



**Public Land  
Survey System  
Corner  
Remonumentation  
Program**

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# Remonumentation of the Public Land Survey System

## Introduction

The purpose of this program is to ensure that Clay County's Public Land Survey System (PLSS) corner monuments are available for everyone long into the future.

Public Land Survey System (PLSS) corner monuments are essential for all property descriptions, location of infrastructure, and are the basis for accurate digital geospatial data. The PLSS is the foundation for land ownership. As such, preserving the PLSS will link historical to present day needs, helping make data-driven decisions for all people who inhabit and utilize land in Clay County. A restoration and preservation program of the PLSS will benefit every landowner.

These benefits include:

- Creates secure land records for future generations.
  - The combination of PLSS records publicly available and the physical monuments in the ground mean that future land and economic development will be assisted with easily attainable land records that can be verified in the field.
- Surveys are more accurate.
  - Future surveys are more accurate and cost effective with certified PLSS monuments.
- GIS data is more accurate.
  - Governmental and private entities can rely on certified PLSS locations making digital data more accurate. Decisions based on that data are more informed.

## Outcomes

The original Public Land Survey System in Clay County was completed in 1871. After that time, the maintenance of the system was left conducted sporadically as need arose. Unfortunately, many of the corner monuments were lost or destroyed. In Minnesota, counties are responsible for the maintenance and perpetuation of the Public Land Survey System (Minnesota Statutes 381.12).

The outcomes of the remonumentation program will include:

- Make land ownership and real property interests more secure.
- Create secure land records for future generations.
- Make future land surveys more cost effective and accurate.
- Increase the accuracy of GIS data including parcel boundaries.

## Remonumentation

“Remonumentation” is a common term associated with the preservation of corners of the Public Land Survey System and may consist of restoration of the corner by placement a new monument. The specific type of corner of the PLSS varies from section corner, quarter corners, meander corners, and witness corners. The result of a remonumentation is a U.S. Public Land Survey Monument Record, commonly called a Certificate of Location Government Corner (COLGC). The detailed, in-depth information shown on a COLGC provides an accurate description of the corner monument, a complete history of the given corner, and coordinates of the corner’s location.

Clay County expects that having quality PLSS corner data will significantly reduce the cost of surveys to landowners which will allow them to sub-divide their properties and ensure boundary lines are preserved. With the updated PLSS corner locations, Clay County GIS will update its parcel fabric. Highly accurate parcel boundaries will then be available to provide better information for landowners and County staff.

The Clay County Board of Commissioners fully understands the importance of PLSS remonumentation and how beneficial the impact of having PLSS corner data can be to citizens. They actively support ongoing efforts for remonumentation but are keenly aware of the tremendous costs involved. Over the years the County Board has provided funding for remonumentation to ensure that the work continues. State law (M.S. 381.12) allows the counties to levy a tax for remonumentation.

Once the remonumentation process is completed, an effort will need to be made to keep corners maintained. Without ongoing maintenance, the quality, preservation, and availability of reliable monumentation will deteriorate.

## County Surveyor

The Office of the Clay County Surveyor was discontinued as of January 1st, 2015. Since that time, Clay County has contracted with a firm to provide Surveyor Services. The two primary areas of work are general consultation and the Public Land Survey System corner remonumentation program. Clay County GIS has been tasked with managing the Public Land Survey System corner remonumentation program.

## PLSS Corner Remonumentation Program

The two goals of the PLSS corner remonumentation program are to ensure that a corner monument is in place at each PLSS corner and to collect high accuracy Clay County coordinates for the location of every corner.

PLSS corners will be remonumented, maintained, or updated pursuant to Minnesota Association of County Surveyors' "Manual of Guidelines for the Identification, Remonumentation, and Preservation of the Public Land Survey Corners in the State of Minnesota." (MACS Remon Manual)

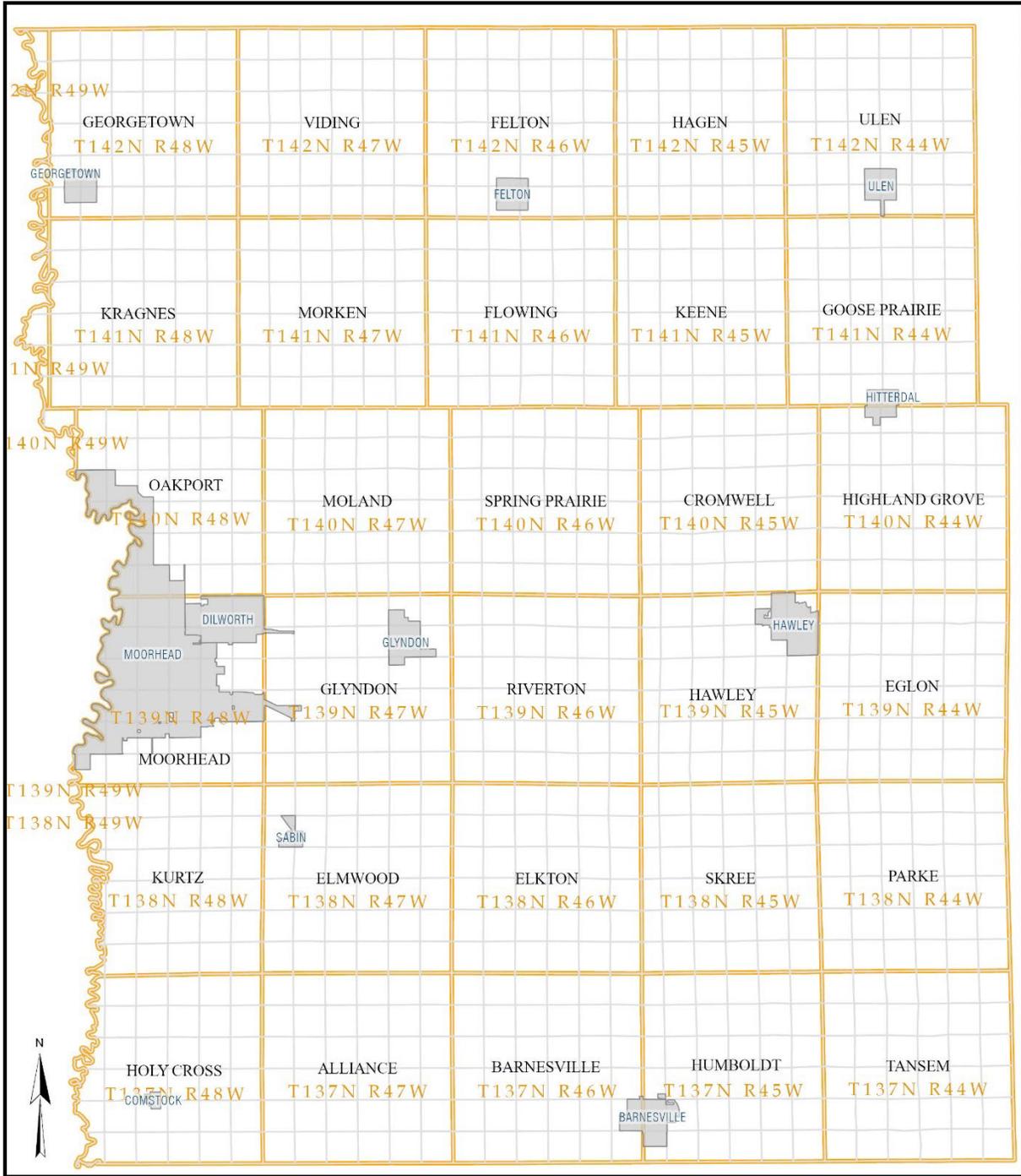
- All corners remonumented, maintained, or updated are required to be referenced to a known geodetic coordinate system and:
- The Clay County Coordinate System shall be used.
- The coordinate system must be clearly identified on the corner certificate.
- The horizontal datum and adjustment shall be noted on the certificate.
- All coordinate values shall be in feet and shown to a minimum of 2 decimal places.
- All PLSS corners remonumented, maintained, or updated must file corner certificates with the Clay County Recorder's Office, who will make the certificates freely available online.
- Associated geospatial data for the monuments that were remonumented, maintained, or updated must be provided to Clay County GIS.

## PLSS Corner remonumentation Program work plan

- The program will target specific townships, as designated by Clay County GIS.
- Each targeted area will comprise an entire township.
- When possible, each targeted township should be completed prior to moving on to the next area.
- Townships to be remonumented will be contiguous with completed areas.
- Remonumentation will take place as funding allows.
- Work will begin in the southeast corner of Clay County and move north along the County Boundary.

# APPENDIX A

# Clay County Township Map



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## Clay County Townships



This map is for reference purposes only. Clay County, MN is not responsible for any inaccuracies herein contained. This map is in the public domain and may be copied without permission. Citation of source is appreciated.



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## APPENDIX B

### "A Brief History of the Public Land Survey and Monumentation"

The United States Public Land Survey System was utilized to divide and distribute all the land that makes up present day Minnesota. The physical evidence of this survey consists of marked positions on the land called monuments. They define every piece of property in the state and serve as reference points for all survey work. Many of these monuments are no longer in place. A discussion of the need for remonumentation programs requires an understanding of how and why the monuments were originally set.

The federal government became interested in surveying undeveloped lands west of the Appalachian Crest after the Revolutionary War. Thomas Jefferson headed a committee to propose legislation on this subject in 1784. Their ideas were revised in 1785 by a new committee headed by William Grayson of Virginia. This committee's work was passed into law as the Land Ordinance of 1785. The Ordinance outlined a rectangular system of surveying which became the basis of the Public Land Survey System (PLSS). The PLSS, first applied to the territory northwest of the Ohio River, eventually covered the western two-thirds of the country, including Minnesota.

The Public Land Survey System was unique in providing an organized and definable system of land description. It laid out rows of townships and ranges oriented along north-south and east-west lines. Each township was six miles square and contained thirty-six sections of one mile square. Surveyors marked off positions on the land by placing eight monuments around each section, one on each corner (section corners) and one on the mid-points of the four outside lines (quarter corners). This made it easy to locate any given parcel of land.

The original survey was monumented with local materials. In Minnesota, wooden stakes were used in the timbered areas and earthen mounds were placed on the prairies. Re-established monuments today use more permanent materials such as casted metals, concrete posts, and iron pipes.

The Public Land surveys were conducted before an area was opened for settlement and land sales; they were, therefore, done as quickly as possible. Measured by today's standards, it was a low-accuracy survey. However, since a government survey rule stated that the placement of a monument represented the correct position for the corner, despite its errors, the system succeeded in minimizing boundary disputes. That is why these monuments are still important today. All property boundaries are based upon the physical location of a monument.

The original survey was made by the federal government at its own expense. In Minnesota, the PLSS was completed during a 60-year period (1847-1907) and left behind over 310,000

monuments. (3,355 monuments were placed in Clay County.) Upon its completion, all the records and archives related to the Minnesota survey were transferred from the U.S. General Land Office to the Minnesota Secretary of State (M.S. 5.03). After that, the perpetuation of the monuments became a state responsibility. The state in turn passed the responsibility of preserving and re-establishing these monuments to the counties (M.S. 381.12). This same provision allowed the counties to levy a tax to finance remonumentation. Time has shown, however, that both interest and ability to remonument the PLSS varies greatly over time.

Despite the loss of many monuments, the impact of the Public Land Survey System remains with us today. It is a historical legacy that helped shape the pattern of settlement and the look of the landscape of rural America. Rural roads were placed along section lines. Many towns were laid out in rectangular grid patterns oriented to the survey. Farmers still measure their landholdings by "quarters" or "quarter-quarters". An airplane flight over the Midwest reveals rectangular fields, a reflection of the influence of the Public Land Survey.

Source: 1978 legislative report on preserving the Public Land Survey System.

## **Preserving the Public Land Survey System**