 0.53 MILE EAST OF 168TH STREET, 24.0 FEET NORTH OF 305TH AVENUE, 35.0 FEET EAST-SOUTHEAST OF A POWER POLE, 16.5 FEET WEST OF A FIELD ENTRANCE, 4.5 FEET SOUTH OF A WITNESS POST.

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -94.180 12B = -94.183 09 = -94.104 03 = -93.970

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Longitude	County (Feet) X	Y	County (Meters) X	Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Reference
NAD83(2011)	44 00 01.23328	93 25 15.37521	367299.306	161087.216	111953.053	49099.482	338.411		2012	GPS2800
NAD83(2007)	44 00 01.23334	93 25 15.37600	367299.249	161087.222	111953.035	49099.484	338.435		2007	GPS2300
NAD83(1996)	44 00 01.23311	93 25 15.37491	367299.328	161087.198	111953.059	49099.476	338.485	C	2005	GPS2088

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/OTISCO_NE-DH3120-3N-14APR2021.jpg	N	Apr 14, 2021
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/OTISCO_NE-DH3120-2-14APR2021.jpg		Apr 14, 2021
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/OTISCO_NE-DH3120-1-14APR2021.jpg		Apr 14, 2021

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_50663.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_50663.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: PILTZ **NGS Name:** PILTZ

County: WASECA, MN (Sheet 1)

NGS ACRN: DP6232 Get Map
NGS Quad / Sta Num : 43093411/
USGS Quad: OTISCO

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	17	105 N	23 W	435330.44	933651.46	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2013	2020	GOOD	Horz=YES Vert=YES	YES		RECESSED 3 IN.	BAR MAG IN DRILL HOLE

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 24 FT)

Disk Type
METAL ROD (WITH REMOVABLE ID DISK)

Mon. Agency
MNDT

Description: (2013) **Stamping:** PILTZ 2013

5.0 MILES EAST-SOUTHEAST OF WALDORF, 4.15 MILES EAST ALONG TRUNK HIGHWAY 30 FROM THE JUNCTION OF TRUNK HIGHWAY 30 AND TRUNK HIGHWAY 83 (THE JUNCTION IS 3.0 MILES SOUTH OF WALDORF), AT TRUNK HIGHWAY 30 MILEPOINT 162.1, 50.0 FEET NORTH OF TRUNK HIGHWAY 30, 20.0 FEET EAST OF A FIELD ENTRANCE, 1.0 FOOT WEST OF A WITNESS POST.

Station Pair: 8105 H - WASECA, MN

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1142.708	0.016	348.298	0.005	2/1	2015	00000851

Geoid Separations(ft): GEOID18 = -95.771 12B = -95.758 09 = -95.699 03 = -95.574

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Geodetic Positions Longitude	County (Feet) X	County (Feet) Y	County (Meters) X	County (Meters) Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Project Info Reference
NAD83(2011)	43 53 30.44474	93 36 51.46381	316082.752	121885.957	96342.2160	37150.914	319.111	C	2020	HTH30
NAD83(1996)	43 53 30.44457	93 36 51.46401	316082.738	121885.940	96342.2110	37150.909	319.174	C	2020	HTH30

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/PILTZ-DP6232-3N-09MAR2020.jpg	N	Mar 9, 2020
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/PILTZ-DP6232-2-09MAR2020.jpg		Mar 9, 2020
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/PILTZ-DP6232-1-09MAR2020.jpg		Mar 9, 2020

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_100332.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_100332.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: POLSFUSS MNDT **NGS Name:** POLSFUSS

County: WASECA, MN (Sheet 1)

NGS ACRN: PP2846 Get Map
NGS Quad / Sta Num : 44093234/1096
USGS Quad: MORRISTOWN

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	3	108 N	22 W	441058.58	932759.40		2

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1973	2018	GOOD	Horz=NO Vert=NO	YES		RECESSED 18 IN.	BAR MAG IN DRILL HOLE

Monument Type
CONCRETE MONUMENT (CAST-IN-PLACE)

Disk Type
TRAVERSE STATION DISK

Mon. Agency
MNDT

Description: (2007) **Stamping:** POLSFUSS 1973

2.5 MILES SOUTH-SOUTHWEST OF MORRISTOWN, 2.6 MILES SOUTH ALONG COUNTY ROAD 16 FROM THE JUNCTION OF COUNTY ROAD 16 AND TRUNK HIGHWAY 60 IN MORRISTOWN, THEN 1.90 MILES SOUTH AND WEST ON COUNTY ROAD 7, THEN 0.1 MILE NORTH ON 150TH STREET, 168.0 FEET EAST OF 150TH STREET, 280.0 FEET SOUTHEAST OF POLSFUSS MNDT RM 2.

Station Notes
THE SURVEY MARK IS ON PRIVATE PROPERTY AND HAS BEEN ABANDONED FOR MNDOT GEODETIC USE.

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -92.999 12B = -92.995 09 = -92.926 03 = -92.749

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Longitude	County (Feet) X	Y	County (Meters) X	Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Reference
NAD83(1996)	44 10 58.57721	93 27 59.40241	355753.203	227730.485	108433.793	69412.391	319.678	2	1999	17648
NAD83(1986)	44 10 58.56504	93 27 59.40203	355753.222	227729.253	108433.799	69412.015		2	1986	17289
NAD27	44 10 58.70110	93 27 58.60292						2	1977	16014

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/POLSFUSS-PP2846-3E-24JUL2018.jpg	E	Jul 24, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/POLSFUSS-PP2846-2-24JUL2018.jpg		Jul 24, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/POLSFUSS-PP2846-1-24JUL2018.jpg		Jul 24, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33272.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33272.pdf

POLSFUSS MNDT RM 1

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: POLSFUSS MNDT RM 1 **NGS Name:** POLSFUSS RM 1

County: WASECA, MN (Sheet 1)

NGS ACRN: PP2847 Get Map
NGS Quad / Sta Num : 44093234/1098
USGS Quad: MORRISTOWN

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	4	108 N	22 W	441057.33	932802.10		2

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1973	2018	DESTROYED	Horz=NO Vert=NO	YES		FLUSH	SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	REFERENCE MARK DISK	MNDT

Description: (1973) **Stamping:** POLSFUSS NO 1 1973

2.5 MILES SOUTH-SOUTHWEST OF MORRISTOWN, 2.4 MILES SOUTH ALONG JACKSON AVENUE FROM THE JUNCTION OF JACKSON AVENUE AND TRUNK HIGHWAY 60, THEN 0.9 MILE SOUTH ON 150TH STREET, 233.49 FEET SOUTHWEST OF STATION POLSFUSS, 87.0 FEET SOUTH OF A FIELD ENTRANCE, 28.0 FEET WEST OF A GRAVEL ROAD, 5.3 FEET NORTHEAST OF A POWER POLE, 4.0 FEET SOUTH-SOUTHEAST OF A WITNESS POST.

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -93.005 12B = -93.005 09 = -92.933 03 = -92.759

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Longitude	County (Feet) X	Y	County (Meters) X	Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Reference
NAD83(1996)	44 10 57.32939	93 28 02.09573	355556.089	227605.430	108373.713	69374.274	315.976	2	1999	17648
NAD83(1986)	44 10 57.31721	93 28 02.09535	355556.109	227604.197	108373.719	69373.898		2	1986	17289
NAD27	44 10 57.45325	93 28 01.29614						2	1977	16014

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33273.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33273.pdf

POLSFUSS MNDT RM 2

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: POLSFUSS MNDT RM 2 **NGS Name:** POLSFUSS RM 2

County: WASECA, MN (Sheet 1)

NGS ACRN: PP2845 Get Map
NGS Quad / Sta Num : 44093234/1099
USGS Quad: MORRISTOWN

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	4	108 N	22 W	441100.49	932802.17		2

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1973	2018	GOOD	Horz=YES Vert=YES	YES		PROJECTS 2 IN.	BAR MAG IN DRILL HOLE

Monument Type
CONCRETE MONUMENT (CAST-IN-PLACE)

Disk Type
REFERENCE MARK DISK

Mon. Agency
MNDT

Description: (1973) **Stamping:** POLSFUSS NO 2 1973

2.5 MILES SOUTH-SOUTHWEST OF MORRISTOWN, 2.6 MILES SOUTH ALONG COUNTY ROAD 16 FROM THE JUNCTION OF COUNTY ROAD 16 AND TRUNK HIGHWAY 60 IN MORRISTOWN, THEN 1.9 MILES SOUTH AND THEN WEST ON COUNTY ROAD 7, THEN 0.15 MILE NORTH ON 150TH STREET, 31.0 FEET WEST OF 150TH STREET, 280.0 FEET NORTHWEST OF STATION POLSFUSS, 3.0 FEET SOUTHWEST OF A POWER POLE, 3.0 FEET SOUTHEAST OF A POWER POLE, 3.5 FEET NORTH-NORTHEAST OF A WITNESS POST.

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -92.999 12B = -92.999 09 = -92.926 03 = -92.752

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Longitude	County (Feet) X	Y	County (Meters) X	Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Reference
NAD83(1996)	44 11 00.49363	93 28 02.17224	355552.653	227925.904	108372.666	69471.954	315.378	2	1999	17648
NAD83(1986)	44 11 00.48145	93 28 02.17188	355552.671	227924.670	108372.671	69471.578		2	1986	17289
NAD27	44 11 00.61750	93 28 01.37270						2	1977	16014

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/POLSFUSS_RM_2-PP2845-3W-24JUL2018.jpg	W	Jul 24, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/POLSFUSS_RM_2-PP2845-2-24JUL2018.jpg		Jul 24, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/POLSFUSS_RM_2-PP2845-1-24JUL2018.jpg		Jul 24, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33274.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33274.pdf

POSAL MNDT

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: POSAL MNDT
NGS Name: POSAL

County: WASECA, MN (Sheet 1)

NGS ACRN: AI6554 Get Map
NGS Quad / Sta Num : 44093322/
USGS Quad: WASECA

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	23	107 N	23 W	440356.63	933333.77	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1998	2014	DESTROYED	Horz=NO Vert=NO	NO		FLUSH	MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
UNKNOWN	SURVEY DISK	MNDT

Description: (2004)
Stamping: POSAL 1998

2.5 MILES WEST-SOUTHWEST OF WASECA, 2.15 MILES WEST ALONG TRUNK HIGHWAY 14 FROM THE JUNCTION OF TRUNK HIGHWAY 14 AND TRUNK HIGHWAY 13 IN WASECA TO TRUNK HIGHWAY 14 MILEPOINT 155.75, THEN 1.35 MILES SOUTH ON COUNTY ROAD 27, THEN 0.65 MILE WEST ON 350TH AVENUE, 33.1 FEET WEST-NORTHWEST OF A POWER POLE, 26.5 FEET SOUTH OF A GRAVEL ROAD, 12.0 FEET EAST OF A FIELD ENTRANCE, 7.3 FEET NORTHWEST OF A WITNESS POST. THE CAP HAS BEEN KNOCKED OFF.

Leveling-Derived Orthometric Heights (Elevations)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1097.869	0.016	334.631	0.005	2/1	2004	00000449
NGVD29	1097.767	0.016	334.600	0.005	2/1	2001	VJANE

Geoid Separations(ft): GEOID18 = -94.560 12B = -94.563 09 = -94.495 03 = -94.331

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Geodetic Positions Longitude	County (Feet) X	County (Feet) Y	County (Meters) X	County (Meters) Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Project Info Reference
NAD83(2011)	44 03 56.63133	93 33 33.76978	331053.989	185177.932	100905.458	56442.347	305.805		2012	GPS2800
NAD83(2007)	44 03 56.63132	93 33 33.77056	331053.933	185177.931	100905.441	56442.346	305.829		2007	GPS2300
NAD83(1996)	44 03 56.63075	93 33 33.76989	331053.981	185177.873	100905.455	56442.329	305.878	C	2000	GPS1453

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_36692.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_36692.pdf

POSAL MNDT RESET

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: POSAL MNDT RESET **NGS Name:** POSAL RESET

County: WASECA, MN (Sheet 1)

NGS ACRN: DP5048 Get Map
NGS Quad / Sta Num : 44093322/
USGS Quad: WASECA

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	23	107 N	23 W	440356.63	933333.77	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2014	2018	GOOD	Horz=YES Vert=YES	YES		RECESSED 2 IN.	BAR MAG IN DRILL HOLE

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 82 FT)

Disk Type
METAL ROD (WITH REMOVABLE ID DISK)

Mon. Agency
MNDT

Description: (2014) **Stamping:** POSAL 1998 2014

2.5 MILES WEST-SOUTHWEST OF WASECA, 2.05 MILES WEST ALONG COUNTY ROAD 14 (ELM AVENUE) FROM THE JUNCTION OF TRUNK HIGHWAY 14 AND TRUNK HIGHWAY 13 IN WASECA, THEN 1.35 MILES SOUTH ON COUNTY ROAD 27, THEN 0.65 MILE WEST ON 350TH AVENUE, 26.5 FEET SOUTH OF 350TH AVENUE, 33.1 FEET WEST-NORTHWEST OF A POWER POLE, 12.0 FEET EAST OF A FIELD ENTRANCE, 7.3 FEET NORTHWEST OF A WITNESS POST.

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1097.606	0.016	334.551	0.005	2/1	2016	00000870

Geoid Separations(ft): GEOID18 = -94.560 12B = -94.563 09 = -94.495 03 = -94.331

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Geodetic Positions Longitude	County (Feet) X	County (Feet) Y	County (Meters) X	County (Meters) Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Project Info Reference
NAD83(2011)	44 03 56.62979	93 33 33.76749	331054.155	185177.774	100905.508	56442.299	305.734		2014	GPS3043
NAD83(1996)	44 03 56.62957	93 33 33.76766	331054.143	185177.752	100905.505	56442.292	305.802	C	2014	HNEW14

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/POSAL_RESET-DP5048-3S-02AUG2018.jpg	S	Aug 2, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/POSAL_RESET-DP5048-2-02AUG2018.jpg		Aug 2, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/POSAL_RESET-DP5048-1-02AUG2018.jpg		Aug 2, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_101432.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_101432.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: POWELL **NGS Name:** POWELL

County: WASECA, MN (Sheet 1)

NGS ACRN: DP5049 Get Map
NGS Quad / Sta Num : 44093322/
USGS Quad: WASECA

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	23	107 N	23 W	440330.25	933344.31	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2014	2018	GOOD	Horz=YES Vert=YES	YES		FLUSH	BAR MAG IN DRILL HOLE

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 24 FT)

Disk Type
METAL ROD (WITH REMOVABLE ID DISK)

Mon. Agency
MNDT

Description: (2014) **Stamping:** POWELL 2014

3.0 MILES SOUTHWEST OF WASECA, 3.3 MILES WEST ALONG TRUNK HIGHWAY 14 FROM THE JUNCTION OF TRUNK HIGHWAY 14 AND TRUNK HIGHWAY 13 IN WASECA, AT TRUNK HIGHWAY 14 MILEPOINT 157.35, 31.1 FEET SOUTH-SOUTHWEST OF AN EASTBOUND TRUNK HIGHWAY 14 FOG LINE, 1.5 FEET NORTH-NORTHEAST OF A WITNESS POST.

Station Pair: ROBRAN - WASECA, MN

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1093.843	0.016	333.404	0.005	2/1	2016	00000870

Geoid Separations(ft): GEOID18 = -94.623 12B = -94.629 09 = -94.557 03 = -94.396

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Geodetic Positions Longitude	County (Feet) X	County (Feet) Y	County (Meters) X	County (Meters) Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Project Info Reference
NAD83(2011)	44 03 30.24629	93 33 44.31325	330263.227	182512.075	100664.433	55629.792	304.566		2014	GPS3043
NAD83(1996)	44 03 30.24605	93 33 44.31341	330263.215	182512.051	100664.429	55629.784	304.633	C	2014	HNEW14

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/POWELL-DP5049-3S-01AUG2018.jpg	S	Aug 1, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/POWELL-DP5049-2-01AUG2018.jpg		Aug 1, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/POWELL-DP5049-1-01AUG2018.jpg		Aug 1, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_101470.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_101470.pdf

RICHLAND MNDT

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: RICHLAND MNDT **NGS Name:** RICHLAND

County: WASECA, MN (Sheet 1)

NGS ACRN: OO1218 Get Map
NGS Quad / Sta Num : 43093411/
USGS Quad: OTISCO

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	19	105 N	22 W	435237.78	933038.54	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1978	2023	GOOD	Horz=YES Vert=YES	YES		RECESSED 2 IN.	BAR MAG IN DRILL HOLE

Monument Type
CONCRETE MONUMENT (CAST-IN-PLACE)

Disk Type
HORIZONTAL CONTROL DISK

Mon. Agency
MNDT

Description: (2008) **Stamping:** RICHLAND 1978

1.0 MILE SOUTH-SOUTHWEST OF NEW RICHLAND, 1.0 MILE SOUTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 30 IN NEW RICHLAND TO TRUNK HIGHWAY 13 MILEPOINT 17.65, THEN 1.2 MILES WEST ALONG 220TH AVENUE, 11.5 FEET NORTH OF 220TH AVENUE, 54.9 FEET NORTHEAST OF A WITNESS POST FOR RICHLAND MNDT RM 2, 53.83 FEET NORTHWEST OF RICHLAND MNDT RM 1, 56.13 FEET NORTHEAST OF RICHLAND MNDT RM 2.

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1209.594	0.016	368.685	0.005	2/1	2015	00000851

Geoid Separations(ft): GEOID18 = -95.692 12B = -95.686 09 = -95.626 03 = -95.482

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Geodetic Positions Longitude	County (Feet) X	County (Feet) Y	County (Meters) X	County (Meters) Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Project Info Reference
NAD83(2011)	43 52 37.77713	93 30 38.54456	343353.107	116338.856	104654.236	35460.154	339.519		2012	GPS2800
NAD83(2007)	43 52 37.77708	93 30 38.54529	343353.053	116338.851	104654.220	35460.153	339.539		2007	GPS2300
NAD83(1996)	43 52 37.77709	93 30 38.54483	343353.087	116338.852	104654.230	35460.153	339.613	C	2008	HMANC
NAD83(1986)	43 52 37.76592	93 30 38.54510	343353.059	116337.721	104654.222	35459.808		2	1986	17289
NAD27	43 52 37.89189	93 30 37.75369						2	1980	16297

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/RICHLAND-OO1218-3N-24APR2023.jpg	N	Apr 24, 2023
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/RICHLAND-OO1218-2-24APR2023.jpg		Apr 24, 2023
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/RICHLAND-OO1218-1-24APR2023.jpg		Apr 24, 2023

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33275.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33275.pdf

RICHLAND MNDT AZ MK

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: RICHLAND MNDT AZ MK **NGS Name:** RICHLAND AZ MK

County: WASECA, MN (Sheet 1)

NGS ACRN: OO1219 Get Map
NGS Quad / Sta Num : 43093411/
USGS Quad: OTISCO

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	30	105 N	22 W	435237.32	933114.99	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1978	2023	GOOD	Horz=YES Vert=YES	YES		FLUSH	BAR MAG IN DRILL HOLE

Monument Type
CONCRETE MONUMENT (CAST-IN-PLACE)

Disk Type
AZIMUTH MARK DISK

Mon. Agency
MNDT

Description: (2008) **Stamping:** RICHLAND 1978

1.5 MILES SOUTHWEST OF NEW RICHLAND, 1.0 MILE SOUTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 30 TO TRUNK HIGHWAY 13 MILEPOINT 17.65, THEN 1.7 MILES WEST ON 220TH AVENUE, 33.0 FEET SOUTH OF 220TH AVENUE, 3.2 FEET EAST OF A POWER POLE, 2.4 FEET NORTH OF A WITNESS POST.

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1169.092	0.016	356.340	0.005	2/1	2015	00000851

Geoid Separations(ft): GEOID18 = -95.728 12B = -95.718 09 = -95.663 03 = -95.518

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Geodetic Positions Longitude	County (Feet) X	County (Feet) Y	County (Meters) X	County (Meters) Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Project Info Reference
NAD83(2011)	43 52 37.32480	93 31 14.99554	340682.810	116312.449	103840.328	35452.105	327.172		2012	GPS2800
NAD83(2007)	43 52 37.32484	93 31 14.99626	340682.757	116312.453	103840.312	35452.107	327.193		2007	GPS2300
NAD83(1996)	43 52 37.32419	93 31 14.99563	340682.803	116312.387	103840.326	35452.087	327.253	C	2008	HMANC
NAD83(1986)	43 52 37.31439	93 31 14.99681	340682.709	116311.395	103840.297	35451.784		3	1986	17289
NAD27	43 52 37.43940	93 31 14.20424						3	1980	16297

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/RICHLAND_AZ_MK-OO1219-3S-24APR2023.jpg	S	Apr 24, 2023
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/RICHLAND_AZ_MK-OO1219-2-24APR2023.jpg		Apr 24, 2023
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/RICHLAND_AZ_MK-OO1219-1-24APR2023.jpg		Apr 24, 2023

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33276.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33276.pdf

RICHLAND MNDT RM 1

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: RICHLAND MNDT RM 1 **NGS Name:** RICHLAND RM 1

County: WASECA, MN (Sheet 1)

NGS ACRN: CI7041 Get Map
NGS Quad / Sta Num : 43093411/
USGS Quad: OTISCO

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	19	105 N	22 W	435237.34	933038.12	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1978	2018	GOOD	Horz=YES Vert=YES	YES		RECESSED 12 IN.	STEEL ROD IMBED IN MON

Monument Type
CONCRETE MONUMENT (CAST-IN-PLACE)

Disk Type
REFERENCE MARK DISK

Mon. Agency
MNDT

Description: (2008) **Stamping:** RICHLAND NO 1 1978

1.0 MILE SOUTH-SOUTHWEST OF NEW RICHLAND, 1.0 MILE SOUTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 30 IN NEW RICHLAND TO TRUNK HIGHWAY 13 MILEPOINT 17.65, THEN 1.2 MILES WEST ALONG 220TH AVENUE, 31.0 FEET SOUTH OF 220TH AVENUE, 61.5 FEET EAST OF RICHLAND MNDT RM 2, 53.83 FEET SOUTHEAST OF STATION RICHLAND, 8.8 FEET SOUTH OF A WITNESS POST.

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Accuracy	Orthometric (Meters) Height	Accuracy	Survey Order/(Class)	Project Info Year	Reference
NAVD88	1206.835	0.016	367.844	0.005	2/1	2015	00000851

Geoid Separations(ft): GEOID18 = -95.692 12B = -95.686 09 = -95.626 03 = -95.482

*** No Horizontal Positions in the Database ***

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/RICHLAND_RM_1-CI7041-3S-26JUL2018.jpg	S	Jul 26, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/RICHLAND_RM_1-CI7041-2-26JUL2018.jpg		Jul 26, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/RICHLAND_RM_1-CI7041-1-26JUL2018.jpg		Jul 26, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_67393.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_67393.pdf

RICHLAND MNDT RM 2

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: RICHLAND MNDT RM 2 **NGS Name:** RICHLAND RM 2

County: WASECA, MN (Sheet 1)

NGS ACRN: CI7042 Get Map
NGS Quad / Sta Num : 43093411/
USGS Quad: OTISCO

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	19	105 N	22 W	435237.35	933038.96	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1978	2018	GOOD	Horz=YES Vert=YES	YES		RECESSED 8 IN.	STEEL ROD IMBED IN MON

Monument Type
CONCRETE MONUMENT (CAST-IN-PLACE)

Disk Type
REFERENCE MARK DISK

Mon. Agency
MNDT

Description: (2008) **Stamping:** RICHLAND NO 2 1978

1.0 MILE SOUTH-SOUTHWEST OF NEW RICHLAND, 1.0 MILE SOUTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 30 IN NEW RICHLAND TO TRUNK HIGHWAY 13 MILEPOINT 17.65, THEN 1.2 MILES WEST ALONG 220TH AVENUE, 31.6 FEET SOUTH OF 220TH AVENUE, 61.5 FEET WEST OF RICHLAND MNDT RM 1, 56.13 FEET SOUTHWEST OF STATION RICHLAND, 7.3 FEET SOUTH OF A WITNESS POST.

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Accuracy	Orthometric (Meters) Height	Accuracy	Survey Order/(Class)	Project Info Year	Reference
NAVD88	1206.359	0.016	367.699	0.005	2/1	2015	00000851

Geoid Separations(ft): GEOID18 = -95.692 12B = -95.686 09 = -95.626 03 = -95.482

*** No Horizontal Positions in the Database ***

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/RICHLAND_RM_2-CI7042-3S-26JUL2018.jpg	S	Jul 26, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/RICHLAND_RM_2-CI7042-2-26JUL2018.jpg		Jul 26, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/RICHLAND_RM_2-CI7042-1-26JUL2018.jpg		Jul 26, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_67394.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_67394.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: ROBRAN **NGS Name:** ROBRAN

County: WASECA, MN (Sheet 1)

NGS ACRN: DP5050 Get Map
NGS Quad / Sta Num : 44093322/
USGS Quad: WASECA

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	23	107 N	23 W	440328.05	933318.33	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2014	2018	GOOD	Horz=YES Vert=YES	YES		RECESSED 2 IN.	BAR MAG IN DRILL HOLE

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 34 FT)

Disk Type
METAL ROD (WITH REMOVABLE ID DISK)

Mon. Agency
MNDT

Description: (2014) **Stamping:** ROBRAN 2014

2.7 MILES SOUTHWEST OF WASECA, 3.0 MILES WEST ALONG TRUNK HIGHWAY 14 FROM THE JUNCTION OF TRUNK HIGHWAY 14 AND TRUNK HIGHWAY 13 IN WASECA, AT TRUNK HIGHWAY 14 MILEPOINT 157.65, 80.1 FEET SOUTH OF AN EASTBOUND TRUNK HIGHWAY 14 FOG LINE, 39.1 FEET NORTH-NORTHWEST OF A RIGHT-OF-WAY POST, 1.5 FEET NORTH OF A WITNESS POST.

Station Pair: POWELL - WASECA, MN

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Accuracy	Orthometric (Meters) Height	Accuracy	Survey Order/(Class)	Project Info Year	Reference
NAVD88	1128.669	0.016	344.019	0.005	2/1	2016	00000870

Geoid Separations(ft): GEOID18 = -94.590 12B = -94.596 09 = -94.524 03 = -94.363

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Longitude	County (Feet) X	Y	County (Meters) X	Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Reference
NAD83(2011)	44 03 28.05110	93 33 18.32553	332159.264	182275.005	101242.346	55557.533	315.193		2014	GPS3043
NAD83(1996)	44 03 28.05087	93 33 18.32569	332159.252	182274.982	101242.343	55557.526	315.261	C	2014	HNEW14

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/ROBRAN-DP5050-3S-01AUG2018.jpg	S	Aug 1, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/ROBRAN-DP5050-2-01AUG2018.jpg		Aug 1, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/ROBRAN-DP5050-1-01AUG2018.jpg		Aug 1, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_101477.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_101477.pdf

ROVE MNDT

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: ROVE MNDT **NGS Name:** ROVE

County: WASECA, MN (Sheet 1)

NGS ACRN: AI6555 Get Map
NGS Quad / Sta Num : 44093233/
USGS Quad: MERIDEN

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	24	107 N	22 W	440330.79	932533.62	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1998	2018	DESTROYED	Horz=NO Vert=NO	YES		FLUSH	MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
UNKNOWN	SURVEY DISK	MNDT

Description: (1998) **Stamping:** ROVE 1998

4.0 MILES EAST-SOUTHEAST OF WASECA, 4.8 MILES EAST ALONG TRUNK HIGHWAY 14 FROM THE JUNCTION OF TRUNK HIGHWAY 14 AND TRUNK HIGHWAY 13 IN WASECA TO TRUNK HIGHWAY 14 MILEPOINT 162.60, THEN 0.7 MILE SOUTH ON 175TH STREET, THEN 0.25 MILE EAST ON 358TH AVENUE, THEN 1.05 MILES SOUTH ON 178TH STREET, THEN 0.2 MILE WEST ON 348TH AVENUE, THEN 0.25 MILE SOUTH ON 175TH STREET, THEN 0.50 MILE WEST ON 345TH AVENUE, 35.0 FEET SOUTH OF 345TH AVENUE, 134.0 FEET EAST OF AN ENTRANCE, 77.0 FEET SOUTH-SOUTHWEST OF A POWER POLE, 3.0 FEET WEST OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Elevations)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1121.746	0.016	341.909	0.005	2/1	2004	00000464
NGVD29	1121.714	0.016	341.899	0.005	2/1	2001	VJANE

Geoid Separations(ft): GEOID18 = -93.743 12B = -93.747 09 = -93.661 03 = -93.514

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Geodetic Positions Longitude	County (Feet) X	County (Feet) Y	County (Meters) X	County (Meters) Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Project Info Reference
NAD83(2011)	44 03 30.78939	93 25 33.62053	366096.688	182316.143	111586.494	55570.072	313.330		2012	GPS2800
NAD83(2007)	44 03 30.78938	93 25 33.62130	366096.632	182316.143	111586.477	55570.071	313.353		2007	GPS2300
NAD83(1996)	44 03 30.78899	93 25 33.62062	366096.681	182316.103	111586.492	55570.059	313.404	C	2002	GPS1746

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_36693.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_36693.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: RUSSEL **NGS Name:** RUSSEL

County: WASECA, MN (Sheet 1)

NGS ACRN: DQ5414 Get Map
NGS Quad / Sta Num : 43093414/
USGS Quad: WALDORF

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	3	105 N	24 W	435534.02	934150.25	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2016	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 3 IN.	BAR MAG IN DRILL HOLE

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 19 FT)

Disk Type
METAL ROD (WITH REMOVABLE ID DISK)

Mon. Agency
MNDT

Description: (2016) **Stamping:** RUSSEL 2016

0.6 MILE SOUTH OF WALDORF, 0.2 MILE SOUTH ALONG TRUNK HIGHWAY 83 FROM THE JUNCTION OF TRUNK HIGHWAY 83 AND COUNTY ROAD 3 (MAIN STREET) IN RUSSEL, AT TRUNK HIGHWAY 83 MILEPOINT 2.4, 59.4 FEET EAST OF TRUNK HIGHWAY 83, 23.4 FEET SOUTH-SOUTHWEST OF A CABLE BOX, 22.3 FEET SOUTH-SOUTHWEST OF A WITNESS POST.

Station Pair: DELORES - WASECA, MN

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1081.520	0.016	329.648	0.005	2/1	2019	00000938

Geoid Separations(ft): GEOID18 = -95.508 12B = -95.502 09 = -95.430 03 = -95.315

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Geodetic Positions Longitude	County (Feet) X	County (Feet) Y	County (Meters) X	County (Meters) Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Project Info Reference
NAD83(2011)	43 55 34.02206	93 41 50.25097	294321.314	134595.569	89709.3160	41024.812	300.523	C	2025	H23BLUE
NAD83(1996)	43 55 34.02150	93 41 50.25095	294321.315	134595.513	89709.3160	41024.794			2025	H23BLUE

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/RUSSEL-DQ5414-3E-31JUL2018.jpg	E	Jul 31, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/RUSSEL-DQ5414-2-31JUL2018.jpg		Jul 31, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/RUSSEL-DQ5414-1-31JUL2018.jpg		Jul 31, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_105305.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_105305.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: S 22 **NGS Name:** S 22

County: WASECA, MN (Sheet 1)

NGS ACRN: PP1721 Get Map
NGS Quad / Sta Num : 44093331/
USGS Quad: MADISON LAKE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	30	108 N	24 W	440759.00	934601.00	2	

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1933	1970	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	BENCH MARK DISK	NGS

Description: (1970) **Stamping:** S 22 1933

IN SMITH'S MILL, 0.2 MILE SOUTH ALONG COUNTY ROAD 37 FROM THE JUNCTION OF COUNTY ROAD 37 AND TRUNK HIGHWAY 14 IN SMITH'S MILL, THEN 0.1 MILE SOUTHEAST ON 398TH AVENUE, 60.0 FEET SOUTH OF THE SOUTHEAST CORNER OF A RAILROAD STATION, 39.0 FEET SOUTHWEST OF THE SOUTH RAIL OF A RAILROAD, 30.0 FEET NORTHWEST OF 3 ELM TREES, 14.0 FEET WEST OF A POLE, 7.0 FEET NORTHEAST OF A FENCE LINE.

Leveling-Derived Orthometric Heights (Elevations)

Vertical Datum	Orthometric (Feet) Height	Accuracy	Orthometric (Meters) Height	Accuracy	Survey Order/(Class)	Project Info Year	Reference
NAVD88	1054.552	0.016	321.428	0.005	2/0	1991	00000025
NGVD29	1054.417	0.007	321.387	0.002	1	1942	L62 MINN

Geoid Separations(ft): GEOID18 = -94.485 12B = -94.488 09 = -94.403 03 = -94.248

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33277.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33277.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: SCHWARTZ **NGS Name:** SCHWARTZ

County: WASECA, MN (Sheet 1)

NGS ACRN: DQ6346 Get Map
NGS Quad / Sta Num : 44093321/
USGS Quad: WATERVILLE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	6	108 N	22 W	441111.05	933037.64	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2016	2020	GOOD	Horz=YES Vert=YES	YES		RECESSED 2 IN.	BAR MAG IN DRILL HOLE

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 19 FT)

Disk Type
METAL ROD (WITH REMOVABLE ID DISK)

Mon. Agency
MNDT

Description: (2016) **Stamping:** SCHWARTZ 2016

3.6 MILES SOUTHEAST OF WATERVILLE, 3.1 MILES SOUTHEAST ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 60 IN WATERVILLE, AT TRUNK HIGHWAY 13 MILEPOINT 39.4, 65.0 FEET SOUTHWEST OF TRUNK HIGHWAY 13, 1.5 FEET NORTHEAST OF A WITNESS POST.

Station Pair: BECKER - WASECA, MN

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1097.701	0.016	334.580	0.005	2/1	2019	00000938

Geoid Separations(ft): GEOID18 = -93.310 12B = -93.317 09 = -93.231 03 = -93.048

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Geodetic Positions Longitude	County (Feet) X	County (Feet) Y	County (Meters) X	County (Meters) Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Project Info Reference
NAD83(2011)	44 11 11.04995	93 30 37.63788	344231.252	229073.525	104921.895	69821.750	306.158		2020	GPS3368
NAD83(1996)	44 11 11.04985	93 30 37.63815	344231.232	229073.515	104921.889	69821.747	306.216	C	2020	HTH13

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/SCHWARTZ-DQ6346-3SW-10MAR2020.jpg	SW	Mar 10, 2020
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/SCHWARTZ-DQ6346-2-10MAR2020.jpg		Mar 10, 2020
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/SCHWARTZ-DQ6346-1-10MAR2020.jpg		Mar 10, 2020

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_105775.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_105775.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: SECA MNDT **NGS Name:** SECA

County: WASECA, MN (Sheet 1)

NGS ACRN: AI6556 Get Map
NGS Quad / Sta Num : 44093322/
USGS Quad: WASECA

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	23	107 N	23 W	440356.64	933253.59	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1998	2014	DESTROYED	Horz=NO Vert=NO	NO		FLUSH	MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
UNKNOWN	SURVEY DISK	MNDT

Description: (1998) **Stamping:** SECA 1998

2.0 MILES WEST-SOUTHWEST OF WASECA, 2.15 MILES WEST ALONG TRUNK HIGHWAY 14 FROM THE JUNCTION OF TRUNK HIGHWAY 14 AND TRUNK HIGHWAY 13 IN WASECA TO TRUNK HIGHWAY 14 MILEPOINT 155.75, THEN 1.35 MILES SOUTH ON COUNTY ROAD 27, THEN 0.05 MILE WEST ON 350TH AVENUE, 298.0 FEET WEST OF COUNTY ROAD 27, 30.5 FEET SOUTH OF 350TH AVENUE, 15.4 FEET NORTHWEST OF A POWER POLE, 3.6 FEET NORTH OF A WITNESS POST.

Station Notes

THE DISK WAS TURNED IN TO THE OFFICE.

Leveling-Derived Orthometric Heights (Elevations)

Vertical Datum	Orthometric (Feet) Height	Accuracy	Orthometric (Meters) Height	Accuracy	Survey Order/(Class)	Project Info Year	Reference
NAVD88	1116.340	0.016	340.261	0.005	2/1	2004	00000449
NGVD29	1116.241	0.016	340.231	0.005	2/1	2001	VJANE

Geoid Separations(ft): GEOID18 = -94.498 12B = -94.504 09 = -94.432 03 = -94.268

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Longitude	County (Feet) X	Y	County (Meters) X	Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Reference
NAD83(2011)	44 03 56.64394	93 32 53.59465	333987.435	185156.545	101799.574	56435.828	311.453		2012	GPS2800
NAD83(2007)	44 03 56.64393	93 32 53.59544	333987.377	185156.544	101799.556	56435.828	311.478		2007	GPS2300
NAD83(1996)	44 03 56.64333	93 32 53.59476	333987.426	185156.483	101799.571	56435.809	311.527	C	2000	GPS1453

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_36694.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_36694.pdf

SECA MNDT RESET

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: SECA MNDT RESET
NGS Name: SECA RESET

County: WASECA, MN (Sheet 1)

NGS ACRN: DP5052 Get Map
NGS Quad / Sta Num : 44093322/
USGS Quad: WASECA

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	23	107 N	23 W	440356.64	933253.59	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2014	2018	GOOD	Horz=YES Vert=YES	YES		RECESSED 4 IN.	BAR MAG IN DRILL HOLE

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 82 FT)

Disk Type
METAL ROD (WITH REMOVABLE ID DISK)

Mon. Agency
MNDT

Description: (2014)

Stamping: SECA 1998 2014

2.0 MILES WEST-SOUTHWEST OF WASECA, 2.05 MILES WEST ALONG COUNTY ROAD 14 (ELM AVENUE) FROM THE JUNCTION OF COUNTY ROAD 14 (ELM AVENUE) AND TRUNK HIGHWAY 13 IN WASECA, THEN 1.35 SOUTH ON COUNTY ROAD 27, THEN 0.05 MILE WEST ON 350TH AVENUE, 298.0 FEET WEST OF COUNTY ROAD 27, 30.5 FEET SOUTH OF 350TH AVENUE, 3.6 FEET NORTH OF A WITNESS POST.

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1116.149	0.016	340.203	0.005	2/1	2016	00000870

Geoid Separations(ft): GEOID18 = -94.498 12B = -94.504 09 = -94.432 03 = -94.268

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Geodetic Positions Longitude	County (Feet) X	County (Feet) Y	County (Meters) X	County (Meters) Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Project Info Reference
NAD83(2011)	44 03 56.64387	93 32 53.59448	333987.447	185156.538	101799.577	56435.826	311.403		2014	GPS3043
NAD83(1996)	44 03 56.64366	93 32 53.59464	333987.435	185156.516	101799.574	56435.819	311.470	C	2014	HNEW14

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/SECA_RESET-DP5052-3S-02AUG2018.jpg	S	Aug 2, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/SECA_RESET-DP5052-2-02AUG2018.jpg		Aug 2, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/SECA_RESET-DP5052-1-02AUG2018.jpg		Aug 2, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_101433.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_101433.pdf

SMITHS MILL RM 1

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: SMITHS MILL RM 1 **NGS Name:** SMITHS MILL RM 1

County: WASECA, MN (Sheet 1)

NGS ACRN: CJ4707 Get Map
NGS Quad / Sta Num : 44093332/1017
USGS Quad: ST CLAIR

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	7	107 N	24 W	440527.00	934603.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1970	2018	DESTROYED	Horz=NO Vert=NO	NO		FLUSH	SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	REFERENCE MARK DISK	MNDT

Description: **Stamping:** SMITHS MILL NO 1 1970

3.29 MILES SOUTH OF SMITH'S MILL, 3.3 MILES SOUTH ON COUNTY ROAD 37 FROM THE JUNCTION OF COUNTY ROAD 37 AND TRUNK HIGHWAY 14 IN SMITH'S MILL, 173.28 FEET EAST OF THE CENTERLINE OF COUNTY ROAD 37, 127.08 FEET EAST OF STATION SMITHS MILL RM 3.

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -94.616 12B = -94.619 09 = -94.537 03 = -94.399

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_66837.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_66837.pdf

SMITHS MILL RM 2

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: SMITHS MILL RM 2 **NGS Name:** SMITHS MILL RM 2

County: WASECA, MN (Sheet 1)

NGS ACRN: PP2910 Get Map
NGS Quad / Sta Num : 44093332/1017
USGS Quad: ST CLAIR

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	7	107 N	24 W	440448.18	934605.58		3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1971	2018	DESTROYED	Horz=NO Vert=NO	NO		PROJECTS 4 IN.	SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	SURVEY DISK	MNDT

Description: (1971) **Stamping:** SMITHS MILL NO 2 1970

3.75 MILES SOUTH OF SMITH'S MILL, 4.0 MILES SOUTH ON COUNTY ROAD 37 FROM THE JUNCTION OF COUNTY ROAD 37 AND TRUNK HIGHWAY 14 IN SMITH'S MILL, AT THE NORTHEAST CORNER OF THE JUNCTION OF COUNTY ROAD 15/COUNTY ROAD 2 (360TH AVENUE) AND COUNTY ROAD 37/COUNTY ROAD 14, 56.4 FEET SOUTH-SOUTHWEST OF THE SOUTH END OF A CONCRETE CULVERT, 38.0 FEET NORTH OF COUNTY ROAD 15/COUNTY ROAD 2, 31.5 FEET EAST OF COUNTY ROAD 37/COUNTY ROAD 14, 18.3 FEET WEST-NORTHWEST OF A POWER POLE, 2.3 FEET WEST OF A WITNESS POST.

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -94.645 12B = -94.649 09 = -94.570 03 = -94.436

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Longitude	County (Feet) X	Y	County (Meters) X	Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Reference
NAD83(1996)	44 04 48.17646	93 46 05.57884	276214.276	190894.852	84190.2800	58184.867	289.271	3	1999	17648
NAD83(1986)	44 04 48.17167	93 46 05.57770	276214.354	190894.366	84190.3040	58184.719		3	1986	17289
NAD27	44 04 48.28659	93 46 04.76306						3	1977	16059

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_2723.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_2723.pdf

SMITHS MILL RM 3

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: SMITHS MILL RM 3 **NGS Name:** SMITHS MILL RM 3

County: WASECA, MN (Sheet 1)

NGS ACRN: CJ4708 Get Map
NGS Quad / Sta Num : 44093332/
USGS Quad: ST CLAIR

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	7	107 N	24 W	440527.09	934604.77		C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1974	2024	GOOD	Horz=YES Vert=YES	YES		FLUSH	STEEL ROD IMBED IN MON

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	REFERENCE MARK DISK	MNDT

Description: (2004) **Stamping:** SMITHS MILL NO 3 1970 1974

5.6 MILES NORTH OF PEMBERTON, 0.8 MILE NORTH ALONG COUNTY ROAD 53 FROM THE JUNCTION OF COUNTY ROAD 53 AND TRUNK HIGHWAY 83 IN PEMBERTON, THEN 0.7 MILE EAST ON COUNTY ROAD 10, THEN 4.75 MILES NORTH ON COUNTY ROAD 37, 58.0 FEET EAST OF COUNTY ROAD 37, 2.5 FEET NORTH OF A WITNESS POST.

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -94.616 12B = -94.616 09 = -94.534 03 = -94.399

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Longitude	County (Feet) X	Y	County (Meters) X	Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Reference
NAD83(2011)	44 05 27.09413	93 46 04.76663	276314.249	194835.150	84220.7510	59385.873	294.183	C	2025	H23BLUE
NAD83(2007)	44 05 27.09411	93 46 04.76742	276314.191	194835.149	84220.7340	59385.872	294.207		2007	GPS2300
NAD83(1996)	44 05 27.09361	93 46 04.76660	276314.250	194835.098	84220.7520	59385.857	294.254	C	2014	HNEW14

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/SMITHS_MILL_RM_3-CJ4708-3E-31JUL2018.jpg	E	Jul 31, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/SMITHS_MILL_RM_3-CJ4708-2-31JUL2018.jpg		Jul 31, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/SMITHS_MILL_RM_3-CJ4708-1-31JUL2018.jpg		Jul 31, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_50005.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_50005.pdf

SMOKESTACK SSW

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: SMOKESTACK SSW **NGS Name:** SMOKESTACK SSW

County: WASECA, MN (Sheet 1)

NGS ACRN: CJ4709 Get Map
NGS Quad / Sta Num : 44093233/
USGS Quad: MERIDEN

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	17	106 N	22 W	435843.20	933007.50		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
	2018	GOOD	Horz=NO Vert=NO	YES			NO MAG MATERIAL

Monument Type	Disk Type	Mon. Agency
SEE DESCRIPTIVE TEXT	STACK	UNK

Description: (2010) **Stamping:**

7.0 MILES SOUTH OF WASECA, 5.6 MILES SOUTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 14 IN WASECA, THEN 0.4 MILE WEST ON COUNTY ROAD 15, 50.0 FEET NORTH OF COUNTY ROAD 15.

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -94.888 12B = -94.888 09 = -94.810 03 = -94.685

*** No Horizontal Positions in the Database ***

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/SMOKESTACK_SSW-CJ4709-3N-01AUG2018.jpg	N	Aug 1, 2018
Monument:			
Disk:			

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_67377.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_67377.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: SOY MNDT **NGS Name:** SOY

County: WASECA, MN (Sheet 1)

NGS ACRN: OO1123 Get Map
NGS Quad / Sta Num : 43093144/
USGS Quad: NEW RICHLAND

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	24	105 N	22 W	435238.69	932429.19		2

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1978	2018	DESTROYED	Horz=NO Vert=NO	YES		FLUSH	MARK IS STEEL PIPE

Monument Type
CONCRETE POST (PREFABRICATED)

Disk Type
SURVEY DISK

Mon. Agency
MNDT

Description: (1985) **Stamping:** SOY 1978

5.0 MILES WEST OF ELLENDALE, 0.05 MILE WEST OF THE COUNTY LINE, AT TRUNK HIGHWAY 30 MILEPOINT 172.95, 105.0 FEET SOUTH OF TRUNK HIGHWAY 30, 10.8 FEET EAST-NORTHEAST OF A RIGHT-OF-WAY POST, 7.9 FEET EAST OF A TELEPHONE POLE, 5.0 FEET SOUTH OF A WITNESS POST. THE STATION IS A SQUARE METAL CAP ATOP A 2.0 INCH DIAMETER SQUARE PERFORATED STEEL TUBE DRIVEN INTO THE GROUND.

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -95.161 12B = -95.154 09 = -95.105 03 = -94.924

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Longitude	County (Feet) X	Y	County (Meters) X	Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Reference
NAD83(1996)	43 52 38.69417	93 24 29.19296	370408.052	116253.665	112900.600	35434.188		2	1999	GPS927
NAD83(1986)	43 52 38.68499	93 24 29.19384	370407.983	116252.735	112900.579	35433.905		2	1986	17289
NAD27	43 52 38.82030	93 24 28.41476						2	1980	16297

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/SOY-OO1123-3S-05JUN2013.jpg	S	Jun 5, 2013
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/SOY-OO1123-2-05JUN2013.jpg		Jun 5, 2013
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/SOY-OO1123-1-05JUN2013.jpg		Jun 5, 2013

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33278.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33278.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: ST MARY C **NGS Name:** ST MARY C

County: WASECA, MN (Sheet 1)

NGS ACRN: DH3121 Get Map
NGS Quad / Sta Num : 44093322/
USGS Quad: WASECA

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	21	107 N	23 W	440304.93	933514.42		C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2003	2018	GOOD	Horz=YES Vert=YES	YES		FLUSH	STEEL ROD IMBED IN MON

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	SURVEY DISK	MN-161

Description: (2004) **Stamping:** ST MARY-C 2003

4.25 MILES SOUTHWEST OF WASECA, 0.25 MILE WEST ALONG ELM STREET/OLD HIGHWAY 14 FROM THE JUNCTION OF ELM STREET AND TRUNK HIGHWAY 13 IN WASECA, THEN 0.8 MILE SOUTH ALONG 4TH STREET, THEN 1.0 MILE SOUTH ALONG COUNTY ROAD 4 (128TH STREET), THEN 3.65 MILES WEST ALONG COUNTY ROAD 9 (340TH AVENUE), THEN 0.1 MILE WEST ALONG COUNTY ROAD 26 (340TH AVENUE), 37.0 FEET WEST OF 90TH STREET, 50.0 FEET NORTH OF COUNTY ROAD 26, 37.0 FEET SOUTH OF A FIELD ENTRANCE, 22.0 FEET NORTHEAST OF A TELEPHONE PEDESTAL, 1.3 FEET SOUTH OF A WITNESS POST.

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -94.777 12B = -94.780 09 = -94.711 03 = -94.554

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Longitude	County (Feet) X	Y	County (Meters) X	Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Reference
NAD83(2011)	44 03 04.92572	93 35 14.41627	323662.597	180000.520	98652.5570	54864.268	308.124		2014	GPS3043
NAD83(2007)	44 03 04.92573	93 35 14.41704	323662.541	180000.522	98652.5400	54864.269	308.148		2007	GPS2300
NAD83(1996)	44 03 04.92544	93 35 14.41636	323662.590	180000.492	98652.5550	54864.260	308.197	C	2014	HNEW14

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/ST_MARY_C-DH3121-3N-31JUL2018.jpg	N	Jul 31, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/ST_MARY_C-DH3121-2-31JUL2018.jpg		Jul 31, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/ST_MARY_C-DH3121-1-31JUL2018.jpg		Jul 31, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_50670.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_50670.pdf

ST MARY MNDT

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: ST MARY MNDT **NGS Name:** ST MARY

County: WASECA, MN (Sheet 1)

NGS ACRN: PP2895 Get Map
NGS Quad / Sta Num : 44093322/1013
USGS Quad: WASECA

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	8	107 N	23 W	440449.61	933722.47		C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1970	2014	DESTROYED	Horz=NO Vert=NO	NO		RECESSED 4 IN.	MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
UNKNOWN	HORIZONTAL CONTROL DISK	MNDT

Description: (1970) **Stamping:** ST MARY 1970

5.5 MILES WEST OF WASECA, 1.4 MILES SOUTH AND WEST ON COUNTY ROAD 27 FROM THE JUNCTION OF COUNTY ROAD 27 AND TRUNK HIGHWAY 14, THEN 2.7 MILES CONTINUED WEST ON COUNTY ROAD 2, 138.22 FEET EAST OF ST. MARY MNDT RM 2, 114.0 FEET WEST OF THE NORTH-SOUTH ROAD, 83.63 FEET NORTH OF ST. MARY MNDT RM 1, 38.0 FEET NORTH OF COUNTY ROAD 2, 3.5 FEET WEST OF A FIELD ENTRANCE.

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -94.718 12B = -94.721 09 = -94.655 03 = -94.491

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Longitude	County (Feet) X	Y	County (Meters) X	Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Reference
NAD83(2011)	44 04 49.60524	93 37 22.47265	314400.976	190678.870	95829.6090	58119.036	316.588		2012	GPS2800
NAD83(2007)	44 04 49.60523	93 37 22.47343	314400.919	190678.870	95829.5920	58119.036	316.612		2007	GPS2300
NAD83(1996)	44 04 49.60468	93 37 22.47309	314400.943	190678.814	95829.5990	58119.019	316.660	C	2000	GPS1453
NAD83(1986)	44 04 49.59614	93 37 22.47194	314401.020	190677.948	95829.6230	58118.755		2	1986	17289
NAD27	44 04 49.72100	93 37 21.66656						2	1991	17504

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33279.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33279.pdf

ST MARY MNDT AZ MK

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: ST MARY MNDT AZ MK **NGS Name:** ST MARY AZ MK

County: WASECA, MN (Sheet 1)

NGS ACRN: PP2894 Get Map
NGS Quad / Sta Num : 44093322/
USGS Quad: WASECA

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	17	107 N	23 W	440448.51	933626.40	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1970	2018	GOOD	Horz=NO Vert=YES	YES		RECESSED 5 IN.	STEEL ROD IMBED IN MON

Monument Type
CONCRETE MONUMENT (CAST-IN-PLACE)

Disk Type
AZIMUTH MARK DISK

Mon. Agency
MNDT

Description: (1970) **Stamping:** ST MARY 1970

5.0 MILES WEST OF WASECA, 2.0 MILES WEST ALONG COUNTY ROAD 2 FROM THE JUNCTION OF COUNTY ROAD 2 AND TRUNK HIGHWAY 14 (THE JUNCTION IS 3.0 MILES WEST OF WASECA), 47.0 FEET SOUTH OF COUNTY ROAD 2 (360TH AVENUE), 17.6 FEET EAST OF DRIVEWAY NUMBER 7998, 5.8 FEET SOUTH OF A WITNESS POST.

Station Notes

DUE TO THE PROXIMITY TO A POWER POLE, THIS SURVEY MARK HAS BEEN ABANDONED FOR MNDOT GEODETIC HORIZONTAL SURVEYS. PART OF THE DISK IS MISSING BUT IS STILL GOOD FOR GEODETIC WORK.

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1133.078	0.016	345.363	0.005	2/1	2016	00000870

Geoid Separations(ft): GEOID18 = -94.672 12B = -94.675 09 = -94.609 03 = -94.442

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Geodetic Positions Longitude	County (Feet) X	County (Feet) Y	County (Meters) X	County (Meters) Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Project Info Reference
NAD83(1996)	44 04 48.50745	93 36 26.40407	318492.922	190533.038	97076.8370	58074.586	317.274	3	1999	17648
NAD83(1986)	44 04 48.49835	93 36 26.40302	318492.991	190532.116	97076.8580	58074.305		3	1986	17289
NAD27	44 04 48.62455	93 36 25.60439						3	1977	16059

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/ST_MARY_AZ_MK-PP2894-3E-01AUG2018.jpg	E	Aug 1, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/ST_MARY_AZ_MK-PP2894-2-01AUG2018.jpg		Aug 1, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/ST_MARY_AZ_MK-PP2894-1-01AUG2018.jpg		Aug 1, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33280.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33280.pdf

ST MARY MNDT RM 1

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: ST MARY MNDT RM 1 **NGS Name:** ST MARY RM 1

County: WASECA, MN (Sheet 1)

NGS ACRN: CJ4729 Get Map
NGS Quad / Sta Num : 44093322/1013
USGS Quad: WASECA

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	17	107 N	23 W	440448.78	933722.47	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1970	2021	GOOD	Horz=YES Vert=YES	YES		FLUSH	BAR MAG IN DRILL HOLE

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	REFERENCE MARK DISK	MNDT

Description: (1970) **Stamping:** ST MARY NO 1 1970

5.7 MILES WEST OF WASECA, 2.75 MILES WEST ALONG COUNTY ROAD 2 FROM THE JUNCTION OF COUNTY ROAD 2 AND TRUNK HIGHWAY 14 (THE JUNCTION IS 3.0 MILES WEST OF WASECA), 47.0 FEET SOUTH OF COUNTY ROAD 2 (360TH AVENUE), 115.0 FEET WEST OF COUNTY ROAD 17 (73RD STREET), 167.4 FEET SOUTHEAST OF ST. MARY MNDT RM 2, 1.0 FOOT EAST OF A WITNESS POST.

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1132.852	0.016	345.294	0.005	2/1	2016	00000870

Geoid Separations(ft): GEOID18 = -94.721 12B = -94.721 09 = -94.655 03 = -94.491

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Geodetic Positions Longitude	County (Feet) X	County (Feet) Y	County (Meters) X	County (Meters) Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Project Info Reference
NAD83(2011)	44 04 48.77882	93 37 22.47092	314400.386	190595.182	95829.4290	58093.528	316.427	3	2021	GPSBM

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/ST_MARY_RM_1-CJ4729-3S-19APR2021.jpg	S	Apr 19, 2021
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/ST_MARY_RM_1-CJ4729-2-19APR2021.jpg		Apr 19, 2021
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/ST_MARY_RM_1-CJ4729-1-19APR2021.jpg		Apr 19, 2021

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_67395.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_67395.pdf

ST MARY MNDT RM 2

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: ST MARY MNDT RM 2 **NGS Name:** ST MARY RM 2

County: WASECA, MN (Sheet 1)

NGS ACRN: CJ4730 Get Map
NGS Quad / Sta Num : 44093322/1013
USGS Quad: WASECA

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	8	107 N	23 W	440449.72	933724.36	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1970	2018	GOOD	Horz=YES Vert=YES	YES		FLUSH	BAR MAG IN DRILL HOLE

Monument Type
CONCRETE MONUMENT (CAST-IN-PLACE)

Disk Type
REFERENCE MARK DISK

Mon. Agency
MNDT

Description: (1970) **Stamping:** ST MARY NO 2 1970

5.7 MILES WEST OF WASECA, 2.75 MILES WEST ALONG COUNTY ROAD 2 FROM THE JUNCTION OF COUNTY ROAD 2 AND TRUNK HIGHWAY 14 (THE JUNCTION IS 3.0 MILES WEST OF WASECA), 250.0 FEET WEST COUNTY ROAD 17 (73RD STREET), 49.0 FEET NORTH COUNTY ROAD 2 (360TH AVENUE), 167.4 FEET NORTHWEST OF ST MARY MNDT RM 1, 3.7 FEET EAST OF A POWER POLE, 1.0 FOOT EAST OF A WITNESS POST.

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1132.672	0.016	345.239	0.005	2/1	2016	00000870

Geoid Separations(ft): GEOID18 = -94.721 12B = -94.721 09 = -94.655 03 = -94.491

*** No Horizontal Positions in the Database ***

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/ST_MARY_RM_2-CJ4730-3N-01AUG2018.jpg	N	Aug 1, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/ST_MARY_RM_2-CJ4730-2-01AUG2018.jpg		Aug 1, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/ST_MARY_RM_2-CJ4730-1-01AUG2018.jpg		Aug 1, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_67396.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_67396.pdf

ST MARY NE

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: ST MARY NE **NGS Name:** ST MARY NE

County: WASECA, MN (Sheet 1)

NGS ACRN: DH3122 Get Map
NGS Quad / Sta Num : 44093322/
USGS Quad: WASECA

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	1	107 N	23 W	440607.14	933248.49		C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2003	2018	GOOD	Horz=YES Vert=YES	YES		FLUSH	STEEL ROD IMBED IN MON

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	SURVEY DISK	MN-161

Description: (2004) **Stamping:** ST MARY-NE 2003

2.25 MILES NORTHWEST OF WASECA, 1.7 MILES NORTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND COUNTY ROAD 14 (ELM AVENUE) IN WASECA, THEN 2.0 MILES WEST ON COUNTY ROAD 5, 84.0 FEET EAST OF COUNTY ROAD 27, 33.0 FEET SOUTH OF COUNTY ROAD 5, IN THE SOUTH ISLAND OF COUNTY ROAD 5 AND COUNTY ROAD 53, 1.0 FOOT SOUTH OF A WITNESS POST.

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -94.239 12B = -94.242 09 = -94.170 03 = -93.999

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Longitude	County (Feet) X	Y	County (Meters) X	Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Reference
NAD83(2011)	44 06 07.13910	93 32 48.48778	334461.293	198368.307	101944.006	60462.781	324.586		2014	GPS3043
NAD83(2007)	44 06 07.13909	93 32 48.48856	334461.237	198368.307	101943.989	60462.781	324.610		2007	GPS2300
NAD83(1996)	44 06 07.13874	93 32 48.48802	334461.276	198368.271	101944.001	60462.770	324.659	C	2014	HNEW14

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/ST_MARY_NE-DH3122-3S-02AUG2018.jpg	S	Aug 2, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/ST_MARY_NE-DH3122-2-02AUG2018.jpg		Aug 2, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/ST_MARY_NE-DH3122-1-02AUG2018.jpg		Aug 2, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_50659.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_50659.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: STA 28 **NGS Name:** STA 28

County: WASECA, MN (Sheet 1)

NGS ACRN: PP2830 Get Map
NGS Quad / Sta Num : 44093233/
USGS Quad: MERIDEN

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	11	106 N	22 W	440017.99	932607.22		3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1960	2018	DESTROYED	Horz=NO Vert=NO	YES			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
SEE DESCRIPTIVE TEXT	UNMONUMENTED	USGS

Description:

IN WASECA COUNTY, 3.17 MILES NORTHWEST OF LEMOND, 1.5 MILES NORTH ON COUNTY ROAD 7 FROM THE JUNCTION OF COUNTY ROAD 7 AND 71ST STREET, THEN 0.7 MILE WEST ON COUNTY ROAD 7, THEN 0.49 MILE SOUTH ON COUNTY ROAD 32 (90TH AVENUE), THEN 1.3 MILES CONTINUED WEST ON COUNTY ROAD 32, THEN 1.25 MILES CONTINUED WEST ON 305TH AVENUE, THEN 0.3 MILE NORTH ON 168TH STREET, THEN 0.2 MILE ON THE FIRST LEFT TURN OFF 168TH STREET, THE STATION IS 0.78 MILE NORTHWEST OF STATION OTISCO NE.

Stamping:

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -94.235 12B = -94.239 09 = -94.153 03 = -94.022

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Longitude	County (Feet) X	Y	County (Meters) X	Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Reference
NAD83(1996)	44 00 17.99286	93 26 07.22078	363520.211	162807.873	110801.182	49623.939	342.484	3	1999	17648
NAD83(1986)	44 00 17.98016	93 26 07.22001	363520.259	162806.586	110801.197	49623.547		3	1986	17289
NAD27	44 00 18.11907	93 26 06.44129						3	1982	16847

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_65244.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_65244.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: STA 29 **NGS Name:** STA 29

County: WASECA, MN (Sheet 1)

NGS ACRN: PP2835 Get Map
NGS Quad / Sta Num : 44093233/
USGS Quad: MERIDEN

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	4	106 N	22 W	440042.09	932825.92		3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1960	2018	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
SEE DESCRIPTIVE TEXT	UNMONUMENTED	USGS

Description:

IN WASECA COUNTY, 2.99 MILES EAST OF WILTON, 0.9 MILE EAST ON WILTON BRIDGE ROAD FROM THE JUNCTION OF WILTON BRIDGE ROAD AND COUNTY ROAD 23 (WILTON RIVER ROAD), THEN 374.0 FEET SOUTH ON 128TH STREET, THEN 2.2 MILES EAST ON 315TH AVENUE, THE STATION IS 0.13 MILE EAST OF THE CENTER OF THE JUNCTION OF 315TH AVENUE AND 145TH STREET.

Stamping:

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -94.442 12B = -94.449 09 = -94.357 03 = -94.229

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Longitude	County (Feet) X	Y	County (Meters) X	Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Reference
NAD83(1996)	44 00 42.08971	93 28 25.91502	353399.342	165314.152	107716.335	50387.854	327.626	3	1999	17648
NAD83(1986)	44 00 42.07684	93 28 25.91443	353399.376	165312.848	107716.345	50387.457		3	1986	17289
NAD27	44 00 42.21727	93 28 25.13039						3	1982	16847

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_65251.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_65251.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: STA 30 EDJ **NGS Name:** STA 30 EDJ

County: WASECA, MN (Sheet 1)

NGS ACRN: PP2907 Get Map
NGS Quad / Sta Num : 44093324/
USGS Quad: ELYSIAN

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	13	108 N	24 W	440922.94	933905.73		3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1963	2018	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
SEE DESCRIPTIVE TEXT	UNMONUMENTED	USGS

Description:

IN WASECA COUNTY, 3.06 MILES SOUTH-SOUTHEAST OF ELYSIAN, 0.3 MILE SOUTH ON COUNTY ROAD 5 FROM THE JUNCTION OF COUNTY ROAD 5 AND TRUNK HIGHWAY 60, THEN 0.7 MILE CONTINUED SOUTH-SOUTHWEST ON EAST ELYSIAN LAKE ROAD, THEN 0.7 MILE SOUTH ON 55TH STREET, THEN 0.5 MILE EAST ON 425TH AVENUE, THEN 1.2 MILES SOUTH ON 60TH STREET, THEN 0.2 MILE WEST ON 412TH AVENUE, THE STATION IS 0.80 MILE EAST OF THE JUNCTION OF 412TH AVENUE AND 50TH STREET.

Stamping:

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -94.422 12B = -94.422 09 = -94.353 03 = -94.160

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Longitude	County (Feet) X	Y	County (Meters) X	Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Reference
NAD83(1996)	44 09 22.94333	93 39 05.73194	307109.980	218424.269	93607.3090	66575.850	305.661	3	1999	17648
NAD83(1986)	44 09 22.93790	93 39 05.73074	307110.063	218423.718	93607.3340	66575.682		3	1986	17289
NAD27	44 09 23.07985	93 39 04.92493						3	1982	16847

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_65261.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_65261.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: STA 32 **NGS Name:** STA 32

County: WASECA, MN (Sheet 1)

NGS ACRN: PP2832 Get Map
NGS Quad / Sta Num : 44093233/
USGS Quad: MERIDEN

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	4	106 N	22 W	440107.34	932759.89		3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1960	2018	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
SEE DESCRIPTIVE TEXT	UNMONUMENTED	USGS

Description:

IN WASECA COUNTY, 3.35 MILES EAST OF WILTON, 0.9 MILE EAST ON WILTON BRIDGE ROAD FROM THE JUNCTION OF WILTON BRIDGE ROAD AND COUNTY ROAD 23, THEN 374.0 FEET SOUTHEAST ON 128TH STREET, THEN 2.0 MILES EAST ON 315TH AVENUE, THEN 0.8 MILE NORTH ON 145TH STREET, THEN 0.4 MILE EAST ON 320TH AVENUE, THEN 469.0 FEET SOUTH-SOUTHWEST ON THE FIRST RIGHT TURN OFF OF 320TH AVENUE, THE STATION IS 0.60 MILE NORTHEAST OF STATION 29, THE STATION IS 0.28 MILE SOUTH-SOUTHWEST OF THE JUNCTION 320TH AVENUE AND COUNTY ROAD 5.

Stamping:

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -94.334 12B = -94.337 09 = -94.252 03 = -94.121

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Longitude	County (Feet) X	Y	County (Meters) X	Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Reference
NAD83(1996)	44 01 07.34457	93 27 59.88548	355318.717	167858.804	108301.361	51163.466	332.159	3	1999	17648
NAD83(1986)	44 01 07.33176	93 27 59.88489	355318.751	167857.507	108301.372	51163.070		3	1986	17289
NAD27	44 01 07.47196	93 27 59.10125						3	1982	16847

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_65248.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_65248.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: STA 32 EDJ **NGS Name:** STA 32 EDJ

County: WASECA, MN (Sheet 1)

NGS ACRN: PP2908 Get Map
NGS Quad / Sta Num : 44093324/
USGS Quad: ELYSIAN

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	23	108 N	24 W	440827.36	934003.45		3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1963	2018	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
SEE DESCRIPTIVE TEXT	UNMONUMENTED	USGS

Description:

IN WASECA COUNTY, 3.96 MILES SOUTH-SOUTHEAST OF ELYSIAN, 1.3 MILES EAST ALONG TRUNK HIGHWAY 60 FROM THE JUNCTION OF TRUNK HIGHWAY 60 AND 3RD STREET SOUTHWEST IN ELYSIAN, THEN 0.3 MILE SOUTH ON COUNTY ROAD 5, THEN 5.3 MILES CONTINUED SOUTH-SOUTHWEST ON EAST ELYSIAN LAKE ROAD, THEN 1.2 MILES EAST AND NORTH ON 398TH AVENUE, THEN 0.7 MILE EAST ON 403RD AVENUE, THEN 289.0 FEET SOUTH ON COUNTY ROAD 68, 1.33 MILES SOUTHWEST OF STATION 30 EDJ.

Stamping:

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -94.531 12B = -94.534 09 = -94.465 03 = -94.278

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Longitude	County (Feet) X	Y	County (Meters) X	Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Reference
NAD83(1996)	44 08 27.35980	93 40 03.44764	302851.012	212833.494	92309.1730	64871.779	313.325	3	1999	17648
NAD83(1986)	44 08 27.35450	93 40 03.44685	302851.065	212832.956	92309.1890	64871.615		3	1986	17289
NAD27	44 08 27.49588	93 40 02.63818						3	1982	16847

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_65262.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_65262.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: STA 33 **NGS Name:** STA 33

County: WASECA, MN (Sheet 1)

NGS ACRN: PP2834 Get Map
NGS Quad / Sta Num : 44093233/
USGS Quad: MERIDEN

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	21	107 N	22 W	440357.29	932801.23		3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1960	2014	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
SEE DESCRIPTIVE TEXT	UNMONUMENTED	USGS

Description:

IN WASECA COUNTY, 1.44 MILES EAST OF WASECA, 1.0 MILE EAST ON TRUNK HIGHWAY 14 FROM THE JUNCTION OF TRUNK HIGHWAY 14 AND TRUNK HIGHWAY 13 IN WASECA, THEN 0.3 MILE SOUTH ON 13TH STREET, THEN 0.5 MILE EAST ON COUNTY ROAD 5, THEN 0.4 MILE CONTINUED SOUTH ON COUNTY ROAD 5, THEN 0.5 MILE EAST ON 350TH AVENUE, THE STATION IS 0.34 MILE SOUTH-SOUTHEAST OF STATION 8104 H.

Stamping:

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -93.960 12B = -93.966 09 = -93.881 03 = -93.733

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Longitude	County (Feet) X	Y	County (Meters) X	Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Reference
NAD83(1996)	44 03 57.29126	93 28 01.22548	355335.645	185069.120	108306.521	56409.181	326.977	3	1999	17648
NAD83(1986)	44 03 57.27863	93 28 01.22509	355335.665	185067.841	108306.527	56408.791		3	1986	17289
NAD27	44 03 57.41932	93 28 00.43761						3	1982	16847

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_65250.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_65250.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: STA 34 **NGS Name:** STA 34

County: WASECA, MN (Sheet 1)

NGS ACRN: PP2833 Get Map
NGS Quad / Sta Num : 44093233/
USGS Quad: MERIDEN

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	16	107 N	22 W	440437.03	932800.50		3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1960	2018	DESTROYED	Horz=NO Vert=NO	YES			SEE DESCRIPTION

Monument Type
SEE DESCRIPTIVE TEXT

Disk Type
UNMONUMENTED

Mon. Agency
USGS

Description:

IN WASECA COUNTY, 2.07 MILES EAST OF WASECA, 2.1 MILES EAST ALONG TRUNK HIGHWAY 14 FROM THE JUNCTION OF TRUNK HIGHWAY 14 AND TRUNK HIGHWAY 13 IN WASECA, THEN 0.2 MILE SOUTH ON 150TH STREET, 0.26 MILE NORTH OF THE JUNCTION OF 150TH STREET AND 355TH AVENUE, 0.25 MILE SOUTH-SOUTHEAST OF STATION 8104 B.

Stamping:

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -93.868 12B = -93.878 09 = -93.792 03 = -93.642

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Longitude	County (Feet) X	Y	County (Meters) X	Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Reference
NAD83(1996)	44 04 37.03047	93 28 00.50422	355415.155	189092.985	108330.756	57635.657	328.905	3	1999	17648
NAD83(1986)	44 04 37.01786	93 28 00.50389	355415.170	189091.708	108330.761	57635.268		3	1986	17289
NAD27	44 04 37.15860	93 27 59.71554						3	1982	16847

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_65249.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_65249.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: STA 34 EDJ **NGS Name:** STA 34 EDJ

County: WASECA, MN (Sheet 1)

NGS ACRN: PP2903 Get Map
NGS Quad / Sta Num : 44093323/
USGS Quad: JANESVILLE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	14	107 N	24 W	440448.51	934002.57		3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1963	2018	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
SEE DESCRIPTIVE TEXT	UNMONUMENTED	USGS

Description:

IN WASECA COUNTY, 3.2 MILES SOUTHEAST OF JANESVILLE, 2.0 MILES SOUTH ALONG COUNTY ROAD 3 FROM THE JUNCTION OF COUNTY ROAD 3 AND TRUNK HIGHWAY 14 IN JANESVILLE, THEN 2.0 MILES EAST ON COUNTY ROAD 2, 1.08 MILES EAST OF STATION JANESVILLE MNDT AZ MK, 62.0 FEET SOUTH OF THE JUNCTION OF COUNTY ROAD 2 AND COUNTY ROAD 33.

Stamping:

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -94.803 12B = -94.806 09 = -94.731 03 = -94.580

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Longitude	County (Feet) X	Y	County (Meters) X	Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Reference
NAD83(1996)	44 04 48.51311	93 40 02.56940	302713.313	190671.513	92267.2020	58116.794	308.032	3	1999	17648
NAD83(1986)	44 04 48.50755	93 40 02.57014	302713.254	190670.951	92267.1840	58116.622		3	1986	17289
NAD27	44 04 48.64813	93 40 01.75937						3	1982	16847

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_65259.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_65259.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: STA 35 **NGS Name:** STA 35

County: WASECA, MN (Sheet 1)

NGS ACRN: PP2897 Get Map
NGS Quad / Sta Num : 44093322/
USGS Quad: WASECA

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	31	108 N	22 W	440651.44	933026.80		3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1960	2018	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
SEE DESCRIPTIVE TEXT	UNMONUMENTED	USGS

Description:

IN WASECA COUNTY, 2.25 MILES NORTH OF WASECA, 2.5 MILES NORTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 14 IN WASECA, 0.16 MILE SOUTH OF STATION 8102 E, 92.81 FEET WEST OF THE CENTERLINE OF TRUNK HIGHWAY 13.

Stamping:

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -93.871 12B = -93.878 09 = -93.796 03 = -93.628

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Longitude	County (Feet) X	Y	County (Meters) X	Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Reference
NAD83(1996)	44 06 51.43708	93 30 26.80192	344832.511	202777.653	105105.160	61806.752	328.915	3	1999	17648
NAD83(1986)	44 06 51.42444	93 30 26.80195	344832.500	202776.373	105105.156	61806.362		3	1986	17289
NAD27	44 06 51.56727	93 30 26.00539						3	1982	16847

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_65255.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_65255.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: STA 35 EDJ **NGS Name:** STA 35 EDJ

County: WASECA, MN (Sheet 1)

NGS ACRN: PP2904 Get Map
NGS Quad / Sta Num : 44093323/
USGS Quad: JANESVILLE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	23	107 N	24 W	440326.18	934002.68		3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1963	2018	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
SEE DESCRIPTIVE TEXT	UNMONUMENTED	USGS

Description:

IN WASECA COUNTY, 4.54 MILES SOUTHEAST OF JANESVILLE, 2.0 MILES SOUTH ALONG COUNTY ROAD 3 FROM THE JUNCTION OF COUNTY ROAD 3 AND TRUNK HIGHWAY 14 IN JANESVILLE, THEN 2.0 MILES EAST ON COUNTY ROAD 2, THEN 1.6 MILES SOUTH ON COUNTY ROAD 33, 0.41 MILE NORTH OF THE CENTER OF THE JUNCTION OF COUNTY ROAD 26 (340TH AVENUE) AND COUNTY ROAD 33/COUNTY ROAD 26, THE STATION IS LOCATED AT AN EASTERLY TURN ONTO A FARM DRIVEWAY.

Stamping:

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -94.905 12B = -94.908 09 = -94.836 03 = -94.695

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Longitude	County (Feet) X	Y	County (Meters) X	Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Reference
NAD83(1996)	44 03 26.18329	93 40 02.68262	302629.150	182334.572	92241.5500	55575.689	286.897	3	1999	17648
NAD83(1986)	44 03 26.17763	93 40 02.68397	302629.046	1823340000	92241.5180	55575.514		3	1986	17289
NAD27	44 03 26.31792	93 40 01.87266						3	1982	16847

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_65260.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_65260.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: STA 36 EDJ
NGS Name: STA 36 EDJ

County: WASECA, MN (Sheet 1)

NGS ACRN: PP2902 Get Map
NGS Quad / Sta Num : 44093323/
USGS Quad: JANESVILLE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	35	107 N	24 W	440120.21	934002.13		3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1963	2018	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
SEE DESCRIPTIVE TEXT	UNMONUMENTED	USGS

Description:

IN WASECA COUNTY, 6.8 MILES SOUTH-SOUTHEAST OF JANESVILLE, 2.4 MILES SOUTH ALONG COUNTY ROAD 3 FROM THE JUNCTION OF COUNTY ROAD 3 AND TRUNK HIGHWAY 14 IN JANESVILLE, THEN 4.0 MILES CONTINUED EAST AND SOUTH ON COUNTY ROAD 3, THEN 1.5 MILES EAST ON 320TH AVENUE, 1.79 MILES SOUTHEAST OF STATION ALTON C, 33.0 FEET NORTH OF THE JUNCTION OF 320TH AVENUE AND COUNTY ROAD 33.

Stamping:

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -95.072 12B = -95.069 09 = -94.993 03 = -94.875

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Longitude	County (Feet) X	Y	County (Meters) X	Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Reference
NAD83(1996)	44 01 20.20814	93 40 02.12834	302553.518	169577.573	92218.4970	51687.348	277.641	3	1999	17648
NAD83(1986)	44 01 20.20233	93 40 02.13068	302553.342	169576.986	92218.4430	51687.169		3	1986	17289
NAD27	44 01 20.34214	93 40 01.31888						3	1982	16847

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_65258.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_65258.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: STA 37 **NGS Name:** STA 37

County: WASECA, MN (Sheet 1)

NGS ACRN: PP2840 Get Map
NGS Quad / Sta Num : 44093233/
USGS Quad: MERIDEN

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	27	108 N	22 W	440725.16	932732.95		3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1960	2018	DESTROYED	Horz=NO Vert=NO	YES			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
SEE DESCRIPTIVE TEXT	UNMONUMENTED	USGS

Description:

IN WASECA COUNTY, 3.78 MILES NORTHEAST OF WASECA, 2.2 MILES NORTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 14 IN WASECA, THEN 1.0 MILE EAST ON 380TH AVENUE, THEN 0.2 MILE NORTH ON 140TH STREET, THEN 1.6 MILES EAST-NORTHEAST ON COUNTY ROAD 10, THEN 0.4 MILE EAST ON 390TH AVENUE, 0.12 MILE WEST OF THE JUNCTION OF 158TH STREET AND 390TH AVENUE, 11.14 FEET SOUTH OF STATION ET 100 T USGS.

Stamping:

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -93.438 12B = -93.445 09 = -93.363 03 = -93.202

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Longitude	County (Feet) X	Y	County (Meters) X	Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Reference
NAD83(1996)	44 07 25.16460	93 27 32.94505	357539.060	206105.974	108978.123	62821.226	324.139	3	1999	17648
NAD83(1986)	44 07 25.15219	93 27 32.94509	357539.048	206104.717	108978.120	62820.843		3	1986	17289
NAD27	44 07 25.29279	93 27 32.15385						3	1982	16847

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_65254.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_65254.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: STA 41 EDJ
NGS Name: STA 41 EDJ

County: WASECA, MN (Sheet 1)

NGS ACRN: PP2898 Get Map
NGS Quad / Sta Num : 44093322/
USGS Quad: WASECA

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	11	106 N	23 W	440028.36	933339.60		3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1963	2018	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
SEE DESCRIPTIVE TEXT	UNMONUMENTED	USGS

Description:

IN WASECA COUNTY, 1.5 MILES SOUTHWEST OF WILTON, 1.3 MILES SOUTHWEST ALONG WILTON BRIDGE ROAD FROM THE JUNCTION OF WILTON BRIDGE ROAD AND COUNTY ROAD 23 IN WILTON, THEN 0.2 MILE WEST ON 310TH AVENUE, 0.29 MILE EAST OF THE CENTER OF THE JUNCTION OF 100TH STREET AND 310TH AVENUE, 46.0 FEET NORTH ON THE NORTHERLY TURN OFF OF 310TH AVENUE.

Stamping:

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -94.957 12B = -94.960 09 = -94.882 03 = -94.754

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Longitude	County (Feet) X	Y	County (Meters) X	Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Reference
NAD83(1996)	44 00 28.35914	93 33 39.60058	330463.461	164090.753	100725.464	50014.961	297.676	3	1999	17648
NAD83(1986)	44 00 28.35161	93 33 39.60288	330463.287	164089.991	100725.411	50014.729		3	1986	17289
NAD27	44 00 28.49112	93 33 38.80406						3	1982	16847

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_65256.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_65256.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: STA 42 EDJ

NGS Name: STA 42 EDJ

County: WASECA, MN (Sheet 1)

NGS ACRN: PP2837 Get Map
NGS Quad / Sta Num : 44093233/
USGS Quad: MERIDEN

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	5	106 N	22 W	440041.85	932921.13		3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1963	2018	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
SEE DESCRIPTIVE TEXT	UNMONUMENTED	USGS

Description:

IN WASECA COUNTY, 2.22 MILES EAST OF WILTON, 0.9 MILE EAST ALONG WILTON BRIDGE ROAD FROM THE JUNCTION OF WILTON BRIDGE ROAD AND COUNTY ROAD 23 IN WILTON, THEN 374.0 FEET SOUTH-SOUTHEAST ON 128TH STREET, THEN 1.4 MILES EAST ON 315TH AVENUE, 0.40 MILE SOUTHEAST OF THE JUNCTION OF 315TH AVENUE AND TRUNK HIGHWAY 13, 0.10 MILE SOUTH OF THE CENTER STRIPE OF 315TH AVENUE.

Stamping:

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -94.547 12B = -94.550 09 = -94.462 03 = -94.334

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Longitude	County (Feet) X	Y	County (Meters) X	Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Reference
NAD83(1996)	44 00 41.85275	93 29 21.13392	349363.611	165317.798	106486.242	50388.966	319.696	3	1999	17648
NAD83(1986)	44 00 41.84402	93 29 21.13574	349363.472	165316.915	106486.199	50388.697		3	1986	17289
NAD27	44 00 41.98292	93 29 20.34553						3	1982	16847

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_65253.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_65253.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: STA 43 EDJ **NGS Name:** STA 43 EDJ

County: WASECA, MN (Sheet 1)

NGS ACRN: PP2836 Get Map
NGS Quad / Sta Num : 44093233/
USGS Quad: MERIDEN

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	21	107 N	22 W	440317.14	932857.33		3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1963	2018	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
SEE DESCRIPTIVE TEXT	UNMONUMENTED	USGS

Description:

IN WASECA COUNTY, 1.00 MILE SOUTHEAST OF WASECA, 1.3 MILES SOUTH AND EAST ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 14 IN WASECA, THEN 371.0 FEET NORTHEAST ON 8TH STREET, THEN 0.7 MILE SOUTHEAST ON 139TH STREET, THEN 0.3 MILE EAST ON 345TH AVENUE, THEN 0.2 MILE SOUTH ON WOODVILLE BOULEVARD, THEN 0.1 MILE CONTINUED SOUTH ON WOODVILLE BOULEVARD, 0.20 MILE SOUTHEAST OF STATION WOVIL MNDT, 70.08 FEET EAST OF WOODVILLE BOULEVARD.

Stamping:

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -94.157 12B = -94.163 09 = -94.078 03 = -93.934

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Longitude	County (Feet) X	Y	County (Meters) X	Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Reference
NAD83(1996)	44 03 17.14313	93 28 57.32796	351211.339	181031.233	107049.430	55178.430	319.718	3	1999	17648
NAD83(1986)	44 03 17.13451	93 28 57.32826	351211.311	181030.360	107049.422	55178.164		3	1986	17289
NAD27	44 03 17.27395	93 28 56.53752						3	1982	16847

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_65252.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_65252.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: STA 44 EDJ

NGS Name: STA 44 EDJ

County: WASECA, MN (Sheet 1)

NGS ACRN: PP2831 Get Map
NGS Quad / Sta Num : 44093233/
USGS Quad: MERIDEN

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	23	107 N	22 W	440331.36	932629.92		3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1963	2014	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type
SEE DESCRIPTIVE TEXT

Disk Type
UNMONUMENTED

Mon. Agency
USGS

Description:

IN WASECA COUNTY, 2.95 MILES SOUTHWEST OF MERIDEN, 1.7 MILES SOUTH ON COUNTY ROAD 18 FROM THE JUNCTION OF COUNTY ROAD 18 AND TRUNK HIGHWAY 14, THEN 1.7 MILES WEST AND SOUTH ON 18TH STREET, THEN 0.2 MILE SOUTH ON 175TH STREET, THEN 1.3 MILES WEST ON 345TH AVENUE, THE STATION IS 0.30 MILE WEST OF STATION BRASE MNDT, THE STATION IS 0.24 MILE EAST OF THE JUNCTION OF 160TH STREET AND 345TH AVENUE.

Stamping:

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -93.842 12B = -93.848 09 = -93.763 03 = -93.615

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Longitude	County (Feet) X	Y	County (Meters) X	Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Reference
NAD83(1996)	44 03 31.36035	93 26 29.92263	361985.553	182399.745	110333.417	55595.554	311.509	3	1999	17648
NAD83(1986)	44 03 31.35098	93 26 29.92260	361985.549	182398.797	110333.416	55595.264		3	1986	17289
NAD27	44 03 31.48959	93 26 29.13662						3	1982	16847

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_65247.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_65247.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: STA 45 EDJ
NGS Name: STA 45 EDJ

County: WASECA, MN (Sheet 1)

NGS ACRN: PP2829 Get Map
NGS Quad / Sta Num : 44093233/
USGS Quad: MERIDEN

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	12	107 N	22 W	440531.71	932454.62		3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1963	2018	DESTROYED	Horz=NO Vert=NO	YES			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
SEE DESCRIPTIVE TEXT	UNMONUMENTED	USGS

Description:

IN WASECA COUNTY, 1.9 MILES NORTHWEST OF MERIDEN, 1.7 MILES NORTH FROM THE JUNCTION OF COUNTY ROAD 18 AND 18TH STREET, THEN 1.0 MILE WEST ON TRUNK HIGHWAY 14, THEN 0.3 MILE CONTINUED WEST ON TRUNK HIGHWAY 14, THEN 0.4 MILE NORTH ON 178TH STREET, THEN 0.1 MILE WEST AT THE FIRST WESTERLY TURN OFF OF 178TH STREET, 0.54 MILE NORTHWEST OF STATION 8104 F.

Stamping:

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -93.412 12B = -93.412 09 = -93.340 03 = -93.186

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Longitude	County (Feet) X	Y	County (Meters) X	Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Reference
NAD83(1996)	44 05 31.70717	93 24 54.61570	369019.067	194543.611	112477.237	59297.011	316.637	3	1999	17648
NAD83(1986)	44 05 31.69744	93 24 54.61420	369019.171	194542.625	112477.268	59296.711		3	1986	17289
NAD27	44 05 31.83585	93 24 53.82971						3	1982	16847

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_65243.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_65243.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: STA 55 JFS
NGS Name: STA 55 JFS

County: WASECA, MN (Sheet 1)

NGS ACRN: OO1222 Get Map
NGS Quad / Sta Num : 43093413/
USGS Quad: MATAWAN

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	26	105 N	24 W	435144.92	934005.23		3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1965	2018	DESTROYED	Horz=NO Vert=NO	YES			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
SEE DESCRIPTIVE TEXT	UNMONUMENTED	USGS

Description:

IN WASECA COUNTY, 1.61 MILES WEST OF MATAWAN, 1.5 MILES WEST ON COUNTY ROAD 28 FROM THE JUNCTION OF COUNTY ROAD 28 AND COUNTY ROAD 11, 1.01 MILES NORTH OF A COUNTY LINE, 0.54 MILE WEST OF THE CENTER OF THE JUNCTION OF COUNTY ROAD 65 AND COUNTY ROAD 28, 0.46 MILE EAST OF THE CENTER OF THE JUNCTION OF 45TH STREET AND COUNTY ROAD 28.

Stamping:

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -95.840 12B = -95.833 09 = -95.774 03 = -95.630

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Longitude	County (Feet) X	Y	County (Meters) X	Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Reference
NAD83(1996)	43 51 44.91550	93 40 05.23481	301795.695	111324.692	91987.5120	33931.834	314.110	3	1999	17648
NAD83(1986)	43 51 44.89948	93 40 05.23291	301795.819	111323.068	91987.5500	33931.339		3	1986	17289
NAD27	43 51 45.06433	93 40 04.42792						3	1981	16434

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_65241.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_65241.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: STA 56 JFS

NGS Name: STA 56 JFS

County: WASECA, MN (Sheet 1)

NGS ACRN: OO1221 Get Map
NGS Quad / Sta Num : 43093413/
USGS Quad: MATAWAN

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	31	105 N	23 W	435145.25	933739.03		3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1965	2018	DESTROYED	Horz=NO Vert=NO	YES			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
SEE DESCRIPTIVE TEXT	UNMONUMENTED	USGS

Description:

IN WASECA COUNTY, 0.5 MILE NORTHEAST OF MATAWAN, 0.4 MILE EAST ALONG COUNTY ROAD 11 FROM THE JUNCTION OF COUNTY ROAD 11 AND COUNTY ROAD 11 (MATAWAN AVENUE) IN MATAWAN, THEN 0.5 MILE NORTH ON 70TH STREET, 1.00 MILE WEST OF STATION 17 KED, 1.00 MILE SOUTH OF THE CENTER OF THE JUNCTION OF 220TH AVENUE AND 70TH STREET, 0.96 MILE NORTH OF A COUNTY LINE.

Stamping:

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -95.909 12B = -95.899 09 = -95.840 03 = -95.702

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Longitude	County (Feet) X	Y	County (Meters) X	Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Reference
NAD83(1996)	43 51 45.25180	93 37 39.03038	312507.668	111263.775	95252.5280	33913.267	320.187	3	1999	17648
NAD83(1986)	43 51 45.23674	93 37 39.02847	312507.795	111262.249	95252.5660	33912.801		3	1986	17289
NAD27	43 51 45.40015	93 37 38.22909						3	1981	16434

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_65240.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_65240.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: STA 57 JFS **NGS Name:** STA 57 JFS

County: WASECA, MN (Sheet 1)

NGS ACRN: OO1225 Get Map
NGS Quad / Sta Num : 43093414/
USGS Quad: WALDORF

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	18	105 N	23 W	435329.59	933737.86		3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1965	2013	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
SEE DESCRIPTIVE TEXT	UNMONUMENTED	USGS

Description:

IN WASECA COUNTY, 2.33 MILES NORTH-NORTHEAST OF MATAWAN, 0.81 MILE NORTH ALONG 70TH STREET FROM THE JUNCTION OF 70TH STREET AND COUNTY ROAD 11/COUNTY ROAD 28, THEN 1.70 MILES CONTINUED NORTH ON COUNTY ROAD 11, THEN 43.0 FEET EAST ON TRUNK HIGHWAY 30, 1.0 MILE SOUTH OF THE JUNCTION OF COUNTY ROAD 11 AND 240TH AVENUE, 132.72 FEET WEST-NORTHWEST OF STATION ET 12 JS USGS, AT THE SOUTHEAST CORNER OF THE JUNCTION OF TRUNK HIGHWAY 30 AND COUNTY ROAD 11.

Stamping:

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -95.771 12B = -95.761 09 = -95.692 03 = -95.571

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Longitude	County (Feet) X	Y	County (Meters) X	Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Reference
NAD83(1996)	43 53 29.59042	93 37 37.85694	312684.671	121828.454	95306.4780	37133.387	320.527	3	1999	17648
NAD83(1986)	43 53 29.57553	93 37 37.85649	312684.691	121826.945	95306.4840	37132.927		3	1986	17289
NAD27	43 53 29.73902	93 37 37.05434						3	1981	16434

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_65242.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_65242.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: STA 58 JFS

NGS Name: STA 58 JFS

County: WASECA, MN (Sheet 1)

NGS ACRN: OO1220 Get Map
NGS Quad / Sta Num : 43093411/
USGS Quad: OTISCO

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	16	105 N	23 W	435330.13	933532.88		3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1965	2013	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
SEE DESCRIPTIVE TEXT	UNMONUMENTED	USGS

Description:

IN WASECA COUNTY, 4.93 MILES WEST OF NEW RICHLAND, 3.15 MILES NORTHEAST OF MATAWAN, 2.5 MILES NORTH ALONG COUNTY ROAD 11 (70TH STREET) FROM THE JUNCTION OF COUNTY ROAD 11 (70TH STREET) AND COUNTY ROAD 28 (205TH AVENUE), THEN 1.7 MILES EAST ON TRUNK HIGHWAY 30, 0.27 MILE WEST OF THE JUNCTION OF TRUNK HIGHWAY 30 AND COUNTY ROAD 59 (90TH STREET), 63.41 FEET WEST OF STATION MATAWAN MNDT.

Stamping:

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -95.768 12B = -95.751 09 = -95.692 03 = -95.571

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Longitude	County (Feet) X	Y	County (Meters) X	Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Reference
NAD83(1996)	43 53 30.12689	93 35 32.87761	321837.311	121805.850	98096.2090	37126.497	332.426	3	1999	17648
NAD83(1986)	43 53 30.11283	93 35 32.87719	321837.330	121804.426	98096.2150	37126.063		3	1986	17289
NAD27	43 53 30.27374	93 35 32.07991						3	1981	16434

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_65239.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_65239.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: STA 59 JFS **NGS Name:** STA 59 JFS

County: WASECA, MN (Sheet 1)

NGS ACRN: OO1217 Get Map
NGS Quad / Sta Num : 43093411/
USGS Quad: OTISCO

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	30	105 N	22 W	435237.76	933036.58		3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1965	2013	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
SEE DESCRIPTIVE TEXT	UNMONUMENTED	USGS

Description:

IN WASECA COUNTY, 1.43 MILES SOUTH-SOUTHWEST OF NEW RICHLAND, 1.0 MILE WEST ON TRUNK HIGHWAY 30 FROM THE JUNCTION OF TRUNK HIGHWAY 30 AND TRUNK HIGHWAY 13, THEN 1.0 MILE SOUTH ON COUNTY ROAD 51 (130TH STREET), THEN 0.2 MILE WEST ON 220TH AVENUE, THE STATION IS 0.90 MILE WEST OF THE JUNCTION OF A NORTH-SOUTH RAILROAD TRACKS AND 220TH AVENUE, THE STATION IS 150.58 FEET EAST OF STATION RICHLAND MNDT. AFTER A CAREFUL SEARCH.

Stamping:

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -95.689 12B = -95.682 09 = -95.623 03 = -95.479

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Longitude	County (Feet) X	Y	County (Meters) X	Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Reference
NAD83(1996)	43 52 37.75729	93 30 36.58159	343496.876	116335.812	104698.057	35459.226	339.149	3	1999	17648
NAD83(1986)	43 52 37.74493	93 30 36.58046	343496.950	116334.560	104698.080	35458.845		3	1986	17289
NAD27	43 52 37.89815	93 30 35.79639						3	1981	16434

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_65238.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_65238.pdf

STA 60 JFS

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: STA 60 JFS **NGS Name:** STA 60 JFS

County: WASECA, MN (Sheet 1)

NGS ACRN: OO1122 Get Map
NGS Quad / Sta Num : 43093144/
USGS Quad: NEW RICHLAND

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	24	105 N	22 W	435237.92	932427.51		3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1965	2013	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
SEE DESCRIPTIVE TEXT	UNMONUMENTED	USGS

Description:

IN WASECA COUNTY, 4.42 MILES EAST-SOUTHEAST OF NEW RICHLAND, 4.4 MILES EAST-SOUTHEAST ON TRUNK HIGHWAY 30 FROM THE JUNCTION OF TRUNK HIGHWAY 30 AND TRUNK HIGHWAY 13, 237.68 FEET SOUTHWEST OF THE JUNCTION OF TRUNK HIGHWAY 30 AND 102ND AVENUE, 146.98 FEET SOUTHEAST OF STATION SOY MNDT.

Stamping:

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -95.161 12B = -95.154 09 = -95.105 03 = -94.924

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Longitude	County (Feet) X	Y	County (Meters) X	Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Reference
NAD83(1996)	43 52 37.92171	93 24 27.50902	370530.933	116174.708	112938.054	35410.122	363.306	3	1999	17648
NAD83(1986)	43 52 37.91134	93 24 27.50767	370531.026	116173.657	112938.083	35409.802		3	1986	17289
NAD27	43 52 38.05539	93 24 26.73696						3	1981	16434

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_65237.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_65237.pdf

SWENSON MNDT

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: SWENSON MNDT **NGS Name:** SWENSON

County: WASECA, MN (Sheet 1)

NGS ACRN: AI6557 Get Map
NGS Quad / Sta Num : 44093322/
USGS Quad: WASECA

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	19	107 N	22 W	440356.64	933105.12	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1998	2014	DESTROYED	Horz=NO Vert=NO	YES		FLUSH	MARKER W/BAR MAGNET

Monument Type
UNKNOWN

Disk Type
SURVEY DISK

Mon. Agency
MNDT

Description: (2004)

Stamping: SWENSON 1998

0.5 MILE SOUTH-SOUTHWEST OF WASECA, 0.25 MILE WEST ALONG TRUNK HIGHWAY 14 FROM THE JUNCTION OF TRUNK HIGHWAY 14 AND TRUNK HIGHWAY 13 IN WASECA, THEN 0.83 MILE SOUTH ON COUNTY ROAD 4 (4TH STREET SOUTHWEST), THEN 0.3 MILE WEST ON 350TH AVENUE, 37.3 FEET SOUTH OF 350TH AVENUE, 20.4 FEET WEST-NORTHWEST OF A POWER POLE, 16.2 FEET EAST OF A FIELD ENTRANCE, 4.8 FEET WEST OF A WITNESS POST.

Station Notes

THE DISK WAS TURNED IN TO THE OFFICE.

Leveling-Derived Orthometric Heights (Elevations)

Vertical Datum	Orthometric (Feet) Height	Accuracy	Orthometric (Meters) Height	Accuracy	Survey Order/(Class)	Project Info Year	Reference
NAVD88	1149.112	0.016	350.250	0.005	2/1	2004	00000449
NGVD29	1149.030	0.016	350.225	0.005	2/1	2001	VJANE

Geoid Separations(ft): GEOID18 = -94.311 12B = -94.321 09 = -94.242 03 = -94.088

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Longitude	County (Feet) X	Y	County (Meters) X	Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Reference
NAD83(2011)	44 03 56.64079	93 31 05.12396	341907.565	185097.018	104213.634	56417.684	321.516		2012	GPS2800
NAD83(2007)	44 03 56.64082	93 31 05.12471	341907.510	185097.022	104213.617	56417.685	321.540		2007	GPS2300
NAD83(1996)	44 03 56.64062	93 31 05.12402	341907.560	185097.001	104213.633	56417.679	321.579	C	2005	GPS2088

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/SWENSON-AI6557-3S-26MAY2004.jpg	S	May 26, 2004
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/SWENSON-AI6557-2-26MAY2004.jpg		May 26, 2004
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/SWENSON-AI6557-1-26MAY2004.jpg		May 26, 2004

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_36695.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_36695.pdf

SWENSON MNDT RESET

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: SWENSON MNDT RESET
NGS Name: SWENSON RESET

County: WASECA, MN (Sheet 1)

NGS ACRN: DP5053 Get Map
NGS Quad / Sta Num : 44093322/
USGS Quad: WASECA

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	19	107 N	22 W	440356.64	933105.12	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2014	2018	GOOD	Horz=YES Vert=YES	YES		RECESSED 4 IN.	BAR MAG IN DRILL HOLE

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 66 FT)

Disk Type
METAL ROD (WITH REMOVABLE ID DISK)

Mon. Agency
MNDT

Description: (2014)

Stamping: SWENSON 1998 2014

0.5 MILE SOUTH-SOUTHWEST OF WASECA, 0.25 MILE WEST ALONG COUNTY ROAD 14/OLD TRUNK HIGHWAY 14 FROM THE JUNCTION OF COUNTY ROAD 14/OLD TRUNK HIGHWAY 14 AND TRUNK HIGHWAY 13 IN WASECA, THEN 0.83 MILE SOUTH ON COUNTY ROAD 4 (4TH STREET SOUTHWEST), THEN 0.3 MILE WEST ON COUNTY ROAD 40, 37.3 FEET SOUTH OF COUNTY ROAD 40, 20.4 FEET WEST-NORTHWEST OF A POWER POLE, 16.2 FEET EAST OF A FIELD ENTRANCE, 4.8 FEET WEST OF A WITNESS POST.

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1148.892	0.016	350.183	0.005	2/1	2016	00000870

Geoid Separations(ft): GEOID18 = -94.311 12B = -94.321 09 = -94.242 03 = -94.088

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Geodetic Positions Longitude	County (Feet) X	County (Feet) Y	County (Meters) X	County (Meters) Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Project Info Reference
NAD83(2011)	44 03 56.64072	93 31 05.12407	341907.556	185097.011	104213.632	56417.682	321.444		2014	GPS3043
NAD83(1996)	44 03 56.64050	93 31 05.12411	341907.553	185096.989	104213.631	56417.675	321.515	C	2014	HNEW14

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/SWENSON_RESET-DP5053-3S-02AUG2018.jpg	S	Aug 2, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/SWENSON_RESET-DP5053-2-02AUG2018.jpg		Aug 2, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/SWENSON_RESET-DP5053-1-02AUG2018.jpg		Aug 2, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_101437.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_101437.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: T 22 **NGS Name:** T 22

County: WASECA, MN (Sheet 1)

NGS ACRN: PP1722 Get Map
NGS Quad / Sta Num : 44093323/
USGS Quad: JANESVILLE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	33	108 N	24 W	440653.00	934227.00	2	

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1933	1988	NOT FOUND	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type
CONCRETE MONUMENT (CAST-IN-PLACE)

Disk Type
BENCH MARK DISK

Mon. Agency
NGS

Description: (2010) **Stamping:** 1066.786 T 22 1933

IN JANESVILLE, 103.0 FEET WEST OF THE WEST END OF A RAILROAD STATION, AT THE NORTHWEST CORNER OF THE JUNCTION OF COUNTY ROAD 3 (MAIN STREET) AND A RAILROAD, 50.0 FEET SOUTHEAST OF THE SOUTHEAST CORNER OF AN ELEVATOR, 18.0 FEET NORTH OF THE NORTH RAIL OF A RAILROAD, 2.0 FEET WEST OF THE WEST PROPERTY LINE ON COUNTY ROAD 3 (MAIN STREET).

Station Notes
THE SURVEY MARK IS ON RAILROAD PROPERTY AND HAS BEEN ABANDONED FOR MNDOT GEODETIC USE.

Leveling-Derived Orthometric Heights (Elevations)

Vertical Datum	Orthometric (Feet) Height	Accuracy	Orthometric (Meters) Height	Accuracy	Survey Order/(Class)	Project Info Year	Reference
NAVD88	1066.917	0.016	325.197	0.005	2/0	1991	00000025
NGVD29	1066.786	0.016	325.157	0.005	2/0	1992	UNCHECKD

Geoid Separations(ft): GEOID18 = -94.665 12B = -94.672 09 = -94.593 03 = -94.429

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33281.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33281.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: TBM 05 1 L24529 **NGS Name:** TBM 05 1

County: WASECA, MN (Sheet 1)

NGS ACRN: AJ9603 Get Map
NGS Quad / Sta Num : 43093414/
USGS Quad: WALDORF

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	14	105 N	24 W	435330.00	934115.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1978	1978	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
IRON ROD	UNMONUMENTED	MNDT

Description:

3.07 MILES SOUTH-SOUTHEAST OF WALDORF, 3.1 MILES SOUTHEAST ON TRUNK HIGHWAY 83 FROM THE JUNCTION OF TRUNK HIGHWAY 83 AND COUNTY ROAD 4 (260TH AVENUE) IN WALDORF, THEN 0.5 MILE EAST ON TRUNK HIGHWAY 30, 0.48 MILE EAST OF STATION 8105 D, THE STATION IS 89.10 FEET NORTH OF TRUNK HIGHWAY 30.

Stamping:

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -95.679 12B = -95.669 09 = -95.603 03 = -95.476

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_57333.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_57333.pdf

TBM 05 10 L24529

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: TBM 05 10 L24529 **NGS Name:** TBM 05 10

County: WASECA, MN (Sheet 1)

NGS ACRN: AJ9612 Get Map
NGS Quad / Sta Num : 43093411/
USGS Quad: OTISCO

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	17	105 N	22 W	435331.00	933004.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1978	1978	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
IRON ROD	UNMONUMENTED	MNDT

Description:

0.36 MILE WEST OF NEW RICHLAND, 0.4 MILE WEST ALONG TRUNK HIGHWAY 30 FROM THE JUNCTION OF TRUNK HIGHWAY 30 AND BROADWAY AVENUE IN NEW RICHLAND, THEN 75.0 FEET NORTH ON ELM STREET, 0.37 MILE WEST OF STATION 8105 P, 0.28 MILE EAST-NORTHEAST OF THE CENTER OF THE JUNCTION OF TRUNK HIGHWAY 30 AND COUNTY ROAD 51.

Stamping:

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -95.554 12B = -95.548 09 = -95.485 03 = -95.344

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_57336.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_57336.pdf

TBM 05 2 L24529

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: TBM 05 2 L24529 **NGS Name:** TBM 05 2

County: WASECA, MN (Sheet 1)

NGS ACRN: AJ9604 Get Map
NGS Quad / Sta Num : 43093414/
USGS Quad: WALDORF

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	23	105 N	24 W	435329.00	934003.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1978	1978	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
IRON ROD	UNMONUMENTED	MNDT

Description:

3.48 MILES SOUTHEAST OF WALDORF, 2.78 MILES NORTHWEST OF MATAWAN, 0.5 MILE WEST ALONG COUNTY ROAD 28 (210TH AVENUE) FROM THE JUNCTION OF COUNTY ROAD 28 (210TH AVENUE) AND COUNTY ROAD 11, THEN 2.0 MILES NORTH ON 60TH STREET, THEN 1.0 MILE WEST ON TRUNK HIGHWAY 30, 0.50 MILE EAST OF THE CENTER OF THE JUNCTION OF 45TH STREET AND TRUNK HIGHWAY 30, 0.50 MILE WEST OF THE CENTER OF THE JUNCTION OF 55TH STREET AND TRUNK HIGHWAY 30, 0.47 MILE EAST OF STATION 8105 E.

Stamping:

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -95.725 12B = -95.715 09 = -95.646 03 = -95.521

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_57342.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_57342.pdf

TBM 05 3 L24529

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: TBM 05 3 L24529 **NGS Name:** TBM 05 3

County: WASECA, MN (Sheet 1)

NGS ACRN: AJ9605 Get Map
NGS Quad / Sta Num : 43093414/
USGS Quad: WALDORF

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	13	105 N	24 W	435330.00	933851.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1978	1978	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
IRON ROD	UNMONUMENTED	MNDT

Description:

4.03 MILES SOUTHEAST OF WALDORF, 2.39 MILES NORTH-NORTHWEST OF MATAWAN, 0.5 MILE WEST ALONG COUNTY ROAD 28 FROM THE JUNCTION OF COUNTY ROAD 28 AND COUNTY ROAD 11 IN MATAWAN, THEN 2.0 MILES NORTH ON 60TH STREET, THEN 62.0 FEET WEST ON TRUNK HIGHWAY 30, 0.53 MILE WEST OF STATION 8105 F, 0.49 MILE EAST OF THE CENTER OF THE JUNCTION OF 55TH STREET AND TRUNK HIGHWAY 30.

Stamping:

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -95.754 12B = -95.745 09 = -95.676 03 = -95.551

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_57349.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_57349.pdf

TBM 05 4 L24529

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: TBM 05 4 L24529 **NGS Name:** TBM 05 4

County: WASECA, MN (Sheet 1)

NGS ACRN: AJ9606 Get Map
NGS Quad / Sta Num : 43093411/
USGS Quad: OTISCO

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	17	105 N	23 W	435330.00	933702.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1978	1978	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
IRON ROD	UNMONUMENTED	MNDT

Description:

2.50 MILES NORTHEAST OF MATAWAN, 2.4 MILES NORTH-NORTHEAST ALONG COUNTY ROAD 11 FROM THE JUNCTION OF COUNTY ROAD 11 AND COUNTY ROAD 28 (210TH AVENUE), THEN 0.5 MILE EAST ON TRUNK HIGHWAY 30, 0.49 MILE WEST OF CENTER OF THE JUNCTION OF TRUNK HIGHWAY 30 AND 80TH STREET, 10.96 FEET NORTH OF THE CENTER STRIPE OF TRUNK HIGHWAY 30.

Stamping:

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -95.774 12B = -95.761 09 = -95.699 03 = -95.574

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_57354.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_57354.pdf

TBM 05 5 L24529

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: TBM 05 5 L24529 **NGS Name:** TBM 05 5

County: WASECA, MN (Sheet 1)

NGS ACRN: AJ9607 Get Map
NGS Quad / Sta Num : 43093411/
USGS Quad: OTISCO

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	16	105 N	23 W	435331.00	933550.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1978	1978	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
IRON ROD	UNMONUMENTED	MNDT

Description:

3.05 MILES NORTHEAST OF MATAWAN, 2.4 MILES NORTH-NORTHEAST ALONG COUNTY ROAD 11 FROM THE JUNCTION OF COUNTY ROAD 11 AND COUNTY ROAD 28, THEN 1.5 MILES EAST ON TRUNK HIGHWAY 30, 0.50 MILE WEST OF THE CENTER OF THE JUNCTION OF TRUNK HIGHWAY 30 AND COUNTY ROAD 59 (90TH STREET), 0.50 MILE EAST OF THE CENTER OF THE JUNCTION OF TRUNK HIGHWAY 30 AND 80TH STREET, 0.24 MILE WEST-NORTHWEST OF STATION 58 JFS, 107.55 FEET NORTH OF TRUNK HIGHWAY 30.

Stamping:

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -95.768 12B = -95.754 09 = -95.692 03 = -95.574

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_57360.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_57360.pdf

TBM 05 6 L24529

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: TBM 05 6 L24529 **NGS Name:** TBM 05 6

County: WASECA, MN (Sheet 1)

NGS ACRN: AJ9608 Get Map
NGS Quad / Sta Num : 43093411/
USGS Quad: OTISCO

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	22	105 N	23 W	435330.00	933438.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1978	1978	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
IRON ROD	UNMONUMENTED	MNDT

Description:

4.17 MILES WEST OF NEW RICHLAND, 3.76 MILES NORTHEAST OF MATAWAN, 2.4 MILES NORTH-NORTHEAST ALONG COUNTY ROAD 11 FROM THE JUNCTION OF COUNTY ROAD 11 AND COUNTY ROAD 28 IN MATAWAN, THEN 2.5 MILES EAST ON TRUNK HIGHWAY 30, 1.01 MILES WEST OF THE CENTER OF THE JUNCTION OF TRUNK HIGHWAY 30 AND COUNTY ROAD 64 (105TH STREET), 0.50 MILE WEST OF STATION 8105 J, 0.50 MILE EAST OF THE CENTER OF THE JUNCTION OF TRUNK HIGHWAY 30 AND COUNTY ROAD 59 (90TH STREET).

Stamping:

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -95.754 12B = -95.738 09 = -95.679 03 = -95.558

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_57373.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_57373.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: TBM 05 7 L24529 **NGS Name:** TBM 05 7

County: WASECA, MN (Sheet 1)

NGS ACRN: AJ9609 Get Map
NGS Quad / Sta Num : 43093411/
USGS Quad: OTISCO

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	14	105 N	23 W	435331.00	933328.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1978	1978	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
IRON ROD	UNMONUMENTED	MNDT

Description:

3.20 MILES WEST OF NEW RICHLAND, 3.6 MILES WEST ALONG TRUNK HIGHWAY 30 FROM THE JUNCTION OF TRUNK HIGHWAY 30 AND TRUNK HIGHWAY 13 IN NEW RICHLAND, 0.47 MILE EAST OF STATION 8105 J, 167.21 FEET WEST-NORTHWEST OF THE CENTER OF THE JUNCTION OF TRUNK HIGHWAY 30 AND COUNTY ROAD 64 (105TH STREET).

Stamping:

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -95.722 12B = -95.712 09 = -95.649 03 = -95.528

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_57377.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_57377.pdf

TBM 05 8 L24529

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: TBM 05 8 L24529 **NGS Name:** TBM 05 8

County: WASECA, MN (Sheet 1)

NGS ACRN: AJ9610 Get Map
NGS Quad / Sta Num : 43093411/
USGS Quad: OTISCO

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	24	105 N	23 W	435330.00	933214.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1978	1978	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
IRON ROD	UNMONUMENTED	MNDT

Description:

2.17 MILES WEST OF NEW RICHLAND, 2.5 MILES WEST ALONG TRUNK HIGHWAY 30 FROM THE JUNCTION OF TRUNK HIGHWAY 30 AND TRUNK HIGHWAY 13, 0.51 MILE WEST OF CENTER OF THE JUNCTION OF TRUNK HIGHWAY 30 AND COUNTY ROAD 12 (120TH STREET), 0.48 MILE EAST OF STATION 8105 K.

Stamping:

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -95.679 12B = -95.669 09 = -95.610 03 = -95.479

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_57381.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_57381.pdf

TBM 05 9 L24529

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: TBM 05 9 L24529 **NGS Name:** TBM 05 9

County: WASECA, MN (Sheet 1)

NGS ACRN: AJ9611 Get Map
NGS Quad / Sta Num : 43093411/
USGS Quad: OTISCO

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	19	105 N	22 W	435329.00	933122.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1978	1978	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
IRON ROD	UNMONUMENTED	MNDT

Description:

1.44 MILES WEST OF NEW RICHLAND, 1.8 MILES WEST ALONG TRUNK HIGHWAY 30 FROM THE JUNCTION OF TRUNK HIGHWAY 30 TRUNK HIGHWAY 13, 0.36 MILE WEST OF STATION 8105 N, 0.21 MILE EAST OF CENTER OF THE JUNCTION OF TRUNK HIGHWAY 30 AND COUNTY ROAD 12 (120TH STREET), 103.76 FEET SOUTH OF TRUNK HIGHWAY 30.

Stamping:

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -95.640 12B = -95.630 09 = -95.571 03 = -95.433

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_57384.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_57384.pdf

TBM 06 1 L24529

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: TBM 06 1 L24529 **NGS Name:** TBM 06 1

County: WASECA, MN (Sheet 1)

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	15	105 N	22 W	435331.00	932718.00		

NGS ACRN: AJ9613 Get Map
NGS Quad / Sta Num : 43093144/
USGS Quad: NEW RICHLAND

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1978	1978	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
IRON ROD	UNMONUMENTED	MNDT

Description:

1.93 MILES EAST OF NEW RICHLAND, 1.6 MILES EAST ALONG TRUNK HIGHWAY 30 FROM THE JUNCTION OF TRUNK HIGHWAY 30 AND TRUNK HIGHWAY 13, 0.44 MILE WEST OF STATION 8106 B, 0.09 MILE EAST-NORTHEAST OF THE CENTER OF THE JUNCTION OF TRUNK HIGHWAY 30 AND 155TH STREET, 92.98 FEET NORTH OF THE CENTER STRIPE OF TRUNK HIGHWAY 30.

Stamping:

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -95.328 12B = -95.325 09 = -95.269 03 = -95.105

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_57405.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_57405.pdf

TBM 06 2 L24529

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: TBM 06 2 L24529 **NGS Name:** TBM 06 2

County: WASECA, MN (Sheet 1)

NGS ACRN: AJ9614 Get Map
NGS Quad / Sta Num : 43093144/
USGS Quad: NEW RICHLAND

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	23	105 N	22 W	435307.00	932537.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1978	1978	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
IRON ROD	UNMONUMENTED	MNDT

Description:

3.37 MILES EAST-SOUTHEAST OF NEW RICHLAND, 3.0 MILES EAST ALONG TRUNK HIGHWAY 30 FROM THE JUNCTION OF TRUNK HIGHWAY 30 AND TRUNK HIGHWAY 13, THEN 0.4 MILE SOUTH ON COUNTY ROAD 63 (170TH STREET), 0.56 MILE NORTH OF THE CENTER OF THE JUNCTION OF COUNTY ROAD 63 (170TH STREET) AND COUNTY ROAD 58 (220TH AVENUE), 0.44 MILE SOUTHEAST OF STATION 8106 C, 0.38 MILE SOUTH OF STATION 8106 D.

Stamping:

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -95.213 12B = -95.210 09 = -95.157 03 = -94.983

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_57426.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_57426.pdf

TBM 06 3 L24529

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: TBM 06 3 L24529 **NGS Name:** TBM 06 3

County: WASECA, MN (Sheet 1)

NGS ACRN: AJ9615 Get Map
NGS Quad / Sta Num : 43093144/
USGS Quad: NEW RICHLAND

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	24	105 N	22 W	435238.00	932517.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1978	1978	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
IRON ROD	UNMONUMENTED	MNDT

Description:

3.75 MILES SOUTHEAST OF NEW RICHLAND, 3.0 MILES EAST ALONG TRUNK HIGHWAY 30 FROM THE JUNCTION OF TRUNK HIGHWAY 30 AND TRUNK HIGHWAY 13, THEN 1.0 MILE SOUTH ON COUNTY ROAD 63 (170TH STREET), THEN 0.3 MILE EAST ON COUNTY ROAD 58 (220TH AVENUE), 0.49 MILE SOUTHWEST OF THE CENTER OF THE JUNCTION OF TRUNK HIGHWAY 30 AND COUNTY ROAD 58 (220TH AVENUE), 0.28 MILE EAST OF STATION 8106 E.

Stamping:

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -95.243 12B = -95.236 09 = -95.190 03 = -95.010

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_57439.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_57439.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: TBM 06 4 L24529 **NGS Name:** TBM 06 4

County: WASECA, MN (Sheet 1)

NGS ACRN: AJ9616 Get Map
NGS Quad / Sta Num : 43093144/
USGS Quad: NEW RICHLAND

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	25	105 N	22 W	435236.00	932448.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1978	1978	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
IRON ROD	UNMONUMENTED	MNDT

Description:

4.15 MILES SOUTHEAST OF NEW RICHLAND, 3.70 MILES NORTH-NORTHWEST OF BATH, 1.5 MILES NORTH ON COUNTY ROAD 20 (740TH AVENUE) FROM THE JUNCTION OF COUNTY ROAD 20 (740TH AVENUE) AND COUNTY ROAD 35 (325TH STREET), THEN 0.8 MILE WEST ON 168TH STREET, THEN 2.0 MILES NORTH ON 102ND AVENUE, 0.3 MILE NORTHWEST ON TRUNK HIGHWAY 30, THEN 0.2 MILE SOUTHWEST ON COUNTY ROAD 58 (220TH AVENUE), 0.67 MILE EAST OF THE CENTER OF THE JUNCTION OF COUNTY ROAD 58 (220TH AVENUE) AND COUNTY ROAD 63 (170TH STREET), 0.26 MILE WEST-SOUTHWEST OF STATION SOY MNDT, THE STATION IS 0.06 MILE EAST-SOUTHEAST OF 220TH AVENUE.

Stamping:

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -95.197 12B = -95.193 09 = -95.144 03 = -94.964

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_57445.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_57445.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: TBM 07 1 L24529 **NGS Name:** TBM 07 1

County: WASECA, MN (Sheet 1)

NGS ACRN: AJ9594 Get Map
NGS Quad / Sta Num : 43093441/
USGS Quad: MAPLETON NE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	18	106 N	24 W	435920.00	934532.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1978	1978	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
IRON ROD	UNMONUMENTED	MNDT

Description:

1.90 MILES SOUTHEAST OF PEMBERTON, 1.7 MILES SOUTHEAST ALONG TRUNK HIGHWAY 83 FROM THE JUNCTION OF TRUNK HIGHWAY 83 AND TOWNSHIP ROAD 197 IN PEMBERTON, 0.33 MILE SOUTH-SOUTHEAST OF THE CENTER OF THE JUNCTION OF TRUNK HIGHWAY 83 AND 300TH AVENUE, 0.06 MILE WEST OF TRUNK HIGHWAY 83.

Stamping:

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -95.006 12B = -95.003 09 = -94.924 03 = -94.819

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_57155.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_57155.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: TBM 07 2 L24529 **NGS Name:** TBM 07 2

County: WASECA, MN (Sheet 1)

NGS ACRN: AJ9595 Get Map
NGS Quad / Sta Num : 43093441/
USGS Quad: MAPLETON NE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	18	106 N	24 W	435854.00	934502.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1978	1978	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
IRON ROD	UNMONUMENTED	MNDT

Description:

2.55 MILES SOUTHEAST OF PEMBERTON, 2.3 MILES SOUTHEAST ALONG TRUNK HIGHWAY 83 FROM THE JUNCTION OF TRUNK HIGHWAY 83 AND TOWNSHIP ROAD 197, 0.34 MILE NORTHWEST OF THE CENTER OF THE JUNCTION OF TRUNK HIGHWAY 83 AND COUNTY ROAD 54 (10TH STREET), 0.28 MILE SOUTHEAST OF STATION 8107 M, 0.07 MILE EAST OF THE CENTER STRIPE OF TRUNK HIGHWAY 83.

Stamping:

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -95.075 12B = -95.069 09 = -94.990 03 = -94.885

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_57163.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_57163.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: TBM 07 3 L24529 **NGS Name:** TBM 07 3

County: WASECA, MN (Sheet 1)

NGS ACRN: AJ9596 Get Map
NGS Quad / Sta Num : 43093414/
USGS Quad: WALDORF

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	20	106 N	24 W	435802.00	934402.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1978	1978	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
IRON ROD	UNMONUMENTED	MNDT

Description:

2.73 MILES NORTHWEST OF WALDORF, 2.7 MILES NORTHWEST ALONG TRUNK HIGHWAY 83 FROM THE JUNCTION OF TRUNK HIGHWAY 83 AND COUNTY ROAD 4 (260TH AVENUE) IN WALDORF, 0.49 MILE SOUTHEAST OF STATION 8107 K, 0.37 MILE NORTHWEST OF THE CENTER OF THE JUNCTION OF 20TH STREET AND COUNTY ROAD 21 (280TH AVENUE), 0.22 MILE NORTH OF THE CENTER OF THE JUNCTION OF TRUNK HIGHWAY 83 AND COUNTY ROAD 21 (280TH AVENUE), 0.12 MILE NORTHEAST OF TRUNK HIGHWAY 83.

Stamping:

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -95.203 12B = -95.197 09 = -95.121 03 = -95.016

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_57166.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_57166.pdf

TBM 07 4 L24529

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: TBM 07 4 L24529 **NGS Name:** TBM 07 4

County: WASECA, MN (Sheet 1)

NGS ACRN: AJ9597 Get Map
NGS Quad / Sta Num : 43093414/
USGS Quad: WALDORF

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	28	106 N	24 W	435734.00	934332.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1978	1978	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
IRON ROD	UNMONUMENTED	MNDT

Description:

2.06 MILES NORTHWEST OF WALDORF, 2.1 MILES NORTHWEST ALONG TRUNK HIGHWAY 83 FROM THE JUNCTION OF TRUNK HIGHWAY 83 AND COUNTY ROAD 4 (260TH AVENUE), THEN 236.0 FEET NORTH ON 20TH STREET, 0.35 MILE NORTHWEST OF STATION 8107 J, 0.34 MILE SOUTHEAST OF THE CENTER OF THE JUNCTION OF 20TH STREET AND COUNTY ROAD 21 (280TH AVENUE), 0.12 MILE NORTHEAST OF THE CENTER OF THE JUNCTION OF TRUNK HIGHWAY 83 AND 20TH STREET, 0.11 MILE EAST OF 20TH STREET.

Stamping:

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -95.266 12B = -95.262 09 = -95.187 03 = -95.082

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_57168.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_57168.pdf

TBM 07 5 L24529

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: TBM 07 5 L24529 **NGS Name:** TBM 07 5

County: WASECA, MN (Sheet 1)

NGS ACRN: AJ9598 Get Map
NGS Quad / Sta Num : 43093414/
USGS Quad: WALDORF

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	28	106 N	24 W	435659.00	934304.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1978	1978	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
IRON ROD	UNMONUMENTED	MNDT

Description:

1.28 MILES NORTHWEST OF WALDORF, 1.3 MILES NORTHWEST ALONG TRUNK HIGHWAY 83 FROM THE JUNCTION OF TRUNK HIGHWAY 83 AND COUNTY ROAD 4, 0.50 MILE EAST OF THE CENTER OF THE JUNCTION OF 270TH AVENUE AND 20TH STREET, 0.43 MILE SOUTHEAST OF STATION 8107 J, 87.54 FEET NORTH OF THE CENTER OF THE JUNCTION OF TRUNK HIGHWAY 83 AND 270TH AVENUE, 35.51 FEET EAST OF THE CENTER STRIPE OF TRUNK HIGHWAY 83.

Stamping:

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -95.338 12B = -95.334 09 = -95.259 03 = -95.151

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_57170.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_57170.pdf

TBM 07 6 L24529

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: TBM 07 6 L24529 **NGS Name:** TBM 07 6

County: WASECA, MN (Sheet 1)

NGS ACRN: AJ9599 Get Map
NGS Quad / Sta Num : 43093414/
USGS Quad: WALDORF

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	34	106 N	24 W	435626.00	934217.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1978	1978	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
IRON ROD	UNMONUMENTED	MNDT

Description:

0.41 MILE NORTHWEST OF WALDORF, 0.4 MILE NORTHWEST ALONG TRUNK HIGHWAY 83 FROM THE JUNCTION OF TRUNK HIGHWAY 83 AND COUNTY ROAD 4 (260TH AVENUE), 0.52 MILE NORTHWEST OF THE CENTER OF THE JUNCTION OF COUNTY ROAD 4 (260TH AVENUE) AND COUNTY ROAD 3 (MAIN STREET/35TH STREET), 0.35 MILE SOUTHEAST OF STATION 8107 H, 0.13 MILE NORTHEAST OF TRUNK HIGHWAY 83.

Stamping:

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -95.420 12B = -95.416 09 = -95.341 03 = -95.233

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_57172.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_57172.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: TBM 07 7 L24529 **NGS Name:** TBM 07 7

County: WASECA, MN (Sheet 1)

NGS ACRN: AJ9600 Get Map
NGS Quad / Sta Num : 43093414/
USGS Quad: WALDORF

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	34	106 N	24 W	435619.00	934201.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1978	1978	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
IRON ROD	UNMONUMENTED	MNDT

Description:

0.26 MILE NORTH EAST OF WALDORF, 0.2 MILE EAST ALONG COUNTY ROAD 4 (NORTH STREET) FROM THE JUNCTION OF COUNTY ROAD 4 (NORTH STREET) AND TRUNK HIGHWAY 83, THEN 0.3 MILE NORTH ON COUNTY ROAD 3 (MAIN STREET), THEN 0.1 MILE WEST ON A LEFT TURN, 0.27 MILE NORTHWEST OF STATION 8107 F, 0.19 MILE NORTHWEST OF THE CENTER OF THE JUNCTION OF COUNTY ROAD 3 (MAIN STREET) AND SCHOOL STREET.

Stamping:

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -95.439 12B = -95.436 09 = -95.361 03 = -95.252

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_57174.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_57174.pdf

TBM 07 8 L24529

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: TBM 07 8 L24529 **NGS Name:** TBM 07 8

County: WASECA, MN (Sheet 1)

NGS ACRN: AJ9601 Get Map
NGS Quad / Sta Num : 43093414/
USGS Quad: WALDORF

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	3	105 N	24 W	435541.00	934149.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1978	1978	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
IRON ROD	UNMONUMENTED	MNDT

Description:

0.54 MILE SOUTHEAST OF WALDORF, 0.5 MILE SOUTHEAST ALONG TRUNK HIGHWAY 83 FROM THE JUNCTION OF TRUNK HIGHWAY 83 AND COUNTY ROAD 4 (260TH AVENUE), 0.30 MILE SOUTH OF STATION WALDORF WATER TANK, 0.07 MILE SOUTHWEST OF THE CENTER OF THE JUNCTION OF TRUNK HIGHWAY 83 AND COUNTY ROAD 3 (MAIN STREET), 277.57 FEET SOUTHEAST OF THE CENTER STRIPE OF TRUNK HIGHWAY 83.

Stamping:

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -95.498 12B = -95.492 09 = -95.420 03 = -95.308

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_57175.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_57175.pdf

TBM 07 9 L24529

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: TBM 07 9 L24529 **NGS Name:** TBM 07 9

County: WASECA, MN (Sheet 1)

NGS ACRN: AJ9602 Get Map
NGS Quad / Sta Num : 43093414/
USGS Quad: WALDORF

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	15	105 N	24 W	435352.00	934152.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1978	1978	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
IRON ROD	UNMONUMENTED	MNDT

Description:

2.58 MILES SOUTH OF WALDORF, 2.6 MILES SOUTH-SOUTHWEST ALONG TRUNK HIGHWAY 83 FROM THE JUNCTION OF TRUNK HIGHWAY 83 AND COUNTY ROAD 4 (260TH AVENUE), 0.56 MILE SOUTH OF CENTER OF THE JUNCTION OF TRUNK HIGHWAY 83 AND 240TH AVENUE, 0.45 MILE NORTH-NORTHEAST OF STATION WALDORF RM 2, 0.44 MILE NORTH OF THE CENTER OF THE JUNCTION OF TRUNK HIGHWAY 83 AND TRUNK HIGHWAY 30, 120.29 FEET WEST OF THE CENTER STRIPE OF TRUNK HIGHWAY 83.

Stamping:

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -95.626 12B = -95.620 09 = -95.548 03 = -95.426

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_57177.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_57177.pdf

TBM 1 L859

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: TBM 1 L859 **NGS Name:** TBM 1

County: WASECA, MN (Sheet 1)

NGS ACRN: BQ7820 Get Map
NGS Quad / Sta Num : 44093233/
USGS Quad: MERIDEN

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	16	107 N	22 W	440419.00	932846.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1933	1933	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
IRON ROD	UNMONUMENTED	NGS

Description:

1.56 MILES SOUTHEAST OF WASECA, 0.8 MILE EAST ALONG TRUNK HIGHWAY 14 FROM THE JUNCTION OF TRUNK HIGHWAY 14 AND TRUNK HIGHWAY 13, THEN 0.3 MILE SOUTH ON COUNTY ROAD 5 (11TH STREET), THEN 0.6 MILE EAST ON COUNTY ROAD 5 (5TH AVENUE SOUTHEAST), 0.13 MILE WEST OF THE CENTER OF THE JUNCTION OF COUNTY ROAD 5 (5TH AVENUE SOUTHEAST) AND COUNTY ROAD 5 (145TH STREET) AND 355TH AVENUE, 0.08 MILE EAST OF STATION 8104 G, 59.61 FEET SOUTH OF COUNTY ROAD 5 (5TH AVENUE SOUTHEAST).

Stamping:

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -93.999 12B = -94.006 09 = -93.920 03 = -93.773

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_59097.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_59097.pdf

TBM 12 L857

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: TBM 12 L857 **NGS Name:** TBM 12

County: WASECA, MN (Sheet 1)

NGS ACRN: BQ8268 Get Map
NGS Quad / Sta Num : 44093324/
USGS Quad: ELYSIAN

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	29	108 N	24 W	440730.00	934427.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1933	1933	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
IRON ROD	UNMONUMENTED	NGS

Description:

1.69 MILES NORTHWEST OF JANESVILLE, 1.64 MILES SOUTHEAST OF SMITH'S MILL, 1.5 MILES SOUTHEAST ALONG TRUNK HIGHWAY 14 FROM THE JUNCTION OF TRUNK HIGHWAY 14 AND COUNTY ROAD 37 (WEST COUNTY LINE ROAD) IN SMITH'S MILL, THEN 0.4 MILE EAST ON 390TH AVENUE, 0.64 MILE WEST-NORTHWEST OF THE CENTER OF 390TH AVENUE AND COUNTY 18 (20TH STREET), 0.55 MILE NORTH-NORTHWEST OF STATION 8103 C, 0.11 MILE NORTH OF THE CENTER STRIPE OF 390TH AVENUE.

Stamping:

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -94.583 12B = -94.590 09 = -94.508 03 = -94.347

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_60152.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_60152.pdf

TBM 13 L857

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: TBM 13 L857 **NGS Name:** TBM 13

County: WASECA, MN (Sheet 1)

NGS ACRN: BQ8269 Get Map
NGS Quad / Sta Num : 44093323/
USGS Quad: JANESVILLE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	33	108 N	24 W	440711.00	934326.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1933	1933	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
IRON ROD	UNMONUMENTED	NGS

Description:

0.78 MILE NORTHWEST OF JANESVILLE, 0.8 MILE WEST ON TRUNK HIGHWAY 14 FROM THE JUNCTION OF TRUNK HIGHWAY 14 AND COUNTY ROAD 3 (MAIN STREET), 0.28 MILE NORTH-NORTHWEST OF STATION 8103 D, 0.26 MILE NORTH-NORTHWEST OF THE INTERSECTION BETWEEN TRUNK HIGHWAY 14 AND COUNTY DITCH NUMBER 6, 0.24 MILE NORTH OF THE CENTER STRIPE OF TRUNK HIGHWAY 14.

Stamping:

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -94.632 12B = -94.639 09 = -94.557 03 = -94.396

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_59701.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_59701.pdf

TBM 2 L859

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: TBM 2 L859 **NGS Name:** TBM 2

County: WASECA, MN (Sheet 1)

NGS ACRN: BQ7821 Get Map
NGS Quad / Sta Num : 44093233/
USGS Quad: MERIDEN

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	15	107 N	22 W	440414.00	932751.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1933	1933	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
IRON ROD	UNMONUMENTED	NGS

Description:

2.30 MILES SOUTHEAST OF WASECA, 2.1 MILES EAST ALONG TRUNK HIGHWAY 14 FROM THE JUNCTION OF TRUNK HIGHWAY 14 AND TRUNK HIGHWAY 13, THEN 0.6 MILE SOUTH ON 150TH STREET, 0.22 MILE SOUTHEAST FROM THE JUNCTION OF 150TH STREET AND 355TH AVENUE, 0.19 MILE EAST OF STATION 8104 H, 60.53 FEET NORTH OF THE CENTER OF THE EAST-WEST RAILROAD TRACKS.

Stamping:

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -93.901 12B = -93.911 09 = -93.825 03 = -93.674

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_58194.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_58194.pdf

TBM 2001 VRICH

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: TBM 2001 VRICH

NGS Name: TBM 2001

County: WASECA, MN (Sheet 1)

NGS ACRN: DF5891 Get Map
NGS Quad / Sta Num : 44093233/
USGS Quad: MERIDEN

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	29	107 N	22 W	440240.00	932950.00	2	

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1999	2011	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
PILES AND POLES	SPIKE	MNDT

Description:

2.3 MILES SOUTH OF WASECA, 10.6 MILE NORTH OF NEW RICHLAND, 10.6 MILE NORTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 30 IN NEW RICHLAND, AT TRUNK HIGHWAY 13 MILEPOINT 29.1, 0.5 MILE NORTH OF THE JUNCTION OF TRUNK HIGHWAY 13 AND 330TH AVENUE. THE CHECK POINT IS A RAILROAD SPIKE SET IN A POWER POLE.

Stamping:

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Accuracy	Orthometric (Meters) Height	Accuracy	Survey Order/(Class)	Project Info Year	Reference
NAVD88	1131.861	0.016	344.992	0.005	2/1	2004	00000449

Geoid Separations(ft): GEOID18 = -94.337 12B = -94.344 09 = -94.262 03 = -94.117

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_57692.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_57692.pdf

TBM 3 L859

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: TBM 3 L859 **NGS Name:** TBM 3

County: WASECA, MN (Sheet 1)

NGS ACRN: BQ7822 Get Map
NGS Quad / Sta Num : 44093233/
USGS Quad: MERIDEN

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	14	107 N	22 W	440413.00	932552.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1933	1933	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
IRON ROD	UNMONUMENTED	NGS

Description:

3.89 MILES SOUTHEAST OF WASECA, 4.2 MILES EAST ALONG TRUNK HIGHWAY 14 FROM THE JUNCTION OF TRUNK HIGHWAY 14 AND TRUNK HIGHWAY 13, THEN 0.8 MILE SOUTH ON 170TH STREET, THEN 0.14 MILE WEST CONTINUED ON 170TH STREET, THEN 163.07 FEET SOUTH CONTINUED ON 170TH STREET, 0.75 MILE EAST-NORTHEAST OF STATION L 23, 0.41 MILE SOUTHWEST OF THE SOUTHERN TIP OF 170TH STREET, 230.61 FEET SOUTH OF THE CENTER OF THE RAILROAD TRACKS.

Stamping:

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -93.681 12B = -93.684 09 = -93.602 03 = -93.455

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_58584.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_58584.pdf

TBM 30 L857

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: TBM 30 L857 **NGS Name:** TBM 30

County: WASECA, MN (Sheet 1)

NGS ACRN: BQ8270 Get Map
NGS Quad / Sta Num : 44093323/
USGS Quad: JANESVILLE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	34	108 N	24 W	440649.00	934133.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1933	1933	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
IRON ROD	UNMONUMENTED	NGS

Description:

0.84 MILES SOUTHEAST OF JANESVILLE, 0.5 MILE EAST ALONG TRUNK HIGHWAY 14 FROM THE JUNCTION OF TRUNK HIGHWAY 14 AND COUNTY ROAD 3 (MAIN STREET), THEN 0.3 MILE SOUTHEAST ON COUNTY ROAD 19 (35TH STREET), 0.22 MILE SOUTHEAST OF STATION 8103 G, 0.20 MILE SOUTHEAST OF THE CENTER OF THE JUNCTION OF COUNTY ROAD 19 (35TH STREET) AND THE EAST-WEST RAILROAD TRACKS, 0.08 MILE SOUTH OF THE RAILROAD TRACKS.

Stamping:

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -94.668 12B = -94.675 09 = -94.600 03 = -94.436

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_58617.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_58617.pdf

TBM 31 L857

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: TBM 31 L857 **NGS Name:** TBM 31

County: WASECA, MN (Sheet 1)

NGS ACRN: BQ8271 Get Map
NGS Quad / Sta Num : 44093323/
USGS Quad: JANESVILLE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	35	108 N	24 W	440647.00	934057.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1933	1933	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
IRON ROD	UNMONUMENTED	NGS

Description:

1.33 MILES EAST-SOUTHEAST OF JANESVILLE, 1.3 MILES EAST-SOUTHEAST ALONG TRUNK HIGHWAY 14 FROM THE JUNCTION OF TRUNK HIGHWAY 14 AND COUNTY ROAD 3 (MAIN STREET), 0.69 MILE SOUTHEAST OF CENTER OF THE JUNCTION OF COUNTY ROAD 19 (35TH STREET) AND THE EAST-WEST RAILROAD TRACKS, 0.11 MILE SOUTHWEST OF STATION 8103 H, 0.10 MILE SOUTH OF THE CENTER OF THE RAILROAD TRACKS.

Stamping:

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -94.668 12B = -94.675 09 = -94.600 03 = -94.432

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_61962.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_61962.pdf

TBM 32 L857

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: TBM 32 L857 **NGS Name:** TBM 32

County: WASECA, MN (Sheet 1)

NGS ACRN: BQ8272 Get Map
NGS Quad / Sta Num : 44093323/
USGS Quad: JANESVILLE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	35	108 N	24 W	440643.00	934006.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1933	1933	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
IRON ROD	UNMONUMENTED	NGS

Description:

2.04 MILES EAST OF JANESVILLE, 2.0 MILES EAST ALONG TRUNK HIGHWAY 14 FROM THE JUNCTION OF TRUNK HIGHWAY 14 AND COUNTY ROAD 3, 234.67 FEET NORTHWEST OF STATION 117 GJS USGS, 231.79 FEET WEST OF THE CENTER OF THE JUNCTION OF TRUNK HIGHWAY 14 AND COUNTY ROAD 68.

Stamping:

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -94.659 12B = -94.665 09 = -94.593 03 = -94.422

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_62139.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_62139.pdf

TBM 33 L857

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: TBM 33 L857 **NGS Name:** TBM 33

County: WASECA, MN (Sheet 1)

NGS ACRN: BQ8273 Get Map
NGS Quad / Sta Num : 44093323/
USGS Quad: JANESVILLE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	6	107 N	23 W	440630.00	933827.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1933	1933	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
IRON ROD	UNMONUMENTED	NGS

Description:

3.43 MILES EAST-SOUTHEAST OF JANESVILLE, 3.4 MILES EAST ALONG TRUNK HIGHWAY 14 FROM THE JUNCTION OF TRUNK HIGHWAY 14 AND COUNTY ROAD 3 (MAIN STREET), 0.95 MILE NORTHWEST OF THE CENTER OF THE JUNCTION OF TRUNK HIGHWAY 14 AND COUNTY ROAD 68 (73RD STREET), 0.18 MILE WEST OF STATION 8103 K.

Stamping:

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -94.623 12B = -94.626 09 = -94.557 03 = -94.383

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_62299.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_62299.pdf

TBM 34 L857

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: TBM 34 L857 **NGS Name:** TBM 34

County: WASECA, MN (Sheet 1)

NGS ACRN: BQ8274 Get Map
NGS Quad / Sta Num : 44093323/
USGS Quad: JANESVILLE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	5	107 N	23 W	440619.00	933733.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1933	1933	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
IRON ROD	UNMONUMENTED	NGS

Description:

6.07 MILES NORTHWEST OF WASECA, 4.20 MILES SOUTHEAST OF JANESVILLE, 4.2 MILES SOUTHEAST ALONG TRUNK HIGHWAY 14 FROM THE JUNCTION OF TRUNK HIGHWAY 14 AND COUNTY ROAD 3 (MAIN STREET) IN JANESVILLE, 0.32 MILE SOUTHWEST OF STATION BISCUIT MNDT, 0.19 MILE WEST-NORTHWEST OF THE CENTER OF THE JUNCTION OF TRUNK HIGHWAY 14 AND COUNTY ROAD 68 (73RD STREET), 202.42 FEET NORTH OF THE CENTER STRIPE OF TRUNK HIGHWAY 14.

Stamping:

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -94.596 12B = -94.600 09 = -94.531 03 = -94.357

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_62460.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_62460.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: TBM 35 L857 **NGS Name:** TBM 35

County: WASECA, MN (Sheet 1)

NGS ACRN: BQ8275 Get Map
NGS Quad / Sta Num : 44093322/
USGS Quad: WASECA

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	5	107 N	23 W	440607.00	933637.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1933	1933	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
IRON ROD	UNMONUMENTED	NGS

Description:

5.29 MILES NORTHWEST OF WASECA, 4.99 MILES SOUTHEAST OF JANESVILLE, 5.0 MILES SOUTHEAST ALONG TRUNK HIGHWAY 14 FROM THE JUNCTION OF TRUNK HIGHWAY 14 AND COUNTY ROAD 3 (MAIN STREET) IN JANESVILLE, 0.62 MILE SOUTHEAST OF THE CENTER OF THE JUNCTION OF TRUNK HIGHWAY 14 AND COUNTY ROAD 17, 0.14 MILE NORTHWEST OF STATION 8103 M, 106.39 FEET NORTH OF THE CENTER STRIPE OF TRUNK HIGHWAY 14.

Stamping:

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -94.560 12B = -94.563 09 = -94.495 03 = -94.321

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_62607.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_62607.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: TBM 36 L857 **NGS Name:** TBM 36

County: WASECA, MN (Sheet 1)

NGS ACRN: BQ8276 Get Map
NGS Quad / Sta Num : 44093322/
USGS Quad: WASECA

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	4	107 N	23 W	440558.00	933556.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1933	1933	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
IRON ROD	UNMONUMENTED	NGS

Description:

4.69 MILES NORTHWEST OF WASECA, 4.9 MILES ALONG TRUNK HIGHWAY 14 FROM THE JUNCTION OF TRUNK HIGHWAY 14 AND TRUNK HIGHWAY 13, 0.45 MILE SOUTHEAST OF STATION 8103 M, 396.69 FEET NORTHWEST OF THE CENTER OF THE JUNCTION OF TRUNK HIGHWAY 14 AND 85TH STREET.

Stamping:

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -94.531 12B = -94.534 09 = -94.465 03 = -94.291

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_60366.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_60366.pdf

TBM 37 L857

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: TBM 37 L857 **NGS Name:** TBM 37

County: WASECA, MN (Sheet 1)

NGS ACRN: BQ8277 Get Map
NGS Quad / Sta Num : 44093322/
USGS Quad: WASECA

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	10	107 N	23 W	440536.00	933431.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1933	1933	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
IRON ROD	UNMONUMENTED	NGS

Description:

3.46 MILES NORTHWEST OF WASECA, 3.7 MILES NORTHWEST ALONG TRUNK HIGHWAY 14 FROM THE JUNCTION OF TRUNK HIGHWAY 14 AND TRUNK HIGHWAY 13, THEN 344.0 FEET SOUTH ON COUNTY ROAD 52 (95TH STREET), THEN 0.1 MILE SOUTHEAST ON TRUNK HIGHWAY 14, 0.90 MILE NORTH-NORTHEAST OF THE CENTER OF THE JUNCTION OF COUNTY ROAD 52 (95TH STREET) AND COUNTY ROAD 2 (360TH AVENUE), 0.60 MILE SOUTH OF STATION VIKINGS MNDT, 0.07 MILE SOUTH OF THE CENTER STRIPE OF TRUNK HIGHWAY 14.

Stamping:

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -94.458 12B = -94.462 09 = -94.393 03 = -94.219

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_60513.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_60513.pdf

TBM 38 L857

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: TBM 38 L857 **NGS Name:** TBM 38

County: WASECA, MN (Sheet 1)

NGS ACRN: BQ8278 Get Map
NGS Quad / Sta Num : 44093322/
USGS Quad: WASECA

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	11	107 N	23 W	440519.00	933331.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1933	1933	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
IRON ROD	UNMONUMENTED	NGS

Description:

2.56 MILES NORTHWEST OF WASECA, 2.7 MILES NORTHWEST ALONG TRUNK HIGHWAY 14 FROM THE JUNCTION OF TRUNK HIGHWAY 14 AND TRUNK HIGHWAY 13, 0.77 MILE NORTH OF STATION WASPORT AZ MK, 0.62 MILE NORTHWEST OF THE CENTER OF THE JUNCTION OF TRUNK HIGHWAY 14 AND COUNTY ROAD 5 NORTH/COUNTY ROAD 27 SOUTH, 73.83 FEET SOUTH OF THE CENTER OF THE RAILROAD TRACKS.

Stamping:

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -94.399 12B = -94.403 09 = -94.334 03 = -94.163

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_60544.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_60544.pdf

TBM 39 L857

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: TBM 39 L857 **NGS Name:** TBM 39

County: WASECA, MN (Sheet 1)

NGS ACRN: BQ8279 Get Map
NGS Quad / Sta Num : 44093322/
USGS Quad: WASECA

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	12	107 N	23 W	440502.00	933231.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1933	1933	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
IRON ROD	UNMONUMENTED	NGS

Description:

1.70 MILES WEST OF WASECA, 1.8 MILES NORTHWEST ALONG TRUNK HIGHWAY 14 FROM THE JUNCTION OF TRUNK HIGHWAY 14 AND TRUNK HIGHWAY 13 IN WASECA, 0.51 MILE NORTHWEST OF STATION 8103 R, 0.28 MILE SOUTHEAST OF THE CENTER OF THE JUNCTION OF TRUNK HIGHWAY 14 AND COUNTY ROAD 5 NORTH/COUNTY ROAD 27 SOUTH, 143.92 FEET NORTH OF THE EAST-WEST RAILROAD TRACKS.

Stamping:

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -94.334 12B = -94.337 09 = -94.268 03 = -94.101

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_60693.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_60693.pdf

TBM 4 L859

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: TBM 4 L859 **NGS Name:** TBM 4

County: WASECA, MN (Sheet 1)

NGS ACRN: BQ7823 Get Map
NGS Quad / Sta Num : 44093233/
USGS Quad: MERIDEN

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	13	107 N	22 W	440417.00	932458.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1933	1933	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
IRON ROD	UNMONUMENTED	NGS

Description:

1.47 MILES WEST OF MERIDEN, 0.2 MILE NORTH ALONG COUNTY ROAD 18 (92ND AVENUE) FROM THE JUNCTION OF COUNTY ROAD 18 (92ND AVENUE) AND 13TH STREET IN MERIDEN, THEN 1.0 WEST ON 10TH STREET, THEN 0.3 MILE CONTINUED ON 358TH AVENUE, THEN 0.4 MILE SOUTH ON 178TH STREET, 0.43 MILE SOUTHWEST OF STATION 8827 B, 0.25 MILE WEST-SOUTHWEST OF THE CENTER OF THE JUNCTION OF 178TH STREET AND THE EAST-WEST RAILROAD TRACKS, 281.62 FEET SOUTH OF THE CENTER OF THE EAST-WEST RAILROAD TRACKS.

Stamping:

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -93.582 12B = -93.582 09 = -93.500 03 = -93.353

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_61113.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_61113.pdf

TBM 40 L857

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: TBM 40 L857 **NGS Name:** TBM 40

County: WASECA, MN (Sheet 1)

NGS ACRN: BQ8280 Get Map
NGS Quad / Sta Num : 44093322/
USGS Quad: WASECA

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	19	107 N	22 W	440353.00	933030.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1933	1933	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
IRON ROD	UNMONUMENTED	NGS

Description:

1.16 MILES SOUTH OF WASECA, 1.1 MILES SOUTH AND EAST ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 14 IN WASECA, THEN 0.1 MILE SOUTH ON 5TH STREET, THEN 0.3 MILE WEST ON 15TH AVENUE, 0.33 MILE WEST-NORTHWEST OF STATION WASECA MNDT, 0.09 MILE SOUTH-SOUTHEAST OF THE CENTER OF THE JUNCTION OF UNIVERSITY DRIVE SOUTHWEST AND THE NORTH-SOUTH RAILROAD TRACKS, 185.18 FEET EAST OF THE CENTER OF THE NORTH-SOUTH RAILROAD TRACKS.

Stamping:

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -94.255 12B = -94.262 09 = -94.183 03 = -94.032

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_61143.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_61143.pdf

TBM 41 L857

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: TBM 41 L857 **NGS Name:** TBM 41

County: WASECA, MN (Sheet 1)

NGS ACRN: BQ8281 Get Map
NGS Quad / Sta Num : 44093322/
USGS Quad: WASECA

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	30	107 N	22 W	440258.00	933028.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1933	1933	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
IRON ROD	UNMONUMENTED	NGS

Description:

2.21 MILES SOUTH OF WASECA, 0.6 MILE SOUTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 14, 0.2 MILE WEST ON 10TH AVENUE, THEN 1.4 MILES SOUTH ON COUNTY ROAD 4 (4TH STREET/128TH STREET), 0.57 MILE SOUTHWEST OF STATION 8101 L, 0.25 MILE SOUTHEAST OF THE CENTER OF THE JUNCTION OF COUNTY ROAD 4 (128TH STREET) AND COUNTY ROAD 9 (340TH AVENUE), 211.03 FEET EAST OF THE NORTH-SOUTH RAILROAD TRACKS.

Stamping:

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -94.370 12B = -94.376 09 = -94.298 03 = -94.147

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_61276.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_61276.pdf

TBM 42 L857

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: TBM 42 L857 **NGS Name:** TBM 42

County: WASECA, MN (Sheet 1)

NGS ACRN: BQ8282 Get Map
NGS Quad / Sta Num : 44093322/
USGS Quad: WASECA

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	32	107 N	22 W	440125.00	933023.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1933	1933	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
IRON ROD	UNMONUMENTED	NGS

Description:

1.52 MILES NORTHEAST OF WILTON, 0.9 MILE EAST ALONG WILTON BRIDGE ROAD FROM THE JUNCTION OF WILTON BRIDGE ROAD AND COUNTY ROAD 23 (WILTON RIVER ROAD), THEN 374.0 FEET SOUTHEAST ON 128TH STREET TOWARDS 315TH AVENUE, THEN 1.0 MILE EAST ON 315TH AVENUE, THEN 0.5 MILE NORTH ON TRUNK HIGHWAY 13, THEN 0.4 MILE WEST ON THE NEXT WESTERLY (LEFT) TURN, 0.48 MILE WEST OF STATION 8101 J, 245.88 FEET EAST OF THE NORTH-SOUTH RAILROAD TRACKS.

Stamping:

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -94.560 12B = -94.563 09 = -94.481 03 = -94.347

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_61380.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_61380.pdf

TBM 43 L857

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: TBM 43 L857 **NGS Name:** TBM 43

County: WASECA, MN (Sheet 1)

NGS ACRN: BQ8283 Get Map
NGS Quad / Sta Num : 44093322/
USGS Quad: WASECA

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	5	106 N	22 W	440113.00	933023.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1933	1933	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
IRON ROD	UNMONUMENTED	NGS

Description:

1.44 MILES NORTHEAST OF WILTON, 0.9 MILE EAST ALONG WILTON BRIDGE ROAD FROM THE JUNCTION OF WILTON BRIDGE ROAD AND COUNTY ROAD 23 (WILTON RIVER ROAD), THEN 374.0 FEET SOUTHEAST ON 128TH STREET TOWARDS 315TH AVENUE, THEN 1.0 MILE EAST ON 315TH AVENUE, THEN 0.5 MILE NORTH ON TRUNK HIGHWAY 13, THEN 0.4 MILE WEST ON THE NEXT WESTERLY (LEFT) TURN, 0.64 MILE NORTHWEST OF STATION 8101 I, 0.36 MILE NORTH-NORTHEAST OF THE CENTER OF THE JUNCTION OF 315TH AVENUE AND THE NORTH-SOUTH RAILROAD TRACKS, 251.38 FEET EAST OF THE NORTH-SOUTH RAILROAD TRACKS.

Stamping:

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -94.586 12B = -94.590 09 = -94.508 03 = -94.373

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_61399.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_61399.pdf

TBM 44 L857

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: TBM 44 L857 **NGS Name:** TBM 44

County: WASECA, MN (Sheet 1)

NGS ACRN: BQ8284 Get Map
NGS Quad / Sta Num : 44093322/
USGS Quad: WASECA

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	8	106 N	22 W	440018.00	933019.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1933	1933	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
IRON ROD	UNMONUMENTED	NGS

Description:

1.55 MILES SOUTHEAST OF WILTON, 0.9 MILE EAST ALONG WILTON BRIDGE ROAD, THEN 1.1 MILES SOUTH ON COUNTY ROAD 51 (128TH STREET), 0.76 MILE SOUTHWEST OF THE CENTER OF THE JUNCTION OF TRUNK HIGHWAY 13 AND 315TH AVENUE, 0.43 MILE SOUTHWEST OF STATION 8101 U, 237.04 FEET EAST OF THE NORTH-SOUTH RAILROAD TRACKS.

Stamping:

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -94.701 12B = -94.705 09 = -94.619 03 = -94.491

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_61526.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_61526.pdf

TBM 45 L857

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: TBM 45 L857 **NGS Name:** TBM 45

County: WASECA, MN (Sheet 1)

NGS ACRN: BQ8285 Get Map
NGS Quad / Sta Num : 43093411/
USGS Quad: OTISCO

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	17	106 N	22 W	435925.00	933016.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1933	1933	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
IRON ROD	UNMONUMENTED	NGS

Description:

0.95 MILE NORTHWEST OF OTISCO, 0.9 MILE WEST ON COUNTY ROAD 15 (290TH AVENUE) FROM THE JUNCTION OF COUNTY ROAD 15 (290TH AVENUE) AND TRUNK HIGHWAY 13 IN OTISCO, THEN 0.9 MILE NORTH ON COUNTY ROAD 51 (128TH STREET), 0.80 MILE NORTH OF THE CENTER OF THE JUNCTION OF COUNTY ROAD 15 (290TH AVENUE) AND THE NORTH-SOUTH RAILROAD TRACKS, 0.43 MILE NORTHWEST OF STATION 8101 G, 169.18 FEET EAST FROM THE CENTER OF THE NORTH-SOUTH RAILROAD TRACKS.

Stamping:

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -94.813 12B = -94.813 09 = -94.731 03 = -94.606

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_61544.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_61544.pdf

TBM 46 L857

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: TBM 46 L857 **NGS Name:** TBM 46

County: WASECA, MN (Sheet 1)

NGS ACRN: BQ8286 Get Map
NGS Quad / Sta Num : 43093411/
USGS Quad: OTISCO

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	29	106 N	22 W	435739.00	933004.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1933	1933	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
IRON ROD	UNMONUMENTED	NGS

Description:

1.29 MILES SOUTHWEST OF OTISCO, 1.5 MILES SOUTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND COUNTY ROAD 15 (290TH AVENUE), THEN 0.5 MILE WEST ON COUNTY ROAD 20 (275TH AVENUE), 0.54 MILE SOUTHWEST OF STATION 8101 S, 0.28 MILE NORTH OF THE CENTER OF THE JUNCTION OF COUNTY ROAD 20 (275TH AVENUE) AND THE NORTH-SOUTH RAILROAD TRACKS, 57.09 FEET WEST OF THE CENTER OF THE NORTH-SOUTH RAILROAD TRACKS.

Stamping:

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -95.026 12B = -95.026 09 = -94.954 03 = -94.819

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_61687.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_61687.pdf

TBM 47 L857

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: TBM 47 L857 **NGS Name:** TBM 47

County: WASECA, MN (Sheet 1)

NGS ACRN: BQ8287 Get Map
NGS Quad / Sta Num : 43093144/
USGS Quad: NEW RICHLAND

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	32	106 N	22 W	435644.00	932955.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1933	1933	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
IRON ROD	UNMONUMENTED	NGS

Description:

2.29 MILES SOUTH-SOUTHWEST OF OTISCO, 2.3 MILES SOUTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND COUNTY ROAD 15, 0.72 MILE NORTH OF THE CENTER OF THE JUNCTION OF 260TH AVENUE AND THE NORTH-SOUTH RAILROAD TRACKS, 0.36 MILE WEST OF STATION 8101 C, 27.03 FEET EAST OF THE CENTER OF THE NORTH-SOUTH RAILROAD TRACKS.

Stamping:

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -95.138 12B = -95.134 09 = -95.062 03 = -94.931

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_61701.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_61701.pdf

TBM 48 L857

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: TBM 48 L857 **NGS Name:** TBM 48

County: WASECA, MN (Sheet 1)

NGS ACRN: BQ8288 Get Map
NGS Quad / Sta Num : 43093144/
USGS Quad: NEW RICHLAND

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	5	105 N	22 W	435522.00	932944.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1933	1933	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
IRON ROD	UNMONUMENTED	NGS

Description:

2.13 MILES NORTH OF NEW RICHLAND, 2.0 MILES NORTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 30, THEN 0.3 MILE WEST AND NORTH ON 250TH AVENUE, 1.15 MILES NORTH OF THE CENTER OF THE JUNCTION OF COUNTY ROAD 8 AND THE NORTH-SOUTH RAILROAD TRACKS, 0.55 MILE EAST-NORTHEAST OF STATION 39 KED, 24.41 FEET WEST OF THE CENTER OF THE NORTH-SOUTH RAILROAD TRACKS.

Stamping:

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -95.298 12B = -95.298 09 = -95.233 03 = -95.092

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_61836.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_61836.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: TBM 49 L857 **NGS Name:** TBM 49

County: WASECA, MN (Sheet 1)

NGS ACRN: BQ8786 Get Map
NGS Quad / Sta Num : 43093144/
USGS Quad: NEW RICHLAND

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	8	105 N	22 W	435436.00	932939.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1933	1933	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
IRON ROD	UNMONUMENTED	NGS

Description:

1.26 MILES NORTH OF NEW RICHLAND, 1.0 MILE NORTH OF TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 30, THEN 0.4 MILE WEST ON COUNTY ROAD 8 (240TH AVENUE), THEN 0.2 MILE NORTH ON ASH AVENUE, 0.47 MILE SOUTHWEST OF STATION 8101 Q, 0.11 MILE NORTHEAST OF THE NORTHERN MOST END OF ASH AVENUE, 10.93 FEET EAST OF THE CENTER OF THE NORTH-SOUTH RAILROAD TRACKS.

Stamping:

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -95.394 12B = -95.387 09 = -95.325 03 = -95.180

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_61854.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_61854.pdf

TBM 50 L857

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: TBM 50 L857 **NGS Name:** TBM 50

County: WASECA, MN (Sheet 1)

NGS ACRN: BQ8787 Get Map
NGS Quad / Sta Num : 43093144/
USGS Quad: NEW RICHLAND

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	20	105 N	22 W	435258.00	932927.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1933	1933	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
IRON ROD	UNMONUMENTED	NGS

Description:

0.64 MILE SOUTHEAST OF NEW RICHLAND, 0.6 MILE SOUTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 30, 0.43 MILE NORTHWEST OF THE CENTER OF THE JUNCTION OF TRUNK HIGHWAY 13 AND 220TH AVENUE, 0.21 MILE WEST OF THE CENTER STRIPE OF TRUNK HIGHWAY 13, 266.85 FEET EAST OF THE CENTER OF THE NORTH-SOUTH RAILROAD TRACKS.

Stamping:

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -95.574 12B = -95.567 09 = -95.512 03 = -95.361

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_62317.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_62317.pdf

TBM 51 L857

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: TBM 51 L857 **NGS Name:** TBM 51

County: WASECA, MN (Sheet 1)

NGS ACRN: BQ8788 Get Map
NGS Quad / Sta Num : 43093143/
USGS Quad: HARTLAND

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	29	105 N	22 W	435212.00	932920.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1933	1933	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
IRON ROD	UNMONUMENTED	NGS

Description:

1.52 MILES SOUTH-SOUTHEAST OF NEW RICHLAND, 1.5 MILES SOUTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 30, THEN 0.1 MILE WEST ON 215TH AVENUE, 0.51 MILE SOUTH-SOUTHWEST OF THE CENTER OF THE JUNCTION OF TRUNK HIGHWAY 13 AND 220TH AVENUE, 0.08 MILE EAST OF THE CENTER OF THE JUNCTION OF 215TH AVENUE AND THE NORTH-SOUTH RAILROAD TRACKS, 19.68 FEET NORTH OF THE CENTER STRIPE OF 215TH AVENUE.

Stamping:

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -95.653 12B = -95.643 09 = -95.594 03 = -95.436

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_62332.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_62332.pdf

TBM 52 L857

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: TBM 52 L857 **NGS Name:** TBM 52

County: WASECA, MN (Sheet 1)

NGS ACRN: BQ8789 Get Map
NGS Quad / Sta Num : 43093143/
USGS Quad: HARTLAND

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	32	105 N	22 W	435145.00	932916.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1933	1933	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
IRON ROD	UNMONUMENTED	NGS

Description:

2.05 MILES SOUTH-SOUTHEAST OF NEW RICHLAND, 2.0 MILES SOUTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 30, THEN 459.0 FEET WEST ON 210TH AVENUE, 0.99 MILE NORTH OF STATION D 23, 271.88 FEET WEST-SOUTHWEST OF THE CENTER OF THE JUNCTION OF 210TH AVENUE AND THE NORTH-SOUTH RAILROAD TRACKS, 48.51 FEET SOUTH OF THE CENTER STRIPE OF 210TH AVENUE.

Stamping:

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -95.695 12B = -95.689 09 = -95.640 03 = -95.476

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_62347.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_62347.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: THILL **NGS Name:** THILL

County: WASECA, MN (Sheet 1)

NGS ACRN: DP5055 Get Map
NGS Quad / Sta Num : 44093331/
USGS Quad: MADISON LAKE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	19	108 N	24 W	440820.01	934603.35	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2014	2022	GOOD	Horz=YES Vert=YES	YES		RECESSED 2 IN.	BAR MAG IN DRILL HOLE

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 30 FT)

Disk Type
METAL ROD (WITH REMOVABLE ID DISK)

Mon. Agency
MNDT

Description: (2014) **Stamping:** THILL 2014

3.3 MILES WEST-NORTHWEST OF JANESVILLE, 4.0 MILES NORTHWEST ALONG TRUNK HIGHWAY 14 FROM THE JUNCTION OF TRUNK HIGHWAY 14 AND COUNTY ROAD 3 IN JANESVILLE, AT TRUNK HIGHWAY 14 MILEPOINT 143.75, 87.2 FEET NORTH-NORTHEAST OF A WESTBOUND TRUNK HIGHWAY 14 FOG LINE, 54.5 FEET SOUTH-SOUTHEAST OF COUNTY ROAD 37 (WEST COUNTY LINE ROAD), 106.5 FEET SOUTH-SOUTHWEST OF 400TH AVENUE, 1.5 FEET NORTH-NORTHEAST OF A WITNESS POST.

Station Pair: SCHMIDT - BLUE EARTH, MN

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1060.037	0.016	323.100	0.005	2/1	2016	00000870

Geoid Separations(ft): GEOID18 = -94.462 12B = -94.468 09 = -94.380 03 = -94.222

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Geodetic Positions Longitude	County (Feet) X	County (Feet) Y	County (Meters) X	County (Meters) Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Project Info Reference
NAD83(2011)	44 08 20.00910	93 46 03.35100	276598.246	212344.038	84307.3140	64722.592	294.306		2014	GPS3043
NAD83(1996)	44 08 20.00880	93 46 03.35116	276598.234	212344.008	84307.3100	64722.583	294.371	C	2014	HNEW14

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/THILL-DP5055-3N-03AUG2022.jpg	N	Aug 3, 2022
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/THILL-DP5055-2-03AUG2022.jpg		Aug 3, 2022
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/THILL-DP5055-1-03AUG2022.jpg		Aug 3, 2022

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_101445.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_101445.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: TT 18 MT **NGS Name:** TT 18 MT

County: WASECA, MN (Sheet 1)

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	32	105 N	24 W	435136.00	934339.00		

NGS ACRN: Get Map
NGS Quad / Sta Num : 43093413/
USGS Quad: MATAWAN

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1949	2018	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	SURVEY DISK	USGS

Description: (1949) **Stamping:** TT 18 MT 1949

8.0 MILES NORTH OF WELLS, 4.57 MILES WEST OF MATAWAN, 0.7 MILE NORTH ALONG COUNTY ROAD 11 FROM THE JUNCTION OF COUNTY ROAD 11 AND 70TH STREET IN MATAWAN, THEN 5.0 MILES WEST ON 220TH AVENUE, THEN 1.2 MILES SOUTH ON 20TH STREET, 450.0 FEET NORTH OF THE CENTER OF THE JUNCTION OF 20TH STREET AND 208TH AVENUE, 27.0 FEET WEST OF 20TH STREET, 2.0 FEET NORTH AND 1.0 FOOT EAST OF A FENCE POST.

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -95.656 12B = -95.646 09 = -95.581 03 = -95.439

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_73010.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_73010.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: TT 19 MT **NGS Name:** TT 19 MT

County: WASECA, MN (Sheet 1)

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	17	105 N	24 W	435330.00	934352.00		

NGS ACRN: Get Map
NGS Quad / Sta Num : 43093414/
USGS Quad: WALDORF

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1949	2009	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	SURVEY DISK	USGS

Description: (1949) **Stamping:** TT 19 MT 1949

10.0 MILES NORTH AND 2.0 MILES WEST OF WELLS, 5.95 MILES NORTHEAST OF MINNESOTA LAKE, 2.2 MILES NORTHEAST ALONG COUNTY ROAD 20 (4TH AVENUE) FROM THE JUNCTION OF COUNTY ROAD 20 (4TH AVENUE) AND TRUNK HIGHWAY 22 IN MINNESOTA LAKE, THEN 3.0 MILES NORTH ON COUNTY ROAD 161 (540TH AVENUE), THEN 2.8 MILES EAST ON TRUNK HIGHWAY 30, 902.08 FEET WEST OF THE CROSSROADS OF 20TH STREET AND TRUNK HIGHWAY 30, 88.16 FEET NORTH OF THE CENTER OF TRUNK HIGHWAY 30, 1.0 FOOT SOUTH AND 3.0 FEET WEST OF A POWER POLE.

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -95.538 12B = -95.528 09 = -95.459 03 = -95.331

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_73011.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_73011.pdf

TT 19 MT RESET

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: TT 19 MT RESET
NGS Name: TT 19 MT RESET

County: WASECA, MN (Sheet 1)

NGS ACRN: DP6227 Get Map
NGS Quad / Sta Num : 43093414/
USGS Quad: WALDORF

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	17	105 N	24 W	435329.78	934352.46	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1952	2018	GOOD	Horz=YES Vert=YES	YES		RECESSED 3 IN.	STEEL SPIKE ADJ TO MON

Monument Type
CONCRETE POST (PREFABRICATED)

Disk Type
BENCH MARK DISK

Mon. Agency
USGS

Description: (2009)

Stamping: TT 19 MT RESET 1952

3.0 MILES SOUTHWEST OF WALDORF, 1.6 MILES WEST ALONG TRUNK HIGHWAY 30 FROM THE JUNCTION OF TRUNK HIGHWAY 30 AND TRUNK HIGHWAY 83 (THE JUNCTION IS 2.5 MILES SOUTH OF WALDORF), AT TRUNK HIGHWAY 30 MILEPOINT 156.3, 61.0 FEET NORTH OF TRUNK HIGHWAY 30, 135.0 FEET EAST OF A FIELD ENTRANCE SOUTH, 1.0 FOOT SOUTH OF A WITNESS POST.

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1079.516	0.016	329.037	0.005	2/1	2015	00000851

Geoid Separations(ft): GEOID18 = -95.538 12B = -95.528 09 = -95.459 03 = -95.331

*** No Horizontal Positions in the Database ***

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/TT_19_MT_RESET-DP6227-3N-25JUL2018.jpg	N	Jul 25, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/TT_19_MT_RESET-DP6227-2-25JUL2018.jpg		Jul 25, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/TT_19_MT_RESET-DP6227-1-25JUL2018.jpg		Jul 25, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33282.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33282.pdf

TT 20 MT RESET

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: TT 20 MT RESET

NGS Name: TT 20 MT RESET

County: WASECA, MN (Sheet 1)

NGS ACRN: Get Map
NGS Quad / Sta Num : 43093441/
USGS Quad: MAPLETON NE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	18	105 N	24 W	435332.00	934548.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1953	2013	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	SURVEY DISK	USGS

Description: (2010) **Stamping:** TT 20 MT RESET 1953

4.4 MILES SOUTHWEST OF WALDORF, 3.3 MILES WEST ALONG TRUNK HIGHWAY 30 FROM THE JUNCTION OF TRUNK HIGHWAY 30 AND TRUNK HIGHWAY 83 SOUTH OF WALDORF, 61.0 FEET NORTH OF TRUNK HIGHWAY 30, AT TRUNK HIGHWAY 30 STATION 11+09, 1223.43 FEET EAST OF THE CROSSROADS OF TRUNK HIGHWAY 30 AND COUNTY ROAD 14 AT THE COUNTY LINE, 1.0 FOOT SOUTH AND 3.0 FEET WEST OF A POWER POLE, AT TRUNK HIGHWAY 30 MILEPOINT 154.6.

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -95.384 12B = -95.374 09 = -95.302 03 = -95.170

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33283.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33283.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: TT 21 MT **NGS Name:** TT 21 MT

County: WASECA, MN (Sheet 1)

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	7	105 N	24 W	435500.00	934603.00		

NGS ACRN: Get Map
NGS Quad / Sta Num : 43093441/
USGS Quad: MAPLETON NE

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1949	2018	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	SURVEY DISK	USGS

Description: (1949) **Stamping:** TT 21 MT 1949

12.0 MILES NORTH AND 2.0 MILES WEST OF WELLS, 3.51 MILES SOUTHWEST OF WALDORF, 3.3 MILES WEST ON COUNTY ROAD 4 FROM THE JUNCTION OF COUNTY ROAD 4 AND TRUNK HIGHWAY 83, THEN 1.3 MILES SOUTH ON COUNTY ROAD 14, 1410.0 FEET SOUTH OF THE CENTER OF THE JUNCTION OF COUNTY ROAD 14 AND COUNTY ROAD 159 (250TH AVENUE), 32.0 FEET EAST OF A ROAD, 12.0 FEET SOUTH OF A FIELD ENTRANCE EAST, 1.0 FOOT WEST OF A FENCE.

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -95.272 12B = -95.266 09 = -95.190 03 = -95.065

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33284.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33284.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: TT 23 MT

NGS Name: TT 23 MT

County: WASECA, MN (Sheet 1)

NGS ACRN: Get Map
NGS Quad / Sta Num : 43093441/
USGS Quad: MAPLETON NE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	18	106 N	24 W	435858.00	934604.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1949	2016	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	SURVEY DISK	USGS

Description: (1949) **Stamping:** TT 23 MT 1949

1.5 MILES SOUTH AND 1.0 MILE EAST OF PEMBERTON, 1080.0 FEET SOUTH OF TOWNSHIP ROAD 79, 32.0 FEET EAST OF THE CENTER OF COUNTY ROAD 14, 27.0 FEET SOUTH OF A DRIVEWAY ON THE WEST SIDE OF COUNTY ROAD 14, 6.0 FEET NORTH AND 5.0 FEET EAST OF A TELEPHONE POLE, 1.0 FOOT WEST OF A FENCE.

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -94.993 12B = -94.990 09 = -94.911 03 = -94.806

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_73012.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_73012.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: U 22 **NGS Name:** U 22

County: WASECA, MN (Sheet 1)

NGS ACRN: PP1725 Get Map
NGS Quad / Sta Num : 44093323/
USGS Quad: JANESVILLE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	36	108 N	24 W	440639.00	933907.00	2	

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1933	1978	NOT FOUND	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	BENCH MARK DISK	NGS

Description: (2010) **Stamping:** U 22 1933

2.8 MILES EAST OF THE RAILROAD STATION IN JANESVILLE, 500.0 FEET WEST OF A RAILROAD CULVERT, 150.0 FEET SOUTH OF TRUNK HIGHWAY 14, 53.0 FEET SOUTHEAST OF THE JUNCTION OF 50TH STREET AND THE RAILROAD TRACKS, 44.0 FEET SOUTH OF THE SOUTH RAIL OF A RAILROAD, 29.0 FEET EAST OF A ROAD.

Station Notes

THE SURVEY MARK IS ON RAILROAD PROPERTY AND HAS BEEN ABANDONED FOR MNDOT GEODETIC USE.

Leveling-Derived Orthometric Heights (Elevations)

Vertical Datum	Orthometric (Feet) Height	Accuracy	Orthometric (Meters) Height	Accuracy	Survey Order/(Class)	Project Info Year	Reference
NAVD88	1126.195	0.016	343.265	0.005	2/0	1991	00000025
NGVD29	1126.067	0.016	343.226	0.005	2/0	1992	UNCHECKD

Geoid Separations(ft): GEOID18 = -94.636 12B = -94.639 09 = -94.570 03 = -94.396

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33285.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33285.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: V 22 **NGS Name:** V 22

County: WASECA, MN (Sheet 1)

NGS ACRN: PP1726 Get Map
NGS Quad / Sta Num : 44093322/
USGS Quad: WASECA

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	4	107 N	23 W	440549.75	933517.64	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1933	2005	POOR	Horz=NO Vert=NO	NO		RECESSED 15 IN.	SEE DESCRIPTION

Monument Type
CONCRETE MONUMENT (CAST-IN-PLACE)

Disk Type
BENCH MARK DISK

Mon. Agency
NGS

Description: (2010) **Stamping:** 1130.569 V 22 1933

4.25 MILES WEST-NORTHWEST ALONG TRUNK HIGHWAY 14 FROM THE JUNCTION OF TRUNK HIGHWAY 14 AND TRUNK HIGHWAY 13 IN WASECA, AT TRUNK HIGHWAY 14 MILEPOINT 153.5, 0.1 MILE WEST OF AN ENTRANCE TO AN ASPHALT SUPPLY COMPANY, 84.8 FEET NORTHWEST OF A TELEPHONE POLE, 63.0 FEET SOUTH-SOUTHWEST OF TRUNK HIGHWAY 14, 40.0 FEET NORTH-NORTHEAST OF THE NORTH RAIL OF THE RAILROAD TRACKS, 0.8 FOOT NORTH OF A WITNESS POST.

Station Notes
THE SURVEY MARK IS ON RAILROAD PROPERTY AND HAS BEEN ABANDONED FOR MNDOT GEODETIC USE.

Leveling-Derived Orthometric Heights (Elevations)

Vertical Datum	Orthometric (Feet) Height	Accuracy	Orthometric (Meters) Height	Accuracy	Survey Order/(Class)	Project Info Year	Reference
NAVD88	1130.585	0.016	344.603	0.005	2/0	1995	00000135
NGVD29	1130.569	0.016	344.598	0.005	2/0	1992	UNCHECKD

Geoid Separations(ft): GEOID18 = -94.498 12B = -94.501 09 = -94.432 03 = -94.255

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Longitude	County (Feet) X	Y	County (Meters) X	Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Reference
NAD83(2011)	44 05 49.74976	93 35 17.63991	323563.085	196693.273	98622.2260	59952.230	315.802		2012	GPS2800
NAD83(2007)	44 05 49.74976	93 35 17.64069	323563.028	196693.274	98622.2080	59952.230	315.825		2007	GPS2300
NAD83(1996)	44 05 49.74935	93 35 17.64014	323563.068	196693.232	98622.2200	59952.217	315.876	C	2000	GPS1453

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33286.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33286.pdf

VIKINGS MNDT

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: VIKINGS MNDT **NGS Name:** VIKINGS

County: WASECA, MN (Sheet 1)

NGS ACRN: AI6558 Get Map
NGS Quad / Sta Num : 44093322/
USGS Quad: WASECA

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	3	107 N	23 W	440607.09	933437.95		C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1998	2014	DESTROYED	Horz=NO Vert=NO	NO		FLUSH	MARKER W/BAR MAGNET

Monument Type
CONCRETE MONUMENT (CAST-IN-PLACE)

Disk Type
HORIZONTAL CONTROL DISK

Mon. Agency
MNDT

Description: (1998) **Stamping:** VIKINGS 1998

3.75 MILES WEST-NORTHWEST OF WASECA, 3.7 MILES WEST ALONG TRUNK HIGHWAY 14 FROM THE JUNCTION OF TRUNK HIGHWAY 14 AND TRUNK HIGHWAY 13 IN WASECA TO TRUNK HIGHWAY 14 MILEPOINT 154.1, THEN 0.5 MILE NORTH ON COUNTY ROAD 52 (95TH STREET), 39.0 FEET EAST OF COUNTY ROAD 52 (95TH STREET), 38.0 FEET SOUTH OF COUNTY ROAD 53 (375TH AVENUE), 11.0 FEET NORTH OF AN ENTRANCE, 4.0 FEET SOUTH OF A POWER POLE, 2.9 FEET SOUTH OF A WITNESS POST.

Station Notes
THE DISK WAS TURNED IN TO THE OFFICE.

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -94.416 12B = -94.416 09 = -94.347 03 = -94.170

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Longitude	County (Feet) X	Y	County (Meters) X	Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Reference
NAD83(2011)	44 06 07.09195	93 34 37.94873	326473.712	198426.039	99509.3860	60480.378	319.908		2012	GPS2800
NAD83(2007)	44 06 07.09194	93 34 37.94951	326473.654	198426.039	99509.3690	60480.378	319.931		2007	GPS2300
NAD83(1996)	44 06 07.09153	93 34 37.94895	326473.695	198425.997	99509.3810	60480.365	319.982	C	2000	GPS1453

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_36696.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_36696.pdf

VIKINGS MNDT RESET

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: VIKINGS MNDT RESET
NGS Name: VIKINGS RESET

County: WASECA, MN (Sheet 1)

NGS ACRN: DP5057 Get Map
NGS Quad / Sta Num : 44093322/
USGS Quad: WASECA

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	3	107 N	23 W	440607.09	933437.95	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2014	2018	GOOD	Horz=YES Vert=YES	YES		RECESSED 1 IN.	BAR MAG IN DRILL HOLE

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 115 FT)

Disk Type
METAL ROD (WITH REMOVABLE ID DISK)

Mon. Agency
MNDT

Description: (2014)

Stamping: VIKINGS 1998 2014

3.75 MILES WEST-NORTHWEST OF WASECA, 3.7 MILES WEST ALONG COUNTY ROAD 14/OLD TRUNK HIGHWAY 14 FROM THE JUNCTION OF COUNTY ROAD 14/OLD TRUNK HIGHWAY 14 AND TRUNK HIGHWAY 13 IN WASECA, THEN 0.5 MILE NORTH ON COUNTY ROAD 52 (95TH STREET), 39.0 FEET EAST OF COUNTY ROAD 52 (95TH STREET), 38.0 FEET SOUTH OF COUNTY ROAD 53 (375TH AVENUE), 11.0 FEET NORTH OF AN ENTRANCE, 4.0 FEET SOUTH OF A POWER POLE, 2.9 FEET SOUTH OF A WITNESS POST.

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1143.751	0.016	348.616	0.005	2/1	2016	00000870

Geoid Separations(ft): GEOID18 = -94.416 12B = -94.416 09 = -94.347 03 = -94.170

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Geodetic Positions Longitude	County (Feet) X	County (Feet) Y	County (Meters) X	County (Meters) Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Project Info Reference
NAD83(2011)	44 06 07.09195	93 34 37.94859	326473.722	198426.039	99509.3890	60480.378	319.843		2014	GPS3043
NAD83(1996)	44 06 07.09168	93 34 37.94880	326473.706	198426.012	99509.3850	60480.369	319.914	C	2014	HNEW14

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/VIKINGS_RESET-DP5057-3N-02AUG2018.jpg	N	Aug 2, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/VIKINGS_RESET-DP5057-2-02AUG2018.jpg		Aug 2, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/VIKINGS_RESET-DP5057-1-02AUG2018.jpg		Aug 2, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_101499.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_101499.pdf

Geodetic Data Sheet (Brief)
GSID Station # 33287

VIVIAN MNDT

04/28/2026
Sheet Help

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: VIVIAN MNDT
NGS Name: VIVIAN

County: WASECA, MN (Sheet 1)

NGS ACRN: AC4907 Get Map
NGS Quad / Sta Num : 43093411/
USGS Quad: OTISCO

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	27	105 N	23 W	435237.57	933513.93	2	B

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1994	2020	GOOD	Horz=YES Vert=YES	YES		RECESSED 3 IN.	MARKER IS STEEL ROD

Monument Type
STEEL ROD (NO SLEEVE) (DEPTH 32 FT)

Disk Type
METAL ROD

Mon. Agency
MNDT

Description: (2005)

Stamping: VIVIAN 1995

5.0 MILES WEST OF NEW RICHLAND, 5.0 MILES WEST ALONG TRUNK HIGHWAY 30 FROM THE JUNCTION OF TRUNK HIGHWAYS 30 AND 13 IN NEW RICHLAND TO TRUNK HIGHWAY 30 MILEPOINT 163.45, THEN 1.0 MILE SOUTH ON COUNTY ROAD 59, 38.0 FEET EAST OF COUNTY ROAD 59, 91.0 FEET NORTH OF A POWER POLE, 26.0 FEET SOUTH OF A FIELD ENTRANCE, 4.9 FEET NORTH OF A WITNESS POST.

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1170.067	0.016	356.637	0.005	2/1	2015	00000851

Geoid Separations(ft): GEOID18 = -95.846 12B = -95.830 09 = -95.774 03 = -95.646

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Geodetic Positions Longitude	County (Feet) X	County (Feet) Y	County (Meters) X	County (Meters) Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Project Info Reference
NAD83(2011)	43 52 37.57056	93 35 13.93338	323181.318	116472.599	98505.8630	35500.919	327.431		2014	GPS3046
NAD83(2007)	43 52 37.57055	93 35 13.93412	323181.263	116472.598	98505.8460	35500.919	327.453		2007	GPS2300
NAD83(1996)	43 52 37.56991	93 35 13.93341	323181.315	116472.533	98505.8620	35500.899	327.498	B	2006	GPS2243

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/VIVIAN-AC4907-3E-08APR2024.jpg	E	Apr 8, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/VIVIAN-AC4907-2-08APR2024.jpg		Apr 8, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/VIVIAN-AC4907-1-08APR2024.jpg		Apr 8, 2024

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33287.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33287.pdf

VIVIAN SW

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: VIVIAN SW
NGS Name: VIVIAN SW

County: WASECA, MN (Sheet 1)

NGS ACRN: DH3123 Get Map
NGS Quad / Sta Num : 43093413/
USGS Quad: MATAWAN

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	33	105 N	24 W	435131.78	934338.35		C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2003	2021	GOOD	Horz=YES Vert=YES	YES		FLUSH	MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	SURVEY DISK	MN-161

Description: (2004) **Stamping:** 2003 VIVAIN-SW

5.0 MILES SOUTHWEST OF WALDORF, 2.5 MILES SOUTH ALONG TRUNK HIGHWAY 83 FROM THE JUNCTION OF TRUNK HIGHWAY 83 AND COUNTY ROAD 3 IN WALDORF, THEN 1.5 MILES WEST ON TRUNK HIGHWAY 30, THEN 2.0 MILES SOUTH ON 20TH STREET, 79.0 FEET EAST OF 20TH STREET, 27.0 FEET NORTH OF 208TH AVENUE, 23.0 FEET WEST OF A FIELD ENTRANCE, 8.0 FEET EAST OF A TELEPHONE PEDESTAL, 5.0 FEET EAST OF A WITNESS POST.

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -95.659 12B = -95.649 09 = -95.587 03 = -95.443

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Longitude	County (Feet) X	Y	County (Meters) X	Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Reference
NAD83(2011)	43 51 31.77882	93 43 38.35236	286168.630	110142.362	87224.3730	33571.459	302.552		2012	GPS2800
NAD83(2007)	43 51 31.77881	93 43 38.35311	286168.575	110142.362	87224.3560	33571.459	302.576		2007	GPS2300
NAD83(1996)	43 51 31.77817	93 43 38.35231	286168.633	110142.296	87224.3740	33571.439	302.621	C	2005	GPS2088

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/VIVIAN_SW-DH3123-3NE-19APR2021.jpg	NE	Apr 19, 2021
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/VIVIAN_SW-DH3123-2-19APR2021.jpg		Apr 19, 2021
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/VIVIAN_SW-DH3123-1-19APR2021.jpg		Apr 19, 2021

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_50650.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_50650.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: VOSS **NGS Name:** VOSS

County: WASECA, MN (Sheet 1)

NGS ACRN: DP5058 Get Map
NGS Quad / Sta Num : 44093323/
USGS Quad: JANESVILLE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	6	107 N	23 W	440629.80	933825.93	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2014	2018	GOOD	Horz=YES Vert=YES	YES		RECESSED 2 IN.	BAR MAG IN DRILL HOLE

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 24 FT)

Disk Type
METAL ROD (WITH REMOVABLE ID DISK)

Mon. Agency
MNDT

Description: (2014) **Stamping:** VOSS 2014

3.35 MILES EAST OF JANESVILLE, 3.35 MILES EAST ALONG TRUNK HIGHWAY 14 FROM THE JUNCTION OF TRUNK HIGHWAY 14 AND COUNTY ROAD 3 IN JANESVILLE, AT TRUNK HIGHWAY 14 MILEPOINT 151.15, 40.5 FEET SOUTH-SOUTHWEST OF AN EASTBOUND TRUNK HIGHWAY 14 FOG LINE, 1.5 FEET NORTH-NORTHEAST OF A WITNESS POST.

Station Pair: GIBSON - WASECA, MN

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1111.454	0.016	338.772	0.005	2/1	2016	00000870

Geoid Separations(ft): GEOID18 = -94.623 12B = -94.626 09 = -94.557 03 = -94.383

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Geodetic Positions Longitude	County (Feet) X	County (Feet) Y	County (Meters) X	County (Meters) Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Project Info Reference
NAD83(2011)	44 06 29.80399	93 38 25.93339	309857.561	200865.608	94444.7740	61223.960	309.932		2014	GPS3043
NAD83(1996)	44 06 29.80377	93 38 25.93380	309857.531	200865.586	94444.7640	61223.953	310.003	C	2014	HNEW14

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/VOSS-DP5058-3S-01AUG2018.jpg	S	Aug 1, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/VOSS-DP5058-2-01AUG2018.jpg		Aug 1, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/VOSS-DP5058-1-01AUG2018.jpg		Aug 1, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_101486.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_101486.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: W 22 **NGS Name:** W 22

County: WASECA, MN (Sheet 1)

NGS ACRN: PP1727 Get Map
NGS Quad / Sta Num : 44093322/
USGS Quad: WASECA

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	18	107 N	22 W	440442.30	933123.80	2	

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1933	2004	GOOD	Horz=NO Vert=NO	YES	RR	FLUSH	SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
BRIDGE ABUTMENT	BENCH MARK DISK	NGS

Description: (2010) **Stamping:** 1149.811 W 22 1933

0.8 MILE WEST ALONG TRUNK HIGHWAY 14 FROM THE JUNCTION OF TRUNK HIGHWAY 14 AND TRUNK HIGHWAY 13 IN WASECA, 71.2 FEET SOUTH-SOUTHWEST OF TRUNK HIGHWAY 14, 156.1 FEET EAST-SOUTHEAST OF TRUNK HIGHWAY 14 MILEPOST 157, 12.5 FEET WEST-NORTHWEST OF A ROAD TO A HODGSON ARBORETUM, 9.4 FEET NORTH-NORTHEAST OF THE NORTH RAIL OF THE RAILROAD TRACKS, IN THE TOP OF THE TOP COURSE OF STONE AT THE WEST END OF A RAILROAD BRIDGE.

Station Notes

THE SURVEY MARK IS ON RAILROAD PROPERTY AND HAS BEEN ABANDONED FOR MNDOT GEODETIC USE.

Leveling-Derived Orthometric Heights (Elevations)

Vertical Datum	Orthometric (Feet) Height	Accuracy	Orthometric (Meters) Height	Accuracy	Survey Order/(Class)	Project Info Year	Reference
NAVD88	1149.896	0.016	350.489	0.005	2/1	2011	00000689
NGVD29	1149.811	0.016	350.463	0.005	2/0	1992	UNCHECKD

Geoid Separations(ft): GEOID18 = -94.255 12B = -94.258 09 = -94.183 03 = -94.025

*** No Horizontal Positions in the Database ***

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/W_22-PP1727-3E-24JUN2004.jpg	E	Jun 24, 2004
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/W_22-PP1727-2-24JUN2004.jpg		Jun 24, 2004
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/W_22-PP1727-1-24JUN2004.jpg		Jun 24, 2004

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33288.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33288.pdf

WALDORF MNDT

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: WALDORF MNDT
NGS Name: WALDORF

County: WASECA, MN (Sheet 1)

NGS ACRN: OO0741 Get Map
NGS Quad / Sta Num : 43093414/
USGS Quad: WALDORF

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	22	105 N	24 W	435328.92	934201.03	2	2

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1978	2008	DESTROYED	Horz=NO Vert=NO	NO		FLUSH	STEEL ROD IMBED IN MON

Monument Type
CONCRETE MONUMENT (CAST-IN-PLACE)

Disk Type
HORIZONTAL CONTROL DISK

Mon. Agency
MNDT

Description: (1978)

Stamping: WALDORF 1978

3.0 MILES SOUTH OF WALDORF, 3.1 MILES SOUTH ALONG TRUNK HIGHWAY 83 FROM THE JUNCTION OF TRUNK HIGHWAY 83 AND COUNTY ROAD 4 IN WALDORF, THEN 0.1 MILE WEST ON TRUNK HIGHWAY 30, 17.0 FEET SOUTH OF TRUNK HIGHWAY 30, 80.0 FEET WEST OF A FIELD ENTRANCE, 54.12 FEET NORTHWEST OF WALDORF RM 1, 51.03 FEET NORTHEAST OF WALDORF RM 2, 40.7 FEET NORTH OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Elevations)

Vertical Datum	Orthometric (Feet) Height	Accuracy	Orthometric (Meters) Height	Accuracy	Survey Order/(Class)	Project Info Year	Reference
NAVD88	1108.354	0.016	337.827	0.005	2/1	1991	00000025
NGVD29	1108.246	0.016	337.794	0.005	2	1980	L24529

Geoid Separations(ft): GEOID18 = -95.646 12B = -95.636 09 = -95.567 03 = -95.443

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Longitude	County (Feet) X	Y	County (Meters) X	Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Reference
NAD83(1996)	43 53 28.92331	93 42 01.03252	293411.877	121935.491	89432.1190	37166.012	308.794	2	1999	17648
NAD83(1986)	43 53 28.91760	93 42 01.03251	293411.872	121934.912	89432.1180	37165.836		2	1986	17289
NAD27	43 53 29.02860	93 42 00.22133						2	1980	16297

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33289.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33289.pdf

WALDORF RM 1

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: WALDORF RM 1 **NGS Name:** WALDORF RM 1

County: WASECA, MN (Sheet 1)

NGS ACRN: OO0740 Get Map
NGS Quad / Sta Num : 43093414/
USGS Quad: WALDORF

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	22	105 N	24 W	435328.52	934200.54	2	

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1978	2008	DESTROYED	Horz=NO Vert=NO	NO		FLUSH	STEEL ROD IMBED IN MON

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	REFERENCE MARK DISK	MNDT

Description: (2010) **Stamping:** WALDORF NO 1 1978

3.01 MILES SOUTH OF WALDORF, 3.05 MILES SOUTH ALONG TRUNK HIGHWAY 83 FROM THE JUNCTION OF TRUNK HIGHWAY 83 AND COUNTY ROAD 4 IN WALDORF, THEN 0.1 MILE WEST ON TRUNK HIGHWAY 30, AT TRUNK HIGHWAY 30 MILEPOINT 157.85, 57.6 FEET SOUTH OF TRUNK HIGHWAY 30, 66.9 FEET EAST OF WALDORF RM 2, 34.9 FEET EAST OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Elevations)

Vertical Datum	Orthometric (Feet) Height	Accuracy	Orthometric (Meters) Height	Accuracy	Survey Order/(Class)	Project Info Year	Reference
NAVD88	1106.612	0.016	337.296	0.005	2/1	1991	00000025
NGVD29	1106.504	0.016	337.263	0.005	2	1980	L24529

Geoid Separations(ft): GEOID18 = -95.646 12B = -95.640 09 = -95.571 03 = -95.446

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33290.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33290.pdf

WALDORF RM 2

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: WALDORF RM 2 **NGS Name:** WALDORF RM 2

County: WASECA, MN (Sheet 1)

NGS ACRN: OO0742 Get Map
NGS Quad / Sta Num : 43093414/
USGS Quad: WALDORF

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	22	105 N	24 W	435328.52	934201.46	2	

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1979	2013	DESTROYED	Horz=NO Vert=NO	NO		FLUSH	STEEL ROD IMBED IN MON

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	REFERENCE MARK DISK	MNDT

Description: (2010) **Stamping:** WALDORF NO 2 1978

SOUTH OF WALDORF, 3.05 MILES SOUTH ALONG TRUNK HIGHWAY 83 FROM THE JUNCTION OF TRUNK HIGHWAY 83 AND COUNTY ROAD 4 IN WALDORF, THEN 0.1 MILE WEST ON TRUNK HIGHWAY 30, AT TRUNK HIGHWAY 30 MILEPOINT 157.85, 57.9 FEET SOUTH OF TRUNK HIGHWAY 30, 66.9 FEET WEST OF WALDORF RM 1, 32.1 FEET WEST OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Elevations)

Vertical Datum	Orthometric (Feet) Height	Accuracy	Orthometric (Meters) Height	Accuracy	Survey Order/(Class)	Project Info Year	Reference
NAVD88	1107.025	0.016	337.422	0.005	2/1	1991	00000025
NGVD29	1106.917	0.016	337.389	0.005	2	1980	L24529

Geoid Separations(ft): GEOID18 = -95.646 12B = -95.640 09 = -95.571 03 = -95.446

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33291.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33291.pdf

WALDORF WATER TANK

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: WALDORF WATER TANK
NGS Name: WALDORF WATER TANK

County: WASECA, MN (Sheet 1)

NGS ACRN: OO1226 Get Map
NGS Quad / Sta Num : 43093414/
USGS Quad: WALDORF

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	3	105 N	24 W	435556.77	934149.21		4

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1978	2018	GOOD	Horz=NO Vert=NO	YES			NO MAG MATERIAL

Monument Type	Disk Type	Mon. Agency
BLANK	ELEVATED TANK	MNDT

Description: (2016)

Stamping:

IN WALDORF, 0.25 MILE NORTH ALONG COUNTY ROAD 3 FROM THE JUNCTION OF TRUNK HIGHWAY 83 AND COUNTY ROAD 3 IN WALDORF, 200.0 FEET EAST OF COUNTY ROAD 3, 172.51 FEET EAST-SOUTHEAST OF THE CENTER OF THE JUNCTION OF COUNTY ROAD 3 AND RAILWAY STREET. THE POINT OBSERVED IS THE CENTER OF THE TOP OF A SILVER, CONE SHAPED STEEL WATER TANK SUPPORTED BY 4 LEGS WITH A CENTER STANDPIPE AND APPROXIMATELY 125.0 FEET HIGH.

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -95.476 12B = -95.472 09 = -95.397 03 = -95.289

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Longitude	County (Feet) X	Y	County (Meters) X	Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Reference
NAD83(1996)	43 55 56.77118	93 41 49.20734	294419.491	136898.442	89739.2400	41726.729		4	1999	17648
NAD83(1986)	43 55 56.76444	93 41 49.20623	294419.566	136897.759	89739.2630	41726.520		4	1986	17289
NAD27	43 55 56.87612	93 41 48.39845						4	1980	16297

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/WALDORF_WATER_TANK-OO1226-3N-20APR2016.jpg	N	Apr 20, 2016
Monument:			
Disk:			

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33292.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33292.pdf

WALDORF WATER TOWER FINIAL

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: WALDORF WATER TOWER FINIAL **NGS Name:** WALDORF WATER TOWER FINIAL

County: WASECA, MN (Sheet 1)

NGS ACRN: CJ4805 Get Map
NGS Quad / Sta Num : 44093322/
USGS Quad: WASECA

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	32	107 N	23 W	440120.00	933650.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
	2018	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
SEE DESCRIPTIVE TEXT	FINIAL	UNK

Description: (2010)

Stamping:

6.5 MILES SOUTHWEST OF WASECA, 3.4 MILES SOUTH ALONG COUNTY ROAD 4 FROM THE JUNCTION OF COUNTY ROAD 4 AND EAST ELM STREET, THEN 1.5 MILES WEST ON COUNTY ROAD 75 (325TH AVENUE), THEN 0.5 MILE SOUTH ON 110TH STREET, THEN WEST ON 320TH AVENUE, THEN 3.3 MILES ON 320TH AVENUE.

Station Notes

THE TOWER HAS BEEN REMOVED.

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -95.029 12B = -95.033 09 = -94.954 03 = -94.823

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_67378.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_67378.pdf

WASECA CATH CH STEEPLE

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: WASECA CATH CH STEEPLE **NGS Name:** WASECA CATH CH STEEPLE

County: WASECA, MN (Sheet 1)

NGS ACRN: PP2886 Get Map
NGS Quad / Sta Num : 44093322/1005
USGS Quad: WASECA

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	18	107 N	22 W	440440.19	933043.85		4

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1927	2018	GOOD	Horz=NO Vert=NO	YES			NO MAG MATERIAL

Monument Type
SEE DESCRIPTIVE TEXT

Disk Type
CHURCH SPIRE

Mon. Agency
NGS

Description: (1927)

Stamping:

IN WASECA, 0.2 MILE WEST ALONG COUNTY ROAD 14 FROM THE JUNCTION OF COUNTY ROAD 14 AND TRUNK HIGHWAY 14 IN WASECA, 75.0 FEET NORTH OF COUNTY ROAD 14, 75.0 FEET WEST OF 4TH STREET NORTH.

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -94.183 12B = -94.189 09 = -94.111 03 = -93.957

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Longitude	County (Feet) X	Y	County (Meters) X	Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Reference
NAD83(1996)	44 04 40.18553	93 30 43.85234	343492.586	189495.315	104696.750	57758.288		4	1999	17648
NAD83(1986)	44 04 40.17435	93 30 43.85053	343492.710	189494.182	104696.787	57757.942		4	1986	17289
NAD27	44 04 40.32000	93 30 43.06000						4	1933	01146

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/WASECA_CATH_CH_STEEPLE-PP2886-3W-30JUL2018.jpg	W	Jul 30, 2018
Monument:			
Disk:			

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33293.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33293.pdf

WASECA CEN SMOKESTACK OF THREE

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: WASECA CEN SMOKESTACK OF THREE **NGS Name:** WASECA CEN SMOKESTACK OF THREE

County: WASECA, MN (Sheet 1)

NGS ACRN: PP2887 Get Map
NGS Quad / Sta Num : 44093322/1006
USGS Quad: WASECA

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	18	107 N	22 W	440437.94	933114.94		4

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1927	2018	DESTROYED	Horz=NO Vert=NO	YES			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
SEE DESCRIPTIVE TEXT	STACK	NGS

Description: (1927) **Stamping:**

IN WASECA, 0.1 MILE SOUTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 14, THEN 0.7 MILE WEST ON 5TH AVENUE, 673.01 FEET NORTHWEST OF THE CENTER OF THE INTERSECTION OF 5TH AVENUE AND 8TH STREET, 186.20 FEET NORTH OF 5TH AVENUE.

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -94.245 12B = -94.252 09 = -94.176 03 = -94.019

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Longitude	County (Feet) X	Y	County (Meters) X	Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Reference
NAD83(1996)	44 04 37.94081	93 31 14.94258	341221.283	189284.512	104004.455	57694.035		4	1999	17648
NAD83(1986)	44 04 37.92707	93 31 14.94239	341221.287	189283.120	104004.456	57693.610		4	1986	17289
NAD27	44 04 38.07000	93 31 14.13000						4	1933	01146

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33294.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33294.pdf

WASECA COURTHOUSE

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: WASECA COURTHOUSE
NGS Name: WASECA COURTHOUSE

County: WASECA, MN (Sheet 1)

NGS ACRN: PP2888 Get Map
NGS Quad / Sta Num : 44093322/1007
USGS Quad: WASECA

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	18	107 N	22 W	440447.10	933027.67		4

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1927	2018	GOOD	Horz=NO Vert=NO	YES			NO MAG MATERIAL

Monument Type	Disk Type	Mon. Agency
SEE DESCRIPTIVE TEXT	FINIAL	NGS

Description: (1927) **Stamping:**

IN WASECA, 0.1 MILE NORTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND COUNTY ROAD 14, 139.11 FEET NORTHWEST OF THE INTERSECTION TRUNK HIGHWAY 13 AND 3RD AVENUE, 92.92 FEET WEST OF TRUNK HIGHWAY 13.

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -94.137 12B = -94.144 09 = -94.065 03 = -93.911

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Longitude	County (Feet) X	Y	County (Meters) X	Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Reference
NAD83(1996)	44 04 47.09642	93 30 27.67268	344678.743	190186.652	105058.291	57969.008		4	1999	17648
NAD83(1986)	44 04 47.08326	93 30 27.67186	344678.793	190185.319	105058.306	57968.601		4	1986	17289
NAD27	44 04 47.22600	93 30 26.87000						4	1933	01146

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/WASECA_COURTHOUSE-PP2888-3W-30JUL2018.jpg	W	Jul 30, 2018
Monument:			
Disk:			

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33295.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33295.pdf

WASECA FAIRGROUNDS

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: WASECA FAIRGROUNDS **NGS Name:** WASECA FAIRGROUNDS

County: WASECA, MN (Sheet 1)

NGS ACRN: DH3124 Get Map
NGS Quad / Sta Num : 44093322/
USGS Quad: WASECA

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	8	107 N	22 W	440508.04	933004.58	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2003	2018	GOOD	Horz=YES Vert=YES	YES		FLUSH	STEEL ROD IMBED IN MON

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	SURVEY DISK	MN-161

Description: (2004) **Stamping:** WASECA FAIRGROUNDS 2003

IN WASECA, 2.1 MILES NORTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 14 IN WASECA, THEN 0.1 MILE EAST ON 7TH AVENUE, THEN 0.1 MILE ON 3RD STREET NORTHEAST, THEN 0.15 MILE EAST ON COUNTY ROAD 13 (8TH AVENUE), 24.0 FEET NORTH OF COUNTY ROAD 13 (8TH AVENUE) NORTHEAST, 10.0 FEET NORTH OF A WATER HYDRANT, 1.0 FOOT SOUTH OF A WITNESS POST.

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1135.464	0.016	346.090	0.005	2/1	2020	00000949

Geoid Separations(ft): GEOID18 = -94.048 12B = -94.055 09 = -93.973 03 = -93.819

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Geodetic Positions Longitude	County (Feet) X	County (Feet) Y	County (Meters) X	County (Meters) Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Project Info Reference
NAD83(2011)	44 05 08.03774	93 30 04.58276	346379.324	192295.272	105576.629	58611.716	317.430		2012	GPS2800
NAD83(2007)	44 05 08.03772	93 30 04.58353	346379.268	192295.271	105576.612	58611.716	317.453		2007	GPS2300
NAD83(1996)	44 05 08.03738	93 30 04.58292	346379.312	192295.236	105576.626	58611.705	317.498	C	2005	GPS2088

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/WASECA_FAIRGROUNDS-DH3124-3N-02AUG2018.jpg	N	Aug 2, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/WASECA_FAIRGROUNDS-DH3124-2-02AUG2018.jpg		Aug 2, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/WASECA_FAIRGROUNDS-DH3124-1-02AUG2018.jpg		Aug 2, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_50660.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_50660.pdf

WASECA HWY DEPT

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: WASECA HWY DEPT **NGS Name:** WASECA HWY DEPT

County: WASECA, MN (Sheet 1)

NGS ACRN: DH3125 Get Map
NGS Quad / Sta Num : 44093322/
USGS Quad: WASECA

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	20	107 N	22 W	440350.08	933006.05	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2003	2022	DESTROYED	Horz=NO Vert=NO	YES		FLUSH	STEEL ROD IMBED IN MON

Monument Type
CONCRETE MONUMENT (CAST-IN-PLACE)

Disk Type
SURVEY DISK

Mon. Agency
MN-161

Description: (2004)

Stamping: WASECA HWY DEPT 2003

IN WASECA, 1.0 MILE SOUTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND COUNTY ROAD 14 (ELM AVENUE) IN WASECA, THEN 0.1 MILE SOUTH ON 5TH STREET, 98.5 FEET EAST OF 5TH STREET SOUTHEAST, 20.0 FEET SOUTH OF THE WASECA HIGHWAY DEPARTMENT BACK OF CURB, 16.5 FEET SOUTH-SOUTHWEST OF A LIGHT POLE, IN THE NORTH END OF THE WEST BERM, 1.0 FOOT NORTH OF A WITNESS POST.

Station Notes

THE WASECA COUNTY HIGHWAY DEPARTMENT WAS DOING SOME CONSTRUCTION ON THEIR PROPERTY AND THE GEODETIC POINT ON THEIR PROPERTY WAS TAKEN OUT.

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1148.341	0.016	350.015	0.005	2/1	2020	00000949

Geoid Separations(ft): GEOID18 = -94.216 12B = -94.222 09 = -94.144 03 = -93.993

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Geodetic Positions Longitude	County (Feet) X	County (Feet) Y	County (Meters) X	County (Meters) Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Project Info Reference
NAD83(2011)	44 03 50.08478	93 30 06.04902	346216.299	184402.094	105526.939	56205.871	321.302		2020	GPS3368
NAD83(2007)	44 03 50.08479	93 30 06.04978	346216.244	184402.095	105526.922	56205.871	321.326		2007	GPS2300
NAD83(1996)	44 03 50.08465	93 30 06.04905	346216.297	184402.081	105526.939	56205.867	321.369	C	2020	HTH13

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/WASECA_HWY_DEPT-DH3125-3S-22NOV2022.jpg	S	Nov 22, 2022
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/WASECA_HWY_DEPT-DH3125-2-22NOV2022.jpg		Nov 22, 2022
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/WASECA_HWY_DEPT-DH3125-1-22NOV2022.jpg		Nov 22, 2022

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_50661.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_50661.pdf

WASECA MNDT

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: WASECA MNDT
NGS Name: WASECA
County: WASECA, MN (Sheet 1)

NGS ACRN: PP2892 Get Map
NGS Quad / Sta Num : 44093322/1011
USGS Quad: WASECA

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	18	107 N	22 W	440400.33	933135.93	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1970	2023	DESTROYED	Horz=NO Vert=NO	YES		FLUSH	BAR MAG IN DRILL HOLE

Monument Type
CONCRETE MONUMENT (CAST-IN-PLACE)

Disk Type
TRAVERSE STATION DISK

Mon. Agency
MNDT

Description: (2010)

Stamping: WASECA 1970

1.25 MILES SOUTHWEST OF WASECA, 1.0 MILE WEST ALONG COUNTY ROAD 14 (ELM AVENUE) FROM THE JUNCTION OF COUNTY ROAD 14 (ELM AVENUE) AND TRUNK HIGHWAY 13 IN WASECA, THEN SOUTH 0.9 MILE ON COUNTY ROAD 41 (120TH STREET), 47.0 FEET EAST OF COUNTY ROAD 41 (120TH STREET), 215.15 FEET SOUTHEAST OF WASECA MNDT RM 2, 98.96 FEET EAST-NORTHEAST OF WASECA MNDT RM 1.

Station Notes

95WEST AERIAL MAPPING FOUND THAT ROAD WENT THROUGH SOME REGRADING AND REPAVING IN THE LAST COUPLE YEARS, AND IT APPEARS THE MARK IS NO LONGER IN PLACE. REPORTED 9/25/2023.

Leveling-Derived Orthometric Heights (Elevations)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1151.408	0.016	350.950	0.005	2/1	2016	00000870
NGVD29	1151.343	0.016	350.930	0.005	2/1	2001	VJANE

Geoid Separations(ft): GEOID18 = -94.360 12B = -94.367 09 = -94.291 03 = -94.134

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Geodetic Positions Longitude	County (Feet) X	County (Feet) Y	County (Meters) X	County (Meters) Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Project Info Reference
NAD83(2011)	44 04 00.33258	93 31 35.93406	339660.687	185487.391	103528.785	56536.670	322.195		2014	GPS3043
NAD83(2007)	44 04 00.33258	93 31 35.93483	339660.631	185487.391	103528.767	56536.670	322.219		2007	GPS2300
NAD83(1996)	44 04 00.33211	93 31 35.93415	339660.680	185487.343	103528.782	56536.655	322.266	C	2014	HNEW14
NAD83(1986)	44 04 00.31888	93 31 35.93463	339660.635	185486.003	103528.769	56536.247		2	1986	17289
NAD27	44 04 00.45048	93 31 35.13986						2	1991	17504

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/WASECA-PP2892-3E-02AUG2018.jpg	E	Aug 2, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/WASECA-PP2892-2-02AUG2018.jpg		Aug 2, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/WASECA-PP2892-1-02AUG2018.jpg		Aug 2, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33296.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33296.pdf

WASECA MNDT AZ MK

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: WASECA MNDT AZ MK **NGS Name:** WASECA AZ MK

County: WASECA, MN (Sheet 1)

NGS ACRN: PP2893 Get Map
NGS Quad / Sta Num : 44093322/
USGS Quad: WASECA

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	13	107 N	23 W	440443.91	933136.79	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1970	2014	DESTROYED	Horz=NO Vert=NO	NO		FLUSH	SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
UNKNOWN	AZIMUTH MARK DISK	MNDT

Description: (2010) **Stamping:** WASECA 1970

1.0 MILE WEST ALONG TRUNK HIGHWAY 14 FROM THE JUNCTION OF TRUNK HIGHWAY 14 AND TRUNK HIGHWAY 13 IN WASECA, NEAR THE JUNCTION OF TRUNK HIGHWAY 14 AND COUNTY ROAD 57, 52.5 FEET SOUTH OF THE SOUTH RAIL OF A RAILROAD, 18.8 FEET WEST OF COUNTY ROAD 57, 4.8 FEET NORTHEAST OF A POWER POLE, 3.0 FEET EAST OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Elevations)

Vertical Datum	Orthometric (Feet) Height	Accuracy	Orthometric (Meters) Height	Accuracy	Survey Order/(Class)	Project Info Year	Reference
NAVD88	1156.789	0.016	352.590	0.005	2/1	1995	00000135
NGVD29	1156.700	0.016	352.563	0.005	2/1	1988	VWASE

Geoid Separations(ft): GEOID18 = -94.275 12B = -94.281 09 = -94.206 03 = -94.045

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Longitude	County (Feet) X	Y	County (Meters) X	Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Reference
NAD83(1996)	44 04 43.91280	93 31 36.79331	339630.605	189901.011	103519.615	57881.944	323.979	3	1999	17648
NAD83(1986)	44 04 43.90019	93 31 36.79397	339630.547	189899.735	103519.598	57881.555		3	1986	17289
NAD27	44 04 44.03213	93 31 36.00340						3	1977	16059

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33297.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33297.pdf

WASECA MNDT RM 1

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: WASECA MNDT RM 1 **NGS Name:** WASECA RM 1

County: WASECA, MN (Sheet 1)

NGS ACRN: PP3538 Get Map
NGS Quad / Sta Num : 44093322/
USGS Quad: WASECA

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	13	107 N	23 W	440400.03	933137.22	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1970	2018	GOOD	Horz=NO Vert=YES	YES		FLUSH	BAR MAG IN DRILL HOLE

Monument Type
CONCRETE MONUMENT (CAST-IN-PLACE)

Disk Type
REFERENCE MARK DISK

Mon. Agency
MNDT

Description: (2010) **Stamping:** WASECA NO 1 1970

1.25 MILES SOUTHWEST OF WASECA, 1.0 MILE WEST ALONG COUNTY ROAD 14 (ELM AVENUE), FROM THE JUNCTION OF COUNTY ROAD 14 (ELM AVENUE) AND TRUNK HIGHWAY 13 IN WASECA, THEN 0.9 MILE SOUTH ON COUNTY ROAD 41 (120TH STREET), 47.5 FEET WEST OF COUNTY ROAD 41 (120TH STREET), 223.3 FEET SOUTH OF WASECA MNDT RM 2, 98.96 FEET WEST-SOUTHWEST OF STATION WASECA MNDT, 2.5 FEET SOUTH OF A POWER POLE. NO WITNESS POST, THE STATION IS IN A MOWED AREA.

Station Notes

DUE TO THE PROXIMITY TO A POWER POLE, THIS SURVEY MARK HAS BEEN ABANDONED FOR MNDOT GEODETIC HORIZONTAL SURVEYS.

Leveling-Derived Orthometric Heights (Elevations)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1148.272	0.016	349.994	0.005	2/1	2016	00000870
NGVD29	1148.223	0.016	349.979	0.005	2/1	2001	VJANE

Geoid Separations(ft): GEOID18 = -94.363 12B = -94.370 09 = -94.294 03 = -94.137

*** No Horizontal Positions in the Database ***

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/WASECA_RM_1-PP3538-3W-02AUG2018.jpg	W	Aug 2, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/WASECA_RM_1-PP3538-2-02AUG2018.jpg		Aug 2, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/WASECA_RM_1-PP3538-1-02AUG2018.jpg		Aug 2, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33298.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33298.pdf

WASECA MNDT RM 2

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: WASECA MNDT RM 2 **NGS Name:** WASECA RM 2

County: WASECA, MN (Sheet 1)

NGS ACRN: PP3537 Get Map
NGS Quad / Sta Num : 44093322/
USGS Quad: WASECA

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	13	107 N	23 W	440402.24	933137.23	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1970	2018	GOOD	Horz=YES Vert=YES	YES		PROJECTS 3 IN.	BAR MAG IN DRILL HOLE

Monument Type
CONCRETE MONUMENT (CAST-IN-PLACE)

Disk Type
REFERENCE MARK DISK

Mon. Agency
MNDT

Description: (2010) **Stamping:** WASECA NO 2 1970

1.25 MILES SOUTHWEST OF WASECA, 1.0 MILE WEST ALONG COUNTY ROAD 14 (ELM AVENUE) FROM THE JUNCTION OF COUNTY ROAD 14 (ELM AVENUE) AND TRUNK HIGHWAY 13 IN WASECA, THEN 0.9 MILE SOUTH ON COUNTY ROAD 41 (120TH STREET), 47.5 FEET WEST OF COUNTY ROAD 41 (120TH STREET), 223.3 FEET NORTH OF WASECA MNDT RM 1, 215.15 FEET NORTHWEST OF STATION WASECA MNDT, 13.0 FEET SOUTH OF A POWER POLE. NO WITNESS POST, STATION WASECA MNDT RM 2 IS IN A MOWED AREA.

Leveling-Derived Orthometric Heights (Elevations)

Vertical Datum	Orthometric (Feet) Height	Accuracy	Orthometric (Meters) Height	Accuracy	Survey Order/(Class)	Project Info Year	Reference
NAVD88	1150.736	0.016	350.745	0.005	2/1	2016	00000870
NGVD29	1150.644	0.016	350.717	0.005	2/1	2001	VJANE

Geoid Separations(ft): GEOID18 = -94.357 12B = -94.363 09 = -94.291 03 = -94.134

*** No Horizontal Positions in the Database ***

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/WASECA_RM_2-PP3537-3W-02AUG2018.jpg	W	Aug 2, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/WASECA_RM_2-PP3537-2-02AUG2018.jpg		Aug 2, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/WASECA_RM_2-PP3537-1-02AUG2018.jpg		Aug 2, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33299.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33299.pdf

WASECA MUN RNWY 15

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: WASECA MUN RNWY 15 **NGS Name:** WASECA MUN RNWY 15

County: WASECA, MN (Sheet 1)

NGS ACRN: PP3225 Get Map
NGS Quad / Sta Num : 44093322/
USGS Quad: WASECA

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	14	107 N	23 W	440439.60	933320.80		3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
	2018	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
SEE DESCRIPTIVE TEXT	UNMONUMENTED	NGS

Description:

2.1 MILES NORTHWEST ALONG TRUNK HIGHWAY 14 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 14 IN WASECA, THEN 0.34 MILE SOUTH ON COUNTY ROAD 27, THEN 0.44 MILE WEST ON COUNTY ROAD 2, 0.18 MILE SOUTH ON COUNTY ROAD 2. LOCATED IN THE WASECA MUNICIPAL AIRPORT, AT THE NORTHWEST END OF THE RUNWAY.

Stamping:

Station Notes

THE SURVEY MARK IS ON AIRPORT PROPERTY AND HAS BEEN ABANDONED FOR MNDOT GEODETIC USE.

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -94.458 12B = -94.462 09 = -94.393 03 = -94.226

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Longitude	County (Feet) X	Y	County (Meters) X	Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Reference
NAD83(1996)	44 04 39.59920	93 33 20.75343	332038.114	189521.680	101205.420	57766.324	314.586	3	1999	17648
NAD27	44 04 39.00000	93 33 19.00000							1991	17504

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_64434.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_64434.pdf

WASECA MUN RNWY 33

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: WASECA MUN RNWY 33 **NGS Name:** WASECA MUN RNWY 33

County: WASECA, MN (Sheet 1)

NGS ACRN: PP3226 Get Map
NGS Quad / Sta Num : 44093322/
USGS Quad: WASECA

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	14	107 N	23 W	440409.40	933300.40		3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
	2018	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
SEE DESCRIPTIVE TEXT	UNMONUMENTED	NGS

Description:

2.1 MILES NORTHWEST ALONG TRUNK HIGHWAY 14 FROM THE JUNCTION OF TRUNK HIGHWAY 14 AND TRUNK HIGHWAY 13 IN WASECA, THEN 0.35 MILE SOUTH ON COUNTY ROAD 27, THEN 0.8 MILE CONTINUED SOUTH ON COUNTY ROAD 27, 0.29 MILE SOUTHWEST OF THE WEST TURN INTO THE MUNICIPAL AIRPORT. LOCATED IN THE WASECA MUNICIPAL AIRPORT, AT THE SOUTHEAST END OF THE RUNWAY.

Stamping:

Station Notes

THE SURVEY MARK IS ON AIRPORT PROPERTY AND HAS BEEN ABANDONED FOR MNDOT GEODETIC USE.

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -94.485 12B = -94.488 09 = -94.419 03 = -94.255

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Longitude	County (Feet) X	Y	County (Meters) X	Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Reference
NAD83(1996)	44 04 09.40105	93 33 00.44085	333497.474	186452.226	101650.233	56830.752	312.397	3	1999	17648
NAD27	44 04 09.00000	93 32 59.00000							1991	17504

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_64435.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_64435.pdf

WASECA ROUND SMOKESTACK

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: WASECA ROUND SMOKESTACK **NGS Name:** WASECA ROUND SMOKESTACK

County: WASECA, MN (Sheet 1)

NGS ACRN: PP2891 Get Map
NGS Quad / Sta Num : 44093322/1008
USGS Quad: WASECA

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	18	107 N	22 W	440435.73	933024.24		4

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1927	2014	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
SEE DESCRIPTIVE TEXT	STACK	NGS

Description: (1927) **Stamping:**

IN WASECA, 295.0 FEET SOUTH ALONG TRUNK HIGHWAY 13 (STATE STREET) FROM THE JUNCTION OF TRUNK HIGHWAY 13 (STATE STREET) AND TRUNK HIGHWAY 14, THEN 210.0 FEET EAST ON 2ND AVENUE, 201.72 FEET SOUTHWEST OF THE CENTER OF THE JUNCTION OF 2ND AVENUE AND 2ND STREET, 64.83 FEET SOUTH OF THE CENTERLINE OF 2ND AVENUE.

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -94.153 12B = -94.160 09 = -94.081 03 = -93.927

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Longitude	County (Feet) X	Y	County (Meters) X	Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Reference
NAD83(1996)	44 04 35.73086	93 30 24.23631	344921.360	189033.918	105132.241	57617.653		4	1999	17648
NAD83(1986)	44 04 35.71742	93 30 24.22778	344921.973	189032.552	105132.428	57617.237		4	1986	17289
NAD27	44 04 35.86000	93 30 23.44000						4	1933	01146

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33300.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33300.pdf

WASECA STEEL WATER TANK

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: WASECA STEEL WATER TANK
NGS Name: WASECA STEEL WATER TANK

County: WASECA, MN (Sheet 1)

NGS ACRN: PP2889 Get Map
NGS Quad / Sta Num : 44093322/1009
USGS Quad: WASECA

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	18	107 N	22 W	440429.17	933029.12		4

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1927	2018	DESTROYED	Horz=NO Vert=NO	YES			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
SEE DESCRIPTIVE TEXT	TANK	NGS

Description: (1927)

Stamping:

IN WASECA, 0.2 MILE SOUTH ALONG TRUNK HIGHWAY 13 (STATE STREET) FROM THE JUNCTION OF TRUNK HIGHWAY 13 (STATE STREET) AND TRUNK HIGHWAY 14, 145.29 FEET SOUTHWEST OF THE CENTER OF THE JUNCTION OF TRUNK HIGHWAY 13 (STATE STREET) AND 5TH AVENUE, 105.8 FEET SOUTHEAST OF STATION Y 22 RESET, 77.15 FEET WEST OF THE CENTERLINE OF TRUNK HIGHWAY 13 (STATE STREET).

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -94.176 12B = -94.183 09 = -94.104 03 = -93.953

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Longitude	County (Feet) X	Y	County (Meters) X	Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Reference
NAD83(1996)	44 04 29.16930	93 30 29.11965	344560.096	188372.013	105022.127	57415.904		4	1999	17648
NAD83(1986)	44 04 29.15774	93 30 29.11913	344560.125	188370.842	105022.136	57415.547		4	1986	17289
NAD27	44 04 29.30000	93 30 28.31900						4	1933	01146

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33301.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33301.pdf

WASECA TALL SMOKESTACK

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: WASECA TALL SMOKESTACK **NGS Name:** WASECA TALL SMOKESTACK

County: WASECA, MN (Sheet 1)

NGS ACRN: PP2890 Get Map
NGS Quad / Sta Num : 44093322/1010
USGS Quad: WASECA

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	18	107 N	22 W	440447.10	933036.16		4

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1927	2018	DESTROYED	Horz=NO Vert=NO	YES			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
SEE DESCRIPTIVE TEXT	STACK	NGS

Description: (1927) **Stamping:**

IN WASECA, 0.1 MILE NORTH ALONG TRUNK HIGHWAY 13 (STATE STREET) FROM THE JUNCTION OF TRUNK HIGHWAY 13 (STATE STREET) AND TRUNK HIGHWAY 14, THEN 0.1 MILE WEST ON 3RD AVENUE, 323.20 FEET NORTHWEST OF THE CENTER OF THE JUNCTION OF 3RD AVENUE AND 2ND STREET, 66.71 FEET NORTH OF THE END OF 3RD AVENUE.

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -94.153 12B = -94.160 09 = -94.081 03 = -93.927

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Longitude	County (Feet) X	Y	County (Meters) X	Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Reference
NAD83(1996)	44 04 47.09987	93 30 36.16292	344058.964	190191.452	104869.382	57970.471		4	1999	17648
NAD83(1986)	44 04 47.08668	93 30 36.16215	344059.010	190190.116	104869.396	57970.063		4	1986	17289
NAD27	44 04 47.23000	93 30 35.35900						4	1933	01146

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33302.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33302.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: WASPORT **NGS Name:** WASPORT

County: WASECA, MN (Sheet 1)

NGS ACRN: PP3227 Get Map
NGS Quad / Sta Num : 44093322/
USGS Quad: WASECA

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	14	107 N	23 W	440409.09	933301.30	2	B

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1989	2018	GOOD	Horz=NO Vert=NO	YES		RECESSED 2 IN.	BAR MAG IN DRILL HOLE

Monument Type
STEEL ROD (IN SLEEVE) (DEPTH 36 FT)

Disk Type
METAL ROD

Mon. Agency
MNDT

Description: (2008) **Stamping:** WASPORT 1989

1.0 MILE WEST OF WASECA, 2.05 MILES WEST ALONG COUNTY ROAD 14 (ELM AVENUE) FROM THE JUNCTION OF COUNTY ROAD 14 (ELM AVENUE) AND TRUNK HIGHWAY 13 IN WASECA, THEN 0.9 MILE SOUTH ON COUNTY ROAD 27, THEN 0.10 MILE WEST ON AIRPORT ROAD, THEN 0.20 MILE SOUTH ON THE TAXI WAY TO STATION WASPORT IN THE SOUTHWEST CORNER OF THE RUNWAY, 302.9 FEET SOUTH OF VASI LIGHT SOUTH END, 182.5 FEET SOUTH OF THE END LIGHT ON THE WEST SIDE OF RUNWAY 33, 33.2 FEET WEST-SOUTHWEST OF THE WEST EDGE OF A BITUMINOUS RUNWAY, 23.9 FEET WEST OF THE WEST LIGHT AT THE END OF RUNWAY 33.

Station Notes
THE SURVEY MARK IS ON AIRPORT PROPERTY AND HAS BEEN ABANDONED FOR MNDOT GEODETIC USE.

Leveling-Derived Orthometric Heights (Elevations)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1117.567	0.016	340.635	0.005	2/1	2016	00000870
NGVD29	1117.465	0.016	340.604	0.005	2/1	2001	VJANE

Geoid Separations(ft): GEOID18 = -94.485 12B = -94.491 09 = -94.419 03 = -94.255

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Geodetic Positions Longitude	County (Feet) X	County (Feet) Y	County (Meters) X	County (Meters) Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Project Info Reference
NAD83(2011)	44 04 09.08731	93 33 01.30000	333434.502	186420.937	101631.039	56821.215	311.828		2012	GPS2800
NAD83(2007)	44 04 09.08728	93 33 01.30079	333434.444	186420.934	101631.022	56821.214	311.855		2007	GPS2300
NAD83(1996)	44 04 09.08686	93 33 01.30011	333434.494	186420.891	101631.037	56821.201	311.898	B	2006	GPS2243
NAD83(1986)	44 04 09.07609	93 33 01.29868	333434.589	186419.800	101631.066	56820.869		2	1991	GPS194
NAD27	44 04 09.20601	93 33 00.50134						2	1991	17504

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/WASPORT-PP3227-3S-02AUG2018.jpg	S	Aug 2, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/WASPORT-PP3227-2-02AUG2018.jpg		Aug 2, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/WASPORT-PP3227-1-02AUG2018.jpg		Aug 2, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33303.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33303.pdf

Geodetic Data Sheet (Brief)
GSID Station # 33304

WASPORT AZ MK

04/28/2026
Sheet Help

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: WASPORT AZ MK
NGS Name: WASPORT AZ MK

County: WASECA, MN (Sheet 1)

NGS ACRN: PP3228 Get Map
NGS Quad / Sta Num : 44093322/
USGS Quad: WASECA

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	14	107 N	23 W	440439.29	933321.58	2	B

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1989	2018	GOOD	Horz=NO Vert=NO	YES		RECESSED 4 IN.	BAR MAG IN DRILL HOLE

Monument Type
STEEL ROD (IN SLEEVE) (DEPTH 40 FT)

Disk Type
METAL ROD

Mon. Agency
MNDT

Description: (1989)

Stamping: WASPORT AZ MK 1989

1.0 MILE WEST OF WASECA, 2.05 MILES WEST ALONG COUNTY ROAD 14 (ELM AVENUE) FROM THE JUNCTION OF COUNTY ROAD 14 (ELM AVENUE) AND TRUNK HIGHWAY 13 IN WASECA, THEN 0.9 MILE SOUTH ON COUNTY ROAD 27, THEN 0.10 MILE WEST ON AIRPORT ROAD, THEN 0.45 MILE NORTHWEST ON THE TAXI WAY TO STATION WASPORT AZ MK IN THE NORTHWEST CORNER OF THE RUNWAY, 179.3 FEET NORTHWEST OF THE END LIGHT ON THE WEST SIDE OF RUNWAY 15, 30.6 FEET WEST-SOUTHWEST OF THE WEST EDGE OF A BITUMINOUS RUNWAY, 23.2 FEET SOUTHWEST OF THE END LIGHT AT THE NORTH END OF RUNWAY 15.

Station Notes

THE SURVEY MARK IS ON AIRPORT PROPERTY AND HAS BEEN ABANDONED FOR MNDOT GEODETIC USE.

Leveling-Derived Orthometric Heights (Elevations)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1124.909	0.016	342.873	0.005	2/1	2016	00000870
NGVD29	1124.807	0.016	342.842	0.005	2/1	2001	VJANE

Geoid Separations(ft): GEOID18 = -94.458 12B = -94.465 09 = -94.393 03 = -94.226

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Geodetic Positions Longitude	County (Feet) X	County (Feet) Y	County (Meters) X	County (Meters) Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Project Info Reference
NAD83(2011)	44 04 39.29069	93 33 21.57640	331977.794	189490.904	101187.034	57756.943	314.086		2012	GPS2800
NAD83(2007)	44 04 39.29074	93 33 21.57730	331977.728	189490.910	101187.014	57756.945	314.106		2007	GPS2300
NAD83(1996)	44 04 39.29023	93 33 21.57651	331977.786	189490.858	101187.031	57756.929	314.156	B	2006	GPS2243
NAD83(1986)	44 04 39.27897	93 33 21.57559	331977.844	189489.717	101187.049	57756.581		2	1991	GPS194
NAD27	44 04 39.40852	93 33 20.77719						2	1991	17504

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/WASPORT_AZ_MK-PP3228-3N-02AUG2018.jpg	N	Aug 2, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/WASPORT_AZ_MK-PP3228-2-02AUG2018.jpg		Aug 2, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/WASPORT_AZ_MK-PP3228-1-02AUG2018.jpg		Aug 2, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33304.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33304.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: WEBER **NGS Name:** WEBER

County: WASECA, MN (Sheet 1)

NGS ACRN: DP6230 Get Map
NGS Quad / Sta Num : 43093414/
USGS Quad: WALDORF

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	22	105 N	24 W	435328.77	934129.46	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2013	2020	GOOD	Horz=YES Vert=YES	YES		RECESSED 4 IN.	BAR MAG IN DRILL HOLE

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 29 FT)

Disk Type
METAL ROD (WITH REMOVABLE ID DISK)

Mon. Agency
MNDT

Description: (2013) **Stamping:** WEBER 2013

3.0 MILES SOUTH OF WALDORF, 0.3 MILE EAST ALONG TRUNK HIGHWAY 30 FROM THE JUNCTION OF TRUNK HIGHWAY 30 AND TRUNK HIGHWAY 83 (THE JUNCTION IS 3.0 MILES SOUTH OF WALDORF), AT TRUNK HIGHWAY 30 MILEPOINT 158.25, 29.2 FEET SOUTH OF TRUNK HIGHWAY 30, 12.3 FEET WEST OF A FIELD ENTRANCE, 30.2 FEET NORTHEAST OF A WITNESS POST.

Station Pair: 8105 D - WASECA, MN

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Accuracy	Orthometric (Meters) Height	Accuracy	Survey Order/(Class)	Project Info Year	Reference
NAVD88	1106.743	0.016	337.336	0.005	2/1	2019	00000938

Geoid Separations(ft): GEOID18 = -95.669 12B = -95.663 09 = -95.594 03 = -95.466

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Longitude	County (Feet) X	Y	County (Meters) X	Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Reference
NAD83(2011)	43 53 28.77327	93 41 29.46194	295723.623	121898.452	90136.7410	37154.723	308.178	C	2020	HTH30
NAD83(1996)	43 53 28.77306	93 41 29.46209	295723.612	121898.431	90136.7370	37154.716	308.238	C	2020	HTH30

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/WEBER-DP6230-3S-08MAR2020.jpg	S	Mar 8, 2020
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/WEBER-DP6230-2-08MAR2020.jpg		Mar 8, 2020
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/WEBER-DP6230-1-08MAR2020.jpg		Mar 8, 2020

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_100324.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_100324.pdf

WILLIAM

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: WILLIAM **NGS Name:** WILLIAM

County: WASECA, MN (Sheet 1)

NGS ACRN: DR3044 Get Map
NGS Quad / Sta Num : 43093143/
USGS Quad: HARTLAND

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	33	105 N	22 W	435132.98	932907.19	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2018	2025	GOOD	Horz=YES Vert=YES	YES		RECESSED 3 IN.	BAR MAG IN DRILL HOLE

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 34 FT)

Disk Type
METAL ROD (WITH REMOVABLE ID DISK)

Mon. Agency
MNDT

Description: (2018) **Stamping:** WILLIAM 2018

2.6 MILES SOUTH OF NEW RICHLAND, 2.25 MILES SOUTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 30 IN NEW RICHLAND, AT TRUNK HIGHWAY 13 MILEPOINT 16.45, 58.8 FEET EAST OF TRUNK HIGHWAY 13, 80.8 FEET NORTH NORTHWEST OF A POWER POLE, 1.0 FOOT WEST OF A WITNESS POST.

Station Pair: 8101 AA - WASECA, MN

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1211.389	0.016	369.232	0.005	2/1	2020	00000949

Geoid Separations(ft): GEOID18 = -95.708 12B = -95.702 09 = -95.653 03 = -95.485

*** No Horizontal Positions in the Database ***

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/WILLIAM-DR3044-3E-17SEP2025.jpg	E	Sep 17, 2025
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/WILLIAM-DR3044-2-17SEP2025.jpg		Sep 17, 2025
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/WILLIAM-DR3044-1-17SEP2025.jpg		Sep 17, 2025

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_109133.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_109133.pdf

WILTON C

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: WILTON C
NGS Name: WILTON C

County: WASECA, MN (Sheet 1)

NGS ACRN: DH3126 Get Map
NGS Quad / Sta Num : 43093411/
USGS Quad: OTISCO

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	16	106 N	23 W	435843.65	933512.78		C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2003	2019	GOOD	Horz=YES Vert=YES	YES		FLUSH	STEEL ROD IMBED IN MON

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	SURVEY DISK	MN-161

Description: (2004) **Stamping:** WILTON-C 2003

6.2 MILES NORTHEAST OF WALDORF, 7.75 MILES EAST AND NORTH ALONG COUNTY ROAD 4 FROM THE JUNCTION OF COUNTY ROAD 4 AND TRUNK HIGHWAY 83 IN WALDORF, THEN 1.0 MILE EAST ON 290TH AVENUE, 27.0 FEET WEST OF 90TH STREET EXTENDED, 34.0 FEET NORTH OF 290TH AVENUE, 70.1 FEET EAST OF A CABLE BOX, 14.2 FEET WEST OF A FIELD ENTRANCE, 31.7 FEET NORTHEAST OF A WITNESS POST.

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -95.226 12B = -95.226 09 = -95.147 03 = -95.033

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Longitude	County (Feet) X	Y	County (Meters) X	Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Reference
NAD83(2011)	43 58 43.65009	93 35 12.77699	323567.293	153541.868	98623.5080	46799.655	311.409		2012	GPS2800
NAD83(2007)	43 58 43.65014	93 35 12.77778	323567.236	153541.873	98623.4910	46799.657	311.434		2007	GPS2300
NAD83(1996)	43 58 43.64989	93 35 12.77674	323567.312	153541.847	98623.5140	46799.649	311.483	C	2005	GPS2088

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/WILTON_C-DH3126-3N-09OCT2019.jpg	N	Oct 9, 2019
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/WILTON_C-DH3126-2-09OCT2019.jpg		Oct 9, 2019
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/WILTON_C-DH3126-1-09OCT2019.jpg		Oct 9, 2019

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_50664.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_50664.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: WILTON SE **NGS Name:** WILTON SE

County: WASECA, MN (Sheet 1)

NGS ACRN: DH3127 Get Map
NGS Quad / Sta Num : 43093411/
USGS Quad: OTISCO

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	35	106 N	23 W	435618.44	933324.60		C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2003	2021	GOOD	Horz=YES Vert=YES	YES		FLUSH	STEEL ROD IMBED IN MON

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	SURVEY DISK	MN-161

Description: (2004) **Stamping:** 2003 WILTON-SE

4.3 MILES NORTHWEST OF NEW RICHLAND, 0.40 MILE NORTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 30 IN NEW RICHLAND, THEN 6.1 MILE NORTH AND WEST ON COUNTY ROAD 12/COUNTY ROAD 8, 28.5 FEET WEST OF COUNTY ROAD 12, 15.2 FEET SOUTH OF A FIELD ENTRANCE, 1.0 FOOT EAST OF A WITNESS POST.

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -95.416 12B = -95.410 09 = -95.341 03 = -95.223

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Longitude	County (Feet) X	Y	County (Meters) X	Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Reference
NAD83(2011)	43 56 18.44136	93 33 24.60143	331363.251	138774.780	100999.721	42298.638	324.003		2012	GPS2800
NAD83(2007)	43 56 18.44142	93 33 24.60221	331363.194	138774.786	100999.704	42298.640	324.027		2007	GPS2300
NAD83(1996)	43 56 18.44110	93 33 24.60127	331363.262	138774.753	100999.724	42298.629	324.076	C	2005	GPS2088

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/WILTON_SE-DH3127-3W-19APR2021.jpg	W	Apr 19, 2021
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/WILTON_SE-DH3127-2-19APR2021.jpg		Apr 19, 2021
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/WILTON_SE-DH3127-1-19APR2021.jpg		Apr 19, 2021

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_50665.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_50665.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: WOLCOTT **NGS Name:** WOLCOTT

County: WASECA, MN (Sheet 1)

NGS ACRN: DP5059 Get Map
NGS Quad / Sta Num : 44093233/
USGS Quad: MERIDEN

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	24	107 N	22 W	440331.63	932550.44	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2014	2018	GOOD	Horz=YES Vert=YES	YES		RECESSED 2 IN.	BAR MAG IN DRILL HOLE

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 44 FT)

Disk Type
METAL ROD (WITH REMOVABLE ID DISK)

Mon. Agency
MNDT

Description: (2014) **Stamping:** WOLCOTT 2014

4.2 MILES EAST-SOUTHEAST OF WASECA, 3.45 MILES EAST ALONG TRUNK HIGHWAY 14 FROM THE JUNCTION OF TRUNK HIGHWAY 14 AND TRUNK HIGHWAY 13 IN WASECA, AT TRUNK HIGHWAY 14 MILEPOINT 164.1, 36.4 FEET SOUTH OF EASTBOUND TRUNK HIGHWAY 14, 90.8 FEET NORTHWEST OF A RIGHT-OF-WAY POST, 84.2 FEET NORTH OF A FRONTAGE/FIELD ROAD, 1.5 FEET NORTH OF A WITNESS POST.

Station Pair: GEHRING - WASECA, MN

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1120.998	0.016	341.681	0.005	2/1	2016	00000870

Geoid Separations(ft): GEOID18 = -93.769 12B = -93.776 09 = -93.691 03 = -93.543

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Geodetic Positions Longitude	County (Feet) X	County (Feet) Y	County (Meters) X	County (Meters) Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Project Info Reference
NAD83(2011)	44 03 31.63054	93 25 50.44158	364868.849	182408.944	111212.248	55598.357	313.096		2014	GPS3043
NAD83(1996)	44 03 31.63033	93 25 50.44174	364868.837	182408.923	111212.244	55598.351	313.166	C	2014	HNEW14

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/WOLCOTT-DP5059-3S-02AUG2018.jpg	S	Aug 2, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/WOLCOTT-DP5059-2-02AUG2018.jpg		Aug 2, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/WOLCOTT-DP5059-1-02AUG2018.jpg		Aug 2, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_101487.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_101487.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: WOOD **NGS Name:** WOOD

County: WASECA, MN (Sheet 1)

NGS ACRN: DP5060 Get Map
NGS Quad / Sta Num : 44093322/
USGS Quad: WASECA

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	3	107 N	23 W	440542.97	933501.06	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2014	2018	GOOD	Horz=YES Vert=YES	YES		RECESSED 2 IN.	BAR MAG IN DRILL HOLE

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 45 FT)

Disk Type
METAL ROD (WITH REMOVABLE ID DISK)

Mon. Agency
MNDT

Description: (2014) **Stamping:** WOOD 2014

4.0 MILES NORTHWEST OF WASECA, 6.45 MILES NORTHWEST ALONG TRUNK HIGHWAY 14 FROM THE JUNCTION OF TRUNK HIGHWAY 14 AND TRUNK HIGHWAY 13 IN WASECA, AT TRUNK HIGHWAY 14 MILEPOINT 154.15, 71.2 FEET SOUTH OF AN EASTBOUND TRUNK HIGHWAY 14 FOG LINE, 1.5 FEET NORTH OF A WITNESS POST.

Station Pair: KIENLE - WASECA, MN

Leveling-Derived Orthometric Height (Elevation)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1120.677	0.016	341.583	0.005	2/1	2016	00000870

Geoid Separations(ft): GEOID18 = -94.488 12B = -94.491 09 = -94.422 03 = -94.245

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Geodetic Positions Longitude	County (Feet) X	County (Feet) Y	County (Meters) X	County (Meters) Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Project Info Reference
NAD83(2011)	44 05 42.97545	93 35 01.05981	324767.510	195997.453	98989.3350	59740.143	312.787		2014	GPS3043
NAD83(1996)	44 05 42.97520	93 35 01.06010	324767.488	195997.428	98989.3280	59740.135	312.860	C	2014	HNEW14

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/WOOD-DP5060-3S-01AUG2018.jpg	S	Aug 1, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/WOOD-DP5060-2-01AUG2018.jpg		Aug 1, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/WOOD-DP5060-1-01AUG2018.jpg		Aug 1, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_101481.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_101481.pdf

WOODVILLE SW

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: WOODVILLE SW **NGS Name:** WOODVILLE SW

County: WASECA, MN (Sheet 1)

NGS ACRN: DH3128 Get Map
NGS Quad / Sta Num : 44093322/
USGS Quad: WASECA

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	31	107 N	22 W	440146.79	933101.34		C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2003	2018	GOOD	Horz=YES Vert=YES	YES		FLUSH	MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	SURVEY DISK	MN-161

Description: (2004) **Stamping:** WOODVILLE-SW 2003

3.8 MILES SOUTH-SOUTHWEST OF WASECA, 1.6 MILES SOUTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 14 IN WASECA TO TRUNK HIGHWAY 13 MILEPOINT 28.65, THEN 0.75 MILE WEST ON 330TH AVENUE, THEN 0.6 MILE SOUTH ON COUNTY ROAD 4, 99.0 FEET WEST OF COUNTY ROAD 4, 34.0 FEET NORTH OF COUNTY ROAD 74, 36.8 FEET EAST-NORTHEAST OF A WITNESS POST.

*** No 1st or 2nd Order Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -94.577 12B = -94.583 09 = -94.501 03 = -94.363

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Longitude	County (Feet) X	Y	County (Meters) X	Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Reference
NAD83(2011)	44 01 46.78816	93 31 01.33858	342088.229	171945.512	104268.701	52409.097	314.644		2012	GPS2800
NAD83(2007)	44 01 46.78820	93 31 01.33937	342088.171	171945.516	104268.683	52409.098	314.668		2007	GPS2300
NAD83(1996)	44 01 46.78802	93 31 01.33829	342088.250	171945.497	104268.707	52409.092	314.715	C	2005	GPS2088

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/WOODVILLE_SW-DH3128-3W-31JUL2018.jpg	W	Jul 31, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/WOODVILLE_SW-DH3128-2-31JUL2018.jpg		Jul 31, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/WOODVILLE_SW-DH3128-1-31JUL2018.jpg		Jul 31, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_50662.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_50662.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: WOVIL MNDT **NGS Name:** WOVIL

County: WASECA, MN (Sheet 1)

NGS ACRN: AI6559 Get Map
NGS Quad / Sta Num : 44093233/
USGS Quad: MERIDEN

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	21	107 N	22 W	440323.39	932908.41	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1998	2018	DESTROYED	Horz=NO Vert=NO	YES		FLUSH	MARKER W/BAR MAGNET

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 49 FT)

Disk Type
SURVEY DISK

Mon. Agency
MNDT

Description: (2004) **Stamping:** WOVIL 1998

1.5 MILES SOUTHEAST OF WASECA, 1.4 MILES SOUTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 14 IN WASECA TO TRUNK HIGHWAY 13 MILEPOINT 30.5, THEN 0.1 MILE NORTH ALONG 8TH STREET (THE ROAD IN FRONT OF THE DEPARTMENT OF TRANSPORTATION TRUCK STATION), THEN 0.8 MILE SOUTHEAST ALONG 139TH STREET, THEN 0.2 MILE SOUTHEAST ALONG 141ST STREET, 0.15 MILE SOUTHEAST OF THE JUNCTION OF 139TH STREET AND 345TH AVENUE, 28.0 FEET NORTHEAST OF 141ST STREET, 8.2 FEET SOUTH OF A POWER POLE NUMBER BMO9E11R51, 3.2 FEET SOUTHWEST OF A WITNESS POST.

Station Notes
DISTRICT 7 REPORTED THAT MARK WAS DISTURBED DUE TO A GRAVEL ROAD (141ST STREET) BEING OBLITERATED.

Leveling-Derived Orthometric Heights (Elevations)

Vertical Datum	Orthometric (Feet) Height	Orthometric (Feet) Accuracy	Orthometric (Meters) Height	Orthometric (Meters) Accuracy	Survey Order/(Class)	Project Info Year	Project Info Reference
NAVD88	1153.541	0.016	351.600	0.005	2/1	2010	00000660
NGVD29	1153.492	0.016	351.585	0.005	2/1	2001	VJANE

Geoid Separations(ft): GEOID18 = -94.166 12B = -94.170 09 = -94.088 03 = -93.943

Geodetic Position and Waseca County Coordinates

Datum and Adjustment	Geodetic Positions Latitude	Geodetic Positions Longitude	County (Feet) X	County (Feet) Y	County (Meters) X	County (Meters) Y	Ellipsoid Hgt (m)	Surv Ord	Project Info Year	Project Info Reference
NAD83(2011)	44 03 23.38777	93 29 08.40965	350406.405	181669.167	106804.086	55372.873	322.900		2012	GPS2800
NAD83(2007)	44 03 23.38779	93 29 08.41041	350406.350	181669.169	106804.069	55372.873	322.923		2007	GPS2300
NAD83(1996)	44 03 23.38776	93 29 08.40970	350406.402	181669.166	106804.085	55372.872	322.966	C	2000	GPS1453

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/WOVIL-AI6559-3NE-08JUN2004.jpg	NE	Jun 8, 2004
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/WOVIL-AI6559-2-08JUN2004.jpg		Jun 8, 2004
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/WOVIL-AI6559-1-08JUN2004.jpg		Jun 8, 2004

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_36697.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_36697.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: X 22 **NGS Name:** X 22

County: WASECA, MN (Sheet 1)

NGS ACRN: PP1728 Get Map
NGS Quad / Sta Num : 44093322/
USGS Quad: WASECA

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	18	107 N	22 W	440435.00	933040.00	2	

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1933	1988	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	BENCH MARK DISK	NGS

Description: (2010) **Stamping:** 1151.015 X 22 1933

IN THE NORTHWEST PART OF WASECA, 280.0 FEET NORTHWEST ALONG THE CHICAGO AND NORTHWESTERN RAILROAD FROM THE CROSSING OF THE MINNEAPOLIS AND ST. LOUIS RAILROAD, 227.68 FEET EAST-SOUTHEAST OF THE CENTER OF THE JUNCTION OF 4TH STREET AND 2ND AVENUE, 146.0 FEET EAST OF 4TH STREET SOUTHWEST, 36.0 FEET NORTH OF THE NORTH RAIL OF THE RAILROAD TRACKS.

Leveling-Derived Orthometric Heights (Elevations)

Vertical Datum	Orthometric (Feet) Height	Accuracy	Orthometric (Meters) Height	Accuracy	Survey Order/(Class)	Project Info Year	Reference
NAVD88	1151.093	0.016	350.854	0.005	2/0	1991	00000025
NGVD29	1151.015	0.016	350.830	0.005	2	1935	CUTLER-VERT

Geoid Separations(ft): GEOID18 = -94.186 12B = -94.193 09 = -94.114 03 = -93.960

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33305.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33305.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: Y 22 **NGS Name:** Y 22

County: WASECA, MN (Sheet 1)

NGS ACRN: PP1729 Get Map
NGS Quad / Sta Num : 44093322/
USGS Quad: WASECA

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	18	107 N	22 W	440430.00	933031.00	2	

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1933	1988	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
CONCRETE FOOTING - SMALL	BENCH MARK DISK	NGS

Description: (2010) **Stamping:** Y 22 1156.894 1933

IN WASECA, 0.2 MILE SOUTH ON TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 14, IN THE NORTH WALL OF A CITY PUMP HOUSE, 350.0 FEET SOUTH OF A RAILROAD, 45.0 FEET EAST OF 2ND STREET SOUTHWEST, 1.8 FEET EAST OF THE NORTHWEST CORNER OF A BUILDING.

Leveling-Derived Orthometric Heights (Elevations)

Vertical Datum	Orthometric (Feet) Height	Accuracy	Orthometric (Meters) Height	Accuracy	Survey Order/(Class)	Project Info Year	Reference
NAVD88	1156.976	0.016	352.647	0.005	2/0	1991	00000025
NGVD29	1156.894	0.007	352.622	0.002	1	1942	L62 MINN

Geoid Separations(ft): GEOID18 = -94.180 12B = -94.186 09 = -94.107 03 = -93.953

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33306.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33306.pdf

Y 22 RESET

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: Y 22 RESET **NGS Name:** Y 22 RESET

County: WASECA, MN (Sheet 1)

NGS ACRN: PP3540 Get Map
NGS Quad / Sta Num : 44093322/
USGS Quad: WASECA

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	18	107 N	22 W	440429.52	933031.24	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1982	2018	GOOD	Horz=NO Vert=YES	YES		FLUSH	NO MAG MATERIAL

Monument Type	Disk Type	Mon. Agency
WALL	BENCH MARK DISK	NGS

Description: (2004) **Stamping:** 156.894 Y 22 RESET 1933 1982

IN WASECA, 1 BLOCK WEST ON ELM AVENUE (OLD HIGHWAY 14) FROM THE JUNCTION OF ELM AVENUE (OLD HIGHWAY 14) AND TRUNK HIGHWAY 13 IN WASECA, THEN SOUTH 0.19 MILE ON 2ND STREET SOUTHWEST, AT A PUMP HOUSE FOR A CITY WATER TANK, 36.5 FEET EAST OF 2ND STREET SOUTHWEST, 35.6 FEET SOUTHWEST OF A FIRE HYDRANT, 19.5 FEET WEST-SOUTHWEST OF THE SOUTHWEST LEG OF A WATER TANK, 1.8 FEET EAST OF THE NORTHWEST CORNER OF A PUMP HOUSE, SET VERTICALLY IN THE NORTH WALL OF A PUMP HOUSE, 4.0 FEET ABOVE THE LEVEL OF THE GROUND.

Station Notes

THE SURVEY MARK IS SET VERTICALLY IN A WALL AND IS UNSUITABLE FOR MNDOT GEODETIC HORIZONTAL SURVEYS.

Leveling-Derived Orthometric Heights (Elevations)

Vertical Datum	Orthometric (Feet) Height	Accuracy	Orthometric (Meters) Height	Accuracy	Survey Order/(Class)	Project Info Year	Reference
NAVD88	1156.969	0.016	352.645	0.005	2/1	2020	00000949
NGVD29	1156.878	0.016	352.617	0.005	2/1	1988	VWASE

Geoid Separations(ft): GEOID18 = -94.180 12B = -94.186 09 = -94.107 03 = -93.957

*** No Horizontal Positions in the Database ***

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/Y_22_RESET-PP3540-3S-02AUG2018.jpg	S	Aug 2, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/Y_22_RESET-PP3540-2-02AUG2018.jpg		Aug 2, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/waseca/Y_22_RESET-PP3540-1-02AUG2018.jpg		Aug 2, 2018

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

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33307.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33307.pdf

Data Sheet Selection By County Name & Map Sheet (Without Photos)

Mn/DOT Name: Z 22 **NGS Name:** Z 22

County: WASECA, MN (Sheet 1)

NGS ACRN: PP1730 Get Map
NGS Quad / Sta Num : 44093322/
USGS Quad: WASECA

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	31	107 N	22 W	440212.00	933026.00	2	

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1933	1963	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	BENCH MARK DISK	NGS

Description: (2010) **Stamping:** Z 22 1933

AT THE CITY PUMP HOUSE, IN THE FACE OF THE BUILDING, 350.0 FEET SOUTH OF THE CHICAGO AND NORTHWESTERN RAILWAY, 45.0 FEET EAST OF THE CENTERLINE OF SECOND STREET SOUTHWEST, 1.8 FEET EAST OF THE NORTHWEST CORNER, 2.3 FEET HIGHER THAN THE FOUNDATION.

Leveling-Derived Orthometric Heights (Elevations)

Vertical Datum	Orthometric (Feet) Height	Accuracy	Orthometric (Meters) Height	Accuracy	Survey Order/(Class)	Project Info Year	Reference
NAVD88	1138.436	0.016	346.996	0.005	2/0	1991	00000025
NGVD29	1138.354	0.016	346.971	0.005	2	1935	CUTLER-VERT

Geoid Separations(ft): GEOID18 = -94.462 12B = -94.468 09 = -94.386 03 = -94.245

*** No Horizontal Positions in the Database ***

Caution: Any positions shown above were selected based on specific criteria. To evaluate all positions, see detailed versions of this data sheet:

Download the Complete ENGLISH Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Single%20Sheet/GSID_33308.pdf
Download the Complete METRIC Data Sheet: ftp://ftp.olmweb.dot.state.mn.us/Geod/PDF%20Metric%20Sheet/M_GSID_33308.pdf