EG Surveying & Mapping, LLC

625 Granite Avenue
Post Office Box 486
Reedsburg, Wisconsin 53959
Office: 608-747-4363
Web: www.eg-wi.com

August 15th, 2024

Lisa Wilson, AICP, MPA
Land, Resources and Environment | Director
505 Broadway, Baraboo, WI 53913
lisa.wilson@saukcountywi.gov

Re: Request For Proposal (RFP) Professional Land Surveyor Services
4.1 Cover Letter

Lisa,

Thank you for your invitation to propose Professional Land Surveyor Services to Sauk County Wisconsin Government.

I am happy to present this proposal to the Sauk County Department of Land, Resources and Environment to provide Professional Land Surveyor Services to Sauk County Wisconsin Government.

As Resident Professional Surveyor of EG Surveying and Mapping, LLC (EG), I am the individual with the authority to negotiate on behalf of EG and to contractually bind the firm.

My contact information is as follows:

Matthew M. Filus
Professional Land Surveyor, Certified Floodplain Manager
Managing Member
EG Surveying & Mapping, LLC
625 Granite Avenue
P.O. Box 486
Reedsburg, WI 53959
Office Phone: (608) 747-4363
Mobile Phone: (608) 381-6882
Email: mfilus@eg-wi.com
Web: www.eg-wi.com

I believe that my education, professional experience and foresight will allow me to provide Sauk County with the requested services in a professional, efficient and cost-effective manner. My relevant experience is highlighted under section 4.3 of this response and further detailed under section 4.8.

Once again, I would like to thank you for your invitation to propose Professional Land Surveyor Services to Sauk County Wisconsin Government.

I look forward to your response.

Respectfully Submitted,

Matthew M Filus, PLS, CFM
EG Surveying & Mapping, LLC

4.2 General Information

A) Certified evidence of license as a land surveyor in the State of Wisconsin.

B) Certificates of insurance for general and personal liability limits as noted in the RFP.

NO. 2185 - 8

EXPIRES: 01/31/2026

The State of Wisconsin

Department of Safety and Professional Services

EXAMINING BOARD OF ARCHITECTS, LANDSCAPE ARCHITECTS, PROFESSIONAL ENGINEERS, DESIGNERS, PROFESSIONAL LAND SURVEYORS, AND REGISTERED INTERIOR DESIGNERS

Hereby certifies that

Matthew M Filus

was granted a license to practice as a

PROFESSIONAL LAND SURVEYOR

in the State of Wisconsin in accordance with Wisconsin Law
on the 11th day of November in the year 1993.
The authority granted herein must be renewed each biennium by the granting authority.
In witness thereof, the State of Wisconsin
Examining Board of Architects, Landscape Architects, Professional Engineers, Designers, Professional Land Surveyors, and Registered Interior Designers
has caused this certificate to be issued under
the seal of the Department of Safety and Professional Services

STATE OF WISCONSIN
DEPT. OF SAFETY AND PROFESSIONAL SERVICES

DSPS Secretary

Chairperson

This certificate was printed on the 18th day of July in the year 2024

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY): 08/05/2024

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Assurance Risk Managers, Inc. 10651 East Bethany Drive Suite 300 Aurora CO 80014-2688	**CONTACT NAME:** Thomas Sprinkle **PHONE (A/C, No, Ext):** (303) 454-9562 **FAX (A/C, No):** (303) 454-9564 **E-MAIL ADDRESS:** Tom.Sprinkle@arm-i.com
INSURED EG Surveying & Mapping P.O. Box 486 Reedsburg WI 53959	**INSURER(S) AFFORDING COVERAGE** — **NAIC #** **INSURER A:** Travelers Property Casualty Co of America — 25674 **INSURER B:** RLI Insurance Co — 13056 **INSURER C:** **INSURER D:** **INSURER E:** **INSURER F:**

COVERAGES **CERTIFICATE NUMBER:** 23-24 BOP E&O **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	[X] COMMERCIAL GENERAL LIABILITY [ ] CLAIMS-MADE [X] OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: [ ] POLICY [X] PRO-JECT [ ] LOC [ ] OTHER:	Y		680-4H549040-23-47	11/25/2023	11/25/2024	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG [ ]	$ 1,000,000 $ 1,000,000 $ 5,000 $ 1,000,000 $ 2,000,000 $ 2,000,000 $
	AUTOMOBILE LIABILITY [ ] ANY AUTO [ ] OWNED AUTOS ONLY [ ] SCHEDULED AUTOS [ ] HIRED AUTOS ONLY [ ] NON-OWNED AUTOS ONLY						COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident) [ ]	$ $ $ $ $
	[ ] UMBRELLA LIAB [ ] OCCUR [ ] EXCESS LIAB [ ] CLAIMS-MADE [ ] DED [ ] RETENTION $						EACH OCCURRENCE AGGREGATE [ ]	$ $ $
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY Y/N ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? [ ] N/A (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below						[ ] PER STATUTE [ ] OTH-ER E.L. EACH ACCIDENT E.L. DISEASE - EA EMPLOYEE E.L. DISEASE - POLICY LIMIT	 $ $ $
B	PROFESSIONAL LIABILITY CLAIMS MADE POLICY			RDP0049036	11/25/2022	11/25/2024	PER CLAIM AGGREGATE	$1,000,000 $1,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

Sauk County Wisconsin Government is an additional insured as their interest may appear when required by written contract.

CERTIFICATE HOLDER

Sauk County Wisconsin Government
505 Broadway
Baraboo WI 53913

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

Lisa Lamm

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY): 08/14/2024

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

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PRODUCER

State Farm

Nicole Bellock
146 Eagle Street

Reedsburg WI 539591538

CONTACT NAME: Nicole Bellock
PHONE (A/C, No, Ext): 608-495-8046 **FAX (A/C, No):**
E-MAIL ADDRESS: nicole.bellock.vabrd9@statefarm.com

INSURER(S) AFFORDING COVERAGE	NAIC #
INSURER A : State Farm Mutual Automobile Insurance Company	25178
INSURER B :	
INSURER C :	
INSURER D :	
INSURER E :	
INSURER F :	

INSURED

Filus, Matthew
PO BOX 486

REEDSBURG WI 539590486

COVERAGES **CERTIFICATE NUMBER:** **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADD INSD	SUB WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
	COMMERCIAL GENERAL LIABILITY ☐ CLAIMS-MADE ☐ OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: ☐ POLICY ☐ PRO-JECT ☐ LOC OTHER:						EACH OCCURRENCE	$
							DAMAGE TO RENTED PREMISES (Ea occurrence)	$
							MED EXP (Any one person)	$
							PERSONAL & ADV INJURY	$
							GENERAL AGGREGATE	$
							PRODUCTS - COMP/OP AGG	$
								$
A	AUTOMOBILE LIABILITY ☐ ANY AUTO ☐ OWNED AUTOS ONLY ☐ HIRED AUTOS ONLY ☒ SCHEDULED AUTOS ☐ NON-OWNED AUTOS ONLY	N	N	0028197-SFP-49	04/03/2024	10/03/2024	COMBINED SINGLE LIMIT (Ea accident)	$
							BODILY INJURY (Per person)	$ 1,000,000
							BODILY INJURY (Per accident)	$ 1,000,000
							PROPERTY DAMAGE (Per accident)	$ 1,000,000
								$
	☐ UMBRELLA LIAB ☐ OCCUR ☐ EXCESS LIAB ☐ CLAIMS-MADE ☐ DED ☐ RETENTION $						EACH OCCURRENCE	$
							AGGREGATE	$
								$
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? Y / N ☐ (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	N / A					☐ PER STATUTE ☐ OTH-ER	$
							E.L. EACH ACCIDENT	$
							E.L. DISEASE - EA EMPLOYEE	$
							E.L. DISEASE - POLICY LIMIT	$

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

CERTIFICATE HOLDER

Sauk County Wisconsin Government
505 Broadway

Baraboo WI 53913

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

Nicole Bellock

This form was system-generated on 08/14/2024

4.3 Relevant Experience

I have had a 35-year long career in Land Surveying, with 31 of them being based in Sauk County. I believe this experience along with my education and technical abilities make me uniquely qualified to provide Professional Land Surveying Services to Sauk County Government as their County Surveyor.

Since 1989, I have completed thousands of land survey projects within Sauk County and the surrounding area. In the past five years alone, I have prepared three subdivision plats, 57 Certified Survey Maps, 78 boundary retracement surveys and 15 other specific-purpose surveys along with remonumentation of approximately 200 Public Land Survey System (PLSS) corners through remonumentation contracts and bounty reimbursement.

My PLSS experience in Sauk county began in the early 1990s and has continued to this day. Personally, I have remonumented nearly 500 PLSS corners in Sauk County through private surveys and contracts with Sauk County and the Wisconsin Department of Transportation.

I have also served as County Surveyor in three Wisconsin Counties for a collective period of over 10 years. From 1995-1998 I was the appointed Eau Claire County Deputy Surveyor. From 2000-2004 I was the elected Surveyor for Sauk County and from 2011-2014 I was the appointed Richland County Surveyor.

My experience, education and technical abilities are further detailed in the following documents that are attached as supporting information under Section 4.8 of this response:

4.8 A – Resume of Matthew M Filus
4.8 B – Education Summary of Matthew M Filus
4.8 C – Notable Project Experience of Matthew M Filus
4.8 D – Technology Experience of Matthew M Filus
4.8 E – Teaching Summary of Matthew M Filus

The project scope of the RFP is requesting that the selected Surveyor develop and maintain a monument maintenance system through which the public land survey PLSS) corners are checked and perpetuated in compliance with State Statutes, Administrative Code, and local ordinances and maintain data regarding maintenance activities, specific to each corner, in a format that can be integrated into the County GIS. Coordinate with County staff to establish how the data will be collected and entered.

I have had extensive experience with this specific task, having developed these type of programs in all three Counties I have served as County Surveyor. I have also aided in the design of databases to maintain the data and metadata for the projects. One example of a database design I have prepared for such purpose is attached as:

4.8 F – Richland County Wisconsin PLSS Corner Database Design

It is anticipated that with proper funding, this project would be completed with a three-year time frame to align with completion of PLSS remonumentation at which time a 20-year / 5% annual PLSS maintenance program would commence.

4.4 List of References

1) Sauk County Land Information Office

Kelly K. Felton, Cartographer, Land Information Officer
Sauk County West Square Building
505 Broadway Room #122
Baraboo, WI 53913
Phone: (608) 355-3240
Email: kelly.felton@saukcountywi.gov

Services provided:

- Remonumentation of 253 Public Land Survey System (PLSS) Corners.

2) Sauk County Surveyor's Office

Patrick J. Dederich, Professional Land Surveyor, Sauk County Surveyor
Sauk County West Square Building
505 Broadway Room #122
Baraboo, WI 53913
Phone: (608) 355-4474
Email: pat.dederich@saukcountywi.gov

Services provided:

- Remonumentation of 253 Public Land Survey System (PLSS) Corners.
- Participation in County PLSS Bounty Program.
- Statute and ordinance compliance review of PLSS Corner Monument Records (Tie Sheets) and Certified Survey Maps (CSMs) submitted by the current County Surveyor.

3) Blakeslee Rural Sewage and Soil Testing, Inc.

Shea Geffert, Owner
Master Plumber, Certified Soil Tester, Designer of Engineering Systems, POWTS Maintainer
625 Granite Avenue
Reedsburg, WI 53959
Phone: (608) 963-5895
Email: shea@rucls.net

Services provided:

- Land surveying services to include boundary surveys, topographic surveys and construction layout for Private Onsite Wastewater Treatment Systems (POWTS).
- Training services for Blakeslee Staff on the topics of land surveying, computer-aided drafting, database development and project archiving processes.

4) Strategic Municipal Services, Inc.

Scott M. Schramm, Owner and President
Professional Engineer, Professional Land Surveyor
W5224 CTH O
Plymouth, WI 53073
Phone: (920) 893-3147
Email: scotts@strategicmunicipal.com

Services provided:

- Land surveying services to include boundary surveys, topographic surveys, bathymetric surveys and construction layout.

5) Juliesells, LLC

Julie Alibrando, Owner, Real Estate Professional
100 E. Main Street,
P.O. Box 56
LaValle, WI 53941
Phone: (608) 985-8484
Email: julie@juliesells.com

Services provided:

- Land surveying services to include boundary surveys, topographic surveys and site planning.

4.7 Fee Proposal

EG Surveying & Mapping is proposing to provide the requested Professional Land Surveying Services to Sauk County based on an hourly rate basis of $130.00 per hour.

This rate is all-inclusive of professional time to be provided by Matthew M Filus, PLS, CFM and also includes any and all equipment and software required to provide such services, including, but not limited to:

- 2022 RAM Four-Wheel-Drive (FWD) Pickup Truck
- 2022 Kawasaki Mule 4010 FWD UTV
- Ancillary Field Equipment
- GEOMAX Zoom 90 Robotic Total Station
- CHC i73+ GNSS Receivers (2) Capable of Static and VRS and Base/Rover RTK
- GEOMAX X-PAD Field Survey Data Collection Software and Rugged Tablet Computer
- Mobile Communications: Laptop Computer and Cellular Telephone with Data Service
- Carlson Civil Suite 2025 Software: Civil, Survey, GIS and Hydrology Modules
- Blue Marble Geographics Gobal Mapper 25.1 GIS Software
- A professional office in Reedsburg, Wisconsin

Based upon the requested scope of services outlined in Section 3.2 of the RFP, I have compiled a tentative schedule of services that addresses these items based upon current levy funding levels for the office of the County Surveyor.

The tentative schedule of services is attached on the following two pages of this response.

Other Technical Surveying Services being requested in Section 3.2 of the RFP will be provided on a case-by-case basis at the proposed hourly rate of $130.00 per hour, all-inclusive.

Description of Task	2025 Hours	2026 Hours	2027 Hours	Notes / Assumptions

General County Surveyor Duties:

Orientation, review and organize previous County Surveyor files, data and policies	16	0	0	Orientation, review and organize previous County Surveyor files, data and policies.
Perform duties as specified under Wisconsin Statutes 59.45	192	192	192	Office hours at 4 hours per week minimum and 48 weeks per calendar year.
Review Subdivision Plats and Certified Survey Maps	59	59	59	Assuming 2 Subdivision Plats and 116 Certified Survey Maps at 0.5 hours each.
Additional, remote office hours	50	50	50	Serve as a resource for landowners, real estate agents, attorneys title and utility companies as well as other professional land surveyors. Assuming 1 hour per week to return messages and schedule appointments during regular office hours.
Sauk County Land Information Council	10	10	10	Serve on and regularly attend the Sauk County Land Information Council meetings, which are held quarterly. Assuming 2.5 hours per quarterly meeting.
Land Resources and Environment Committee meetings	8	8	8	Attend Land Resources and Environment Committee meetings, as needed. Assuming 4 meetings per year.
Wisconsin County Surveyor Meetings	6	6	6	Attend Wisconsin County Surveyor Meetings, when necessary. Assuming 2 meetings per year.

PLSS Re-monumentation, Perpetuation, & Maintenance

Identify project areas for re-monumentation projects	6	6	6	In coordination with GIS/Land Information staff.
Develop RFP/RFB for re-monumentation projects	6	6	6	To be completed by Consultants; and present to the appropriate Committee and/or County Board for awarding of contract(s).

Description of Task	2025 Hours	2026 Hours	2027 Hours	Notes / Assumptions
Administer PLSS Bounty Program	6	6	6	Receive requests for PLSS re-monumentation and maintenance, review same and authorize payment, if appropriate.
Develop, administer and maintain a PLSS Maintenance Program	4	4	4	Through which the public land survey (PLSS) corners are checked and perpetuated in compliance with State Statutes, Administrative Code, and local ordinances.
Maintain data regarding maintenance activities, specific to each PLSS corner by means of a relational database	90	106	106	In a format that can be integrated into the County GIS. Coordinate with County staff to establish how the data will be collected and entered.
Perpetuation of PLSS corner locations in preparation for proposed construction projects	60	60	60	Assuming 15 corners per year.

Budget Summary By Fiscal Calendar Year

Total Hours By Calendar Year	513	513	513	
Proposed Hourly Rate	$130.00	$130.00	$130.00	
Estimated Budgeted Hours	$66,690.00	$66,690.00	$66,690.00	
Bounty Payments to Consultants	$7,000.00	$7,000.00	$7,000.00	Center of Sections (10). All other PLSS corners will be re-monumented and positioned by 12/2027
Total Budget	$73,690.00	$73,690.00	$73,690.00	

4.8 A - Resume of Matthew M Filus

Matthew M. Filus
Professional Land Surveyor, Certified Floodplain Manager
Managing Member
EG Surveying & Mapping, LLC
625 Granite Avenue
P.O. Box 486
Reedsburg, WI 53959
Office Phone: (608) 747-4363
Mobile Phone: (608) 381-6882
Email: mfilus@eg-wi.com
Web: www.eg-wi.com

Education

1986 - 1987 University of Wisconsin - Baraboo, Wisconsin

Study of liberal arts and sciences in preparation for future education.

1987 - 1989 Madison Area Technical College - Madison, Wisconsin

Civil Engineering / Land Surveying Technology – AAS

1989 – Present Continuing Education

Completion of annual continuing education and enhancement programs relating to land surveying, civil engineering, soil testing, electronic survey data collection, computer-aided drafting and design (CADD), GPS data reduction, calculations and adjustment and business-related topic and software.

Professional Experience

June 1989 through October 1995
MSA Professional Services
Civil & Surveying Technician / Professional Land Surveyor

I began my career in land surveying with MSA Professional Services (MSA) in Baraboo, Wisconsin in June of 1989 upon graduation from Madison Area Technical College (MATC).

MSA is a multi-disciplined consulting firm that provides professional services in the areas Civil Engineering and Land Surveying. While employed as a Survey Technician with MSA, I was presented the opportunity to experience a wide range of project types across all of the company's disciplines.

I was fortunate to start my career at the emergence of many technologies we now find commonplace. My beginning toolset included: transit, chain, drafting table, scale and a Leroy inking set. A few years later, my toolset was expanded to include: total stations, personal

computers, computer-aided drafting and design (CADD) software and global positioning systems (GPS).

I began to utilize CADD exclusively in 1991, beginning with AutoCAD Version 9 for MS-DOS and Intergraph Microstation Version 3.0. At that time, MSA had only six CADD stations in a then 130-person firm. I was named Land Information Specialist for the firm and also developed and implemented CADD standards for all surveying staff to utilize. I also assisted a national-level client to develop CADD standards which other consultants would later follow. My proficiency was acknowledged by the Wisconsin Society of Land Surveyors, by winning several awards in their annual Map and Plat Contests.

I was introduced to Geographic Information System (GIS) software early in the 1990s, being trained in ESRI ArcCad for MS-DOS for 40 hours at the University of Wisconsin - Madison.

I also began to utilize electronic distance measuring (EDM) equipment by 1991. Early equipment sets included digital theodolites and top-mount EDMs, while still collecting completely hard field notes. Shortly thereafter, Total Stations were implemented at the firm and our first exposure to electronic data collection began. One of my most memorable control surveys was performed with a Geodimeter 440 Total Station and Geodat 400 Data Collector, completely traversing the Village of Lake Delton, Wisconsin for its water distribution system planning in the early 1990s.

1993 brang my introduction to GPS, as applied to land surveying. Utilizing Ashtech model Z-12 receivers, many control surveys were performed to support land information projects.

Obtaining licensure as a Land Surveyor in the State of Wisconsin in 1993 allowed me to advance my position at MSA to that of Professional Surveyor and Project Manager. Having worked directly under licensed land surveyors since beginning my career, this transition came naturally and the newfound duties proceeded swiftly.

Project Manager Responsibilities added client consultation, project research, compliance verification, project cost estimating and budgeting, project scheduling, owner representation and market development responsibilities.

In my final two years of employment at MSA, I was assigned increasingly larger projects to complete and thoroughly expanded my professional knowledge as a result. This level of experience would prepare me for my duties as Deputy County Surveyor for Eau Claire County Wisconsin.

October 1995 through October 1998
Eau Claire County Government
Deputy County Surveyor

In October of 1995, I was appointed Deputy County Surveyor of Eau Claire County Wisconsin. Eau Claire County was accelerating their Public Land Surveying System (PLSS) corner perpetuation and maintenance and had launched a specific program to accomplish these tasks. I was appointed to develop standard operating procedures, hire and train staff and to manage the program. Eau Claire County includes 18 civil townships containing some 2,500 PLSS corners.

Staff included an Assistant County Surveyor who was also a Licensed Surveyor and two Survey Technicians and I received administrative and professional guidance from the County Surveyor.

My first task was to organize the office, surveying equipment and vehicles necessary for the program and to develop a training and procedures manual for every step in the PLSS corner remonumentation process. These procedures were subsequently taught to staff as they were hired into their positions and included: health and safety training; research; land law; field reconnaissance methods; use of surveying equipment (including GPS, total stations and electronic data collection devices); data reduction and adjustment of both GPS and conventionally-collected information; staking of boundaries and construction improvements; corner maintenance and marking; database population and reporting; computer-aided drafting and design (CADD) drafting and base cadastral mapping for tax parcel map development.

The program was designed to prepare the base cadastral layer for the development of the County's future Geographic Information System (GIS). All work was performed utilizing current technologies in positioning methods.

Dual-frequency Global Positioning System (GPS) was utilized to georeference the work. With the purchase of the TOPCON GPS System, professional training in data processing techniques was required and provided by TOPCON programming personnel. Fully-automatic total stations, intelligent data collection and CADD software were used in this process, as well.

As work was completed, a database was developed and populated to track the status of the PLSS corners within the county and to be incorporated into the County GIS.

During my time with Eau Claire County, three civil townships were completely remonumented, controlled and documented. Approximately 25% of the corners had been proved to have been previously perpetuated in error and approximately 65% of previous geodetic location information for the corners was deemed grossly inaccurate.

In addition to the PLSS program, the project team was utilized for other positioning needs of Eau Claire County. These projects included: control surveys for remote sensing, investigative surveys for violations of county ordinances, forensic surveys for the Sherriff's department, floodplain surveys, property legal research, surveys for county-owned lands, property line maintenance and dispute resolution for county forestry projects and other surveys as requested.

Additionally, I was assigned with the review process of land divisions within the county, as well as all survey documents submitted for statutory filing in the office of County Surveyor. I also acted as the County Surveyor in his absence.

October 1998 through October 2001
Vierbicher Associates, Inc.
Survey Team Leader

In October of 1998, I joined the firm of Vierbicher and Associates, Inc. (VAI) as their Survey Team Leader for their Reedsburg, Wisconsin office. VAI is a multi-disciplined consulting firm that provides professional services in the disciplines of civil engineering, land surveying and geographic information systems (GIS).

As Survey Team Leader, I was responsible for the planning, organization, budgeting, scheduling, data management, professional advancement and market development of the firm's land surveying department. The department served all of the firms' disciplines as well as their own clientele in need of professional land surveying and positioning services. I also acted as the firm's resident GPS expert. It was at this time that I was professionally trained in Trimble Geomatics Office Software by Trimble at their Sunnyvale, California facility.

One of the firms' largest market sectors at the time was GIS and land information projects. Under my management, many projects that required precise geodetic positioning of various monumentation, features and improvements were completed.

One of the firms' licensed land surveyors served as the elected Sauk County Surveyor from 1986 until the year 2000. As a deputized assistant, I assisted in providing Sauk County with Public Land Surveying System (PLSS) corner perpetuation, maintenance, geodetic positioning and record management. Nearly 12,000 records of surveys and 3,000 PLSS corner locations had been imaged/scanned and indexed digitally.

In the fall of 1999, VAI was awarded a contract to prepare a county-level network of geodetic control stations referenced to the state-level High Accuracy Reference Network (HARN) or a County HARN Network. I managed the project, completed much of the field work, reduced the field data and performed the final adjustment. The final published documents are available at the web address of:

https://www.co.sauk.wi.us/surveyor/sauk-county-high-accuracy-reference-network-harn

In the fall of 1999, I also obtained licensure as a Land Surveyor in the State of Iowa. Additionally, I had the pleasure of mentoring high school students interested in land surveying and consulting engineering by participating in the local job shadowing program. Several of the participants did go on to pursue a career of this nature and are now gainfully employed in their chosen field.

January 2000 through December 2003
Sauk County Wisconsin Government

Elected to the office of Sauk County Surveyor in 2000, I served the office part-time for two consecutive terms until 2004. The primary duty of the office of County Surveyor in Wisconsin is the maintenance of the Public Land Surveying System (PLSS) corners.

During my terms as Sauk County Surveyor, I established a rigid maintenance program that ensure that 5% of PLSS corners be maintained per year. In addition to these maintenance efforts, several remonumentation projects were administered under my direction. Nearly five civil townships were completed and precisely positioned to assist the County Cartographer with parcel mapping to use as the cadastral fabric of the County Geographic Information System (GIS).

My administration of these projects included design and publication of the Requests for Proposal (RFPs) and their specifications, respondent RFP review, respondent interviews, award of contracts, review of work completed and submitted, dispute resolution between conflicting survey results, indexing and publication of final project results and invoice processing for final payment of consultants.

In addition to the PLSS duties of the office of County Surveyor, I assisted other departments with their legal research and land surveying needs and was charged with the review process of land divisions within the County. I also completed the statutorily-required filing of documents in the office of County Surveyor.

One of my most memorable surveying moments ever was in the fall of 2003 in the Township of Troy, Sauk County, Wisconsin. A contracting surveyor had used lost-corner proportionate methods to establish a PLSS corner as part of a contract. The location he calculated was not in harmony with either the physical occupation in the field or measurements of previous survey work in the area. I recommended that an excavation be made, as the area was in a filled area. I suggested a location and after about an hour and 8 feet of excavated materials, an original, hand-hewn Government Land Office (GLO) oak stake was recovered in near perfect condition. There was no doubt that we had "walked in the footsteps" of the original GLO Surveyors.

October 2001 to Present
The Excelsior Group, LLC
Professional Land Surveyor / Certified Floodplain Manager

In the fall of 2001, I chartered the Excelsior Group, LLC (now EG Surveying & Mapping, LLC) and began to consult to clients under my own name. Since then, I have successfully completed every step in over 1,000 projects of varying size and complexity, for both public and private-sector clientele.

The largest portions of my recent projects are that of boundary retracement and positioning, many including Public Land Surveying System (PLSS) corner positions.

In the year 2008, I was appointed by the advisory committee of the Sauk County Surveyor to review PLSS corner records prepared by the current Sauk County Surveyor for compliance with state statutes and administrative codes.

As a contribution to my local community and to my chosen profession, I have volunteered with: the Boys Scouts of America, Habitat for Humanity, the Wisconsin Woodland Owners Association and the Colvin Crew.

In 2005, I prepared and presented a curriculum to the Boys Scouts of America Troop in Baraboo for the orienteering and surveying merit badge.

In 2006, to assist the Habitat for Humanity, I provided pro bono land surveying services to help complete a residential housing project in Baraboo, Wisconsin.

In the years 2006 and 2007, I prepared and presented a series of seminars to the Wisconsin Woodland Owners Association (www.wisconsinwoodlands.org) regarding land title, boundary determination and easements.

In the year 2007, I became a member of the Colvin Crew (www.colvincrew.org). The goal of the Colvin Crew is to spread the word about a relatively obscure champion of the New York State (NYS) Forest Preserve who was instrumental in the creation of the Adirondack Park. Through his position as Superintendent of NYS Land Surveys (1872-1900), Mr. Colvin presented detailed surveying reports to the NYS Legislators extolling the virtues and importance of preserving that

area of New York State now known as the Adirondack Park. Membership in the Colvin Crew has helped me better understand land title and surveying in the colonial or metes and bounds states.

January 2011 through December 2014
Richland County Wisconsin Government

Appointed by interview to the office of Sauk County Surveyor in 2011, I served the office part-time for two consecutive terms until 2014. The primary duty of the office of County Surveyor in Wisconsin is the maintenance of the Public Land Surveying System (PLSS) corners.

During my terms as Richland County Surveyor, I established a rigid maintenance program that ensure that 5% of PLSS corners be maintained per year. In addition to these maintenance efforts, several remonumentation projects were administered under my direction. Nearly five civil townships were completed and precisely positioned to assist the County Cartographer with parcel mapping to use as the cadastral fabric of the County Geographic Information System (GIS).

My administration of these projects included design and publication of the Requests for Proposal (RFPs) and their specifications, respondent RFP review, respondent interviews, award of contracts, review of work completed and submitted, dispute resolution between conflicting survey results, indexing and publication of final project results and invoice processing for final payment of consultants.

In addition to the PLSS duties of the office of County Surveyor, I assisted other departments with their legal research and land surveying needs and was charged with the review process of land divisions within the County. I also completed the statutorily-required filing of documents in the office of County Surveyor.

January 2020 through December 2020
Dagostino Geospatial, Inc.

Dagostino Geospatial, Inc. (now CHW, an NV5 Company) is a geospatial firm specializing in real property due diligence surveys in southwest Florida.

As Chief Operating Officer, my primary responsibility was the overall day-to-day operation and financial management of a 25-person consulting firm.

Accreditations

- National Institute for Certification in Engineering Technologies (NICET) Certified Civil Engineering Technician #078628 (1990 | Expired)
- Wisconsin Registered Land Surveyor #2185 (1993)
- Wisconsin Civil Engineer-In-Training #15184 (1998 | Expired 2008)
- Iowa Licensed Land Surveyor #14911 (1999)
- Certified Floodplain Manager | ASFPM (2018)
- Florida Professional Surveyor & Mapper #7244 (2019)

Professional Memberships

- Member, Wisconsin Society of Land Surveyors (WSLS), 1992-Present
- Member, Northwest Chapter, WSLS, 1995-1998
- Member, Madison Area Surveyors Council (WSLS Chapter), 2000 – 2010
- Member, Southwest Chapter, WSLS, 2010 - Present
- Member, Wisconsin County Surveyors Association, 1995-2004, 2011-2014
- Member, National Society of Professional Land Surveyors 2009 - Present

Awards

- Special Service Award, Madison Area Technical College, 1989
- Multiple awards from the WSLS mapping and platting contests
- Wisconsin Society of Land Surveyors Voluntarily Informed Professional (VIP)

4.8 B – Education Summary of Matthew M Filus

Matthew M. Filus
Professional Land Surveyor, Certified Floodplain Manager
Managing Member
EG Surveying & Mapping, LLC
625 Granite Avenue
P.O. Box 486
Reedsburg, WI 53959
Office Phone: (608) 747-4363
Mobile Phone: (608) 381-6882
Email: mfilus@eg-wi.com
Web: www.eg-wi.com

Education

1986 - 1987 University of Wisconsin - Baraboo, Wisconsin

Study of liberal arts and sciences in preparation for future education.

1987 - 1989 Madison Area Technical College - Madison, Wisconsin

Civil Engineering / Land Surveying Technology – AAS

Continuing Education

In addition to annual attendance of the Wisconsin Society of Land Surveyors (WSLS) annual institute and chapter meetings, the following is a summary of significant additional continuing education and professional enhancement efforts completed:

1990 Training and certification for use of Troxler nuclear density testing equipment

1992 40-hour superfund site and hazardous material training, UW-Madison College of Engineering

1992 ESRI ArcCAD 40-hour training, UW-Madison College of Engineering / Remote Sensing

1993 Corner (PLSS) evidence analysis seminar, Dennis Mouland of Cadastral Consultants, Inc.

1995 Eagle Point Advantage Series for AutoCAD, Eagle Point, Dubuque, IA

1996 TOPCON GPS post-processing training, Eduardo Falcon, TOPCON

1997 Annual Autodesk product training, Taylor Technologies, Iron Mountain, MI

1998 Annual Autodesk product training, Taylor Technologies, Iron Mountain, MI

2000 63rd Annual Iowa Land Surveyors Conference, Ames, IA
Trimble 40-hour GPS post-processing training, Trimble, Sunnyvale, CA

2001 WSLS Certified Voluntarily Informed Professional or "VIP" status achieved

2001 Project Management Training, Braley Consulting and Training

2003 Private Onsite Waste Treatment Systems (POWTS) Training, Buildings & Safety
Microsoft Office 2003 Training, CareerTrack

2005 Wisconsin Land Information Association (WLIA) annual conference, Green Bay, WI
Certified Soil Tester Training, Buildings & Safety

2006 Land Surveyor's Workshop Continuing Education Cruise, Caribbean
(Hydrology, Earthwork, Legal Research, Easements, Insurance, Litigation)
Certified Soil Tester Training, Buildings & Safety
Erosion Control Training, Buildings & Safety

2007 Tripod Data Systems (TDS) Survey Pro Data Collection Training, Des Moines, IA

2009 WSLS Certified Survey Map (CSM) Seminar, Wisconsin Dells, WI
Managing your business in challenging times webinar, Gary Kent, PLS

2010 Wisconsin Land Information Association (WLIA) annual conference
Wisconsin Association of Land Conservation Employees (WALCE) annual conference
Wetland Plant Identification Training, USDA NRCS, Dodgeville, WI
WSLS Fall Seminar, Conflicts and 1st Surveyor Doctrine, Wisconsin Dells, WI

2011 Wisconsin Association of Land Conservation Employees (WALCE) annual conference
WSLS Spring Workshop, Ethics, Wisconsin Dells, WI
WSLS Fall Workshop, WISDOT TPP and Geodetic Topics, Wisconsin Dells, WI

2012 BLM Bearing Tree Webinar, Dennis Mouland, PLS
Adverse Possession Webinar, Thomas Strong, PLS
FEMA Flood Insurance Study Webinar, Jonathon Terry, PLS

2013 Smart Vent Engineered Flood Vent Training

2014 WSLS Spring Workshop, "Survey Modernization Bill Reviewed", Wisconsin Dells, WI
Presented "Know Your Boundaries", 6 topics to help the tree farm community understand the land survey process, to the Wisconsin Tree Farm Committee
Managing Multiple Priorities, Fred Pryor Seminars
Confined Spaces, Fred Pryor Seminars
Project control, coordinate systems and datums, DiscountPDH.com

2015 DPLE 149 – Just the FAQs on Ethics, RLI Insurance Continuing Education (RLI)
DPLE 150 – Ownership of Documents and Intellectual Property, RLI
DPLE 164 – Managing Risk through Contract Provisions, RLI

2016 Surveyor's Rendevous, Lake George, NY, Surveyor's Historical Society

2018 DPLE 195 – Learning when to waive good-bye (contract waivers), RLI
DPLE 223 – Contract Administration Pitfalls and Pointers, RLI
Fundamentals of Floodplain Management, Florida Floodplain Managers Association
General Ethics and Standards for Professional Land Surveyors, DiscountPDH.com

2019 Mapping SFHAs Using 2D Modeling, Association of State Floodplain Managers
Using LIDAR for LOMAs, Association of State Floodplain Managers
Floodways – The Original Intent, Association of State Floodplain Managers

2020 Elevation Certificate Basics, Florida Floodplain Managers Association
Elevation Certificates and the Community Rating System, Florida Surveying & Mapping Society

2021 Business plans for mapping, Association of State Floodplain Managers

2022 Substanital (Flood) Damage Workshop, WiDNR
Flood openings for floodplain management, Floodproofing.com
FEMA Flood Insurance Studies, PDH Online
DPLE 316 - Contract review for design professionals, RLI
Applied approaches to non-levee features, Association of State Floodplain Managers
Active and passive floodproofing, Floodproofing.com
LiMWA-CAZ Flood Mapping, Florida Floodplain Managers Association
Future conditions flood mapping, Association of State Floodplain Managers
Alternative Stormwater Management, PDH Online
Topography & Surveying – Essential guidelines, PDH Online
Introduction to photogrammetry, Florida Surveying & Mapping Society

2023 Writing boundary descriptions, Florida Surveying & Mapping Society
University of Florida NSRS Workshop, Florida Surveying & Mapping Society
Flood risk management, Association of State Floodplain Managers
Flood risk data initiative, Association of State Floodplain Managers

2024 Wisconsin rules and statutes for land surveyors, McKissock
Ethics for licensed professionals, PDH Online
Fundamentals of project management, PDH Online

4.8 C – Notable Project Experience of Matthew M Filus

Matthew M. Filus
Professional Land Surveyor, Certified Floodplain Manager
Managing Member
EG Surveying & Mapping, LLC
625 Granite Avenue
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Reedsburg, WI 53959
Office Phone: (608) 747-4363
Mobile Phone: (608) 381-6882
Email: mfilus@eg-wi.com
Web: www.eg-wi.com

June 1989 through October 1995
MSA Professional Services
Civil & Surveying Technician / Professional Land Surveyor

Civil & Surveying Technician:

- Preliminary survey, USH 14 bypass, Richland Center, WI.
- Construction layout and inspection, St Croix Meadows Greyhound Track, Hudson, WI.
- Survey, design, drafting, layout and inspection, The Springs Golf Course, Spring Green, WI.
- Worked under Professional Engineers serving approximately 40 Wisconsin and Illinois communities providing municipal and environmental engineering services.
- Acted as Resident Engineer, performed inspection of utility construction, grading, bituminous and concrete paving placement.

Professional Land Surveyor:

- Native American effigy mound preservation survey, St Paul's Lutheran Church, Baraboo, WI.
- PLSS remonumentation and control survey, Town of Winfield, Sauk County, WI.
- Three-dimensional aerial control survey, Water System Design, Village of Lake Delton, WI.
- GIS Implementation Study, City of Baraboo, WI.

October 1995 through October 1998
Eau Claire County Government
Deputy County Surveyor

- PLSS corner perpetuation and maintenance programs including 18 civil townships containing approximately 2,500 PLSS corners.
- Design and population of PLSS corner database (MicroRIM R:BASE).
- Preparation of the base cadastral layer for the development of the County GIS.
- Three-dimensional aerial control survey covering approximately 108 square miles to include the city of Eau Claire and surrounding townships in Eau Claire and Chippewa Counties.
- ALTA/ACSM Land Title Survey of the Eau Claire County Sanitary Landfill for sale to a private holding company.

October 1998 through October 2001
Vierbicher Associates, Inc.
Survey Team Leader

- County-level High Accuracy Reference Network (HARN), Sauk County, WI.
- Construction layout management, STH 35 reconstruction, Hudson, WI to River Falls, WI.
- Land development projects, various Ho-Chunk Nation Properties across Wisconsin.
- GIS control, feature and attribute surveys, Jackson County, WI.

October 2001 to Present
The Excelsior Group, LLC
Professional Land Surveyor

- Retracement surveys of several thousand existing boundaries throughout Wisconsin in both urban and rural environments for public and private clients.
- Platting and creation of several hundred lots throughout Wisconsin by virtue of Metes and Bounds, Certified Survey Maps, Subdivision Plats, Condominium Plats and Cemetery Plats.
- PLSS corner perpetuation, positioning and maintenance contracts with several County Governments including Sauk, Richland and Vernon Counties as well as the Wisconsin Department of Transportation.
- Topographic and design surveys of several hundred sites throughout Wisconsin in both urban and rural environments.

- Floodplain delineation surveys and elevation certificates of numerous properties throughout Wisconsin in both urban and rural environments.

- Quantity surveys and calculations in support of landfill progress as well as litigation cases.

- Construction layout services provided for construction of roadways, buildings and other improvements to property.

- Permitting assistance and representation services to clients in support of zoning changes, zoning variances and board of adjustment hearings.

- Geodetic surveying of monitoring well and other device locations for use in groundwater modeling study, Badger Army Ammunition Plant, Baraboo, WI.

- Assisted in the research, boundary retracement and platting of lands in New York State under the direct supervision of James M. Vianna, PLS.

- Design Survey and Transportation Project Plat, WISDOT ID 1011-03-06, I-39 Madison – Portage, CTH DM, Bridge B-13-0085, Dane County, WI.

- Richland County Surveyor | Services provided to Richland County Government included:
  - Statutory duties of the office of Richland County Surveyor
  - Serve as a County Land Information Officer
  - Design of PLSS corner database for implementation into the County GIS as well as the State Cartographer's Office PLSSFinder application.

- Volk Field / Camp Williams Wisconsin Air National Guard Facility:
  - Aerostar SES | Geodetic locations of multiple monitoring devices
  - Pond & Company | Topographic design survey for fire suppression systems in hangars
  - Bethel Environmental Services | Geodetic locations of perimeter of unexploded ordinance field

4.8 D – Technology Experience of Matthew M Filus

Matthew M. Filus
Professional Land Surveyor, Certified Floodplain Manager
Managing Member
EG Surveying & Mapping, LLC
625 Granite Avenue
P.O. Box 486
Reedsburg, WI 53959
Office Phone: (608) 747-4363
Mobile Phone: (608) 381-6882
Email: mfilus@eg-wi.com
Web: www.eg-wi.com

Field Hardware

- Ancillary surveying equipment (field book, magnetic locator, compass)
- Taping (chaining) equipment
- Leveling equipment including dumpy levels, automatic levels and rotating lasers
- Transits and Theodolites
- Top-mount Electronic Distance Measurement (EDM) equipment
- Fully-automatic total stations; Brands used in chronological order include Omni, Nikon, Geodimeter, Pentax, Lietz, Sokkia, Topcon
- Robotic total stations; Brands used in chronological order include Geodimeter and Topcon, GEOMAX
- Survey-grade Global Positioning Systems (GPS); Models and modes used in chronological order include:
    - Ashtech Z-12 (Static)
    - Topcon Turbo S II (Static, Post-Processed Kinematic or PPK)
    - Trimble 4000, 4400, 4700, 4800 and 5700 (Static, PPK, Real-Time Kinematic or RTK)
    - Trimble 4600LS (static, PPK)
    - Topcon HIPER Lite+ (Static, RTK)
    - Magellan Professional Promark 3 (Static, PPK)
    - CHC X91+ (Static, Post-Processed Kinematic or PPK)
    - GEOMAX Zenith 16
    - CHC i73+
- Resource-grade GPS Systems; Models used in chronological order include:
    - Trimble Pathfinder Pro XR
    - Ashtech Mobile Mapper
    - Ashtech Mobile Mapper CE
    - Magellan Professional Promark 3

Field Software

Conventional:

- Geodimeter proprietary (UDS)
- Corvallis Micro Technology (CMT) Surveyor's Assistant (Pentax-Branded)
- Sokkia SDR
- Trimble Survey Controller
- Tripod Data Systems (TDS) Survey Pro
- Carlson SurvCE & SurvPC versions 2.0 to current (6.xx)
- GEOMAX X-PAD

GPS/GNSS:

- Topcon Turbo S II
- Trimble Data Controller
- Trimble Survey Controller
- Tripod Data Systems (TDS) Survey Pro
- Carlson SurvCE & SurvPC
- Carlson GIS-CE
- ESRI ArcPAD
- GEOMAX X-PAD

Office Software

General Office / Productivity:

- MicroRIM R:BASE database software
- Microsoft Office through version 2019
  (Outlook, Word, Excel, PowerPoint, Publisher, Access)
- Intuit QuickBooks Pro Accounting Software through version 2018
- Intuit Quicken version 2024
- Nitro Pro PDF Suite
- 17hats Business Management Software
- Paymo Business Management Software

Civil Engineering / Surveying Productivity:

- AutoCAD versions 9-2025
- DCA/Softdesk Survey Modules for AutoCAD
- Eagle Point Advantage Series Civil-Survey modules for AutoCAD
- Land Development Desktop 2/3 & Civil 3D
- Carlson Civil Suite through version 2025 with SurvNET Least-Squares Adjustment
- Carlson SurveyGNSS Post-Processing GNSS Software
- TOPCON TGPS & Magnet Office GPS Software
- Trimble Wave, GPSurvey & Trimnet GPS Software
- Trimble Geomatics Office GPS Software
- Trimble Business Center GPS Software
- ESRI ArcGIS Desktop Version 10
- Blue Marble Geographics Global Mapper through version 25.1

4.8 E – Teaching Summary of Matthew M Filus

Matthew M. Filus
Professional Land Surveyor, Certified Floodplain Manager
Managing Member
EG Surveying & Mapping, LLC
625 Granite Avenue
P.O. Box 486
Reedsburg, WI 53959
Office Phone: (608) 747-4363
Mobile Phone: (608) 381-6882
Email: mfilus@eg-wi.com
Web: www.eg-wi.com

June 1989 through October 1995
MSA Professional Services
Civil & Surveying Technician / Professional Land Surveyor

During my tenure with MSA, I was named Land Information Specialist for the firm, developed and implemented CAD standards for all surveying staff to utilize and assisted a national-level client to develop CAD standards which other consultants would later follow.

Additionally, I implemented standard operating field procedures and training guides for migration to use of fully-automatic total stations. I traveled to regional MSA offices throughout the Midwest to implement these procedures.

October 1995 through October 1998
Eau Claire County Government
Deputy County Surveyor

While in Eau Claire, I developed training routines, procedures and manuals for every step in the Public Land Surveying System (PLSS) corner remonumentation process. These procedures were subsequently taught to staff as they were hired into their positions.

These procedures included: health and safety training; research; land law; field reconnaissance methods; use of surveying equipment (including GPS, total stations and electronic data collection devices); data reduction and adjustment of both GPS and conventionally-collected information; staking of boundaries and construction improvements; corner maintenance and marking; database population and reporting; computer-aided drafting and design (CADD) drafting and base cadastral mapping for tax parcel map development.

As an active member of the Wisconsin County Surveyor's Association (WCSA), I was a member of the committee that assembled the WCSA County Surveyor's handbook. This document was created to assist County Surveyors, their steering committees of County Supervisors and private surveyors as to the operations of a typical County Surveyor's Office.

In the summer of 1997 I was a presenter at the summer meeting of the WCSA. I prepared and presented a history of the remonumentation program of Eau Claire County and the future plans for completion and implementation into the county GIS.

October 1998 through October 2001
Vierbicher Associates, Inc.
Survey Team Leader

As Survey Team Leader, I was responsible for the training and professional advancement of the firm's land surveying staff in the Reedsburg, Wisconsin office. I implemented a series of "brown bag" seminars over a weekly luncheon to train staff on procedures and policies of the firm.

Designated as the resident GPS expert, I was also responsible for company-wide standards for operation and proper use of GPS equipment.

October 2001 to Present
The Excelsior Group, LLC
Professional Land Surveyor

Since beginning self-employment, I have been presented with many additional opportunities to educate others.

As County Surveyor for both Sauk and Richland Counties, I have been afforded the opportunity to present ideas, concepts and budgets to County Staff and Board Members. Having a combined seven years of experience as a County Surveyor and three years as a Deputy, I have attended and presented at numerous meetings discussing a variety of topics over those 10 years.

In 2005, I prepared and presented a curriculum to the Boys Scouts of America Troop in Baraboo for the orienteering and surveying merit badge.

In the years 2006 and 2007, I prepared and presented a series of seminars to the Wisconsin Woodland Owners Association (www.wisconsinwoodlands.org) regarding land title, boundary determination and easements.

In the year 2007, I became a member of the Colvin Crew (www.colvincrew.org). The goal of the Colvin Crew is to spread the word about a relatively obscure champion of the New York State (NYS) Forest Preserve who was instrumental in the creation of the Adirondack Park. Through his position as Superintendent of NYS Land Surveys (1872-1900), Mr. Colvin presented detailed surveying reports to the NYS Legislators extolling the virtues and importance of preserving that area of New York State now known as the Adirondack Park. Membership in the Colvin Crew has helped me better understand land title and surveying in the colonial or metes and bounds states.

In the spring of 2012, Michael H Webb, Colvin Crew "Camp Clerk" and lead land surveying technology instructor at the State University of New York (SUNY) Ranger School in Wanakena, NY invited me to present a discussion to his students about the Public Land Surveying System (PLSS). In conjunction with the annual meeting of the Colvin Crew, I gave a 2-hour primer on the topic that enlightened the students and academic staff on the PLSS.

Richland County Surveyor

Richland County Courthouse
c/o Register of Deeds
P.O. Box 337
181 West Seminary Street
Richland Center, WI 53581

Monday, February 20, 2012

Barbara J Scott
MIS Director
Richland County Government
221 West Seminary St
Richland Center, WI 53581

Re: Richland County Public Land Surveying System (PLSS) Database

Barb,

As requested, I am providing you with a proposed conceptual database model for future use in managing PLSS corner information for Richland County PLSS corners.

Richland County Government has been very progressive in the last 30 years by completing substantial re-monumentation of nearly all PLSS corners within its boundaries. Most of these corners have been documented in accordance with Wisconsin Administrative Code Chapter A-E 7.08, by virtue of a U.S. Public Land Survey Monument Record or "Tie Sheet". Additionally, approximately 65% of these corners have been assigned survey-grade (1-2 cm-level) coordinates related to the Wisconsin Coordinate Reference System (WISCRS). The PLSS serves as the framework for land description in Richland County and the coordinate values provide a geographically correct spatial reference system to base the Geographic Information System (GIS) upon.

There are many initiatives by Federal, State and Local Governments already underway throughout the PLSS states that have established a basis for development of PLSS database models, which I feel we should build upon to have a model that will integrate easily with other systems already in place. One such initiative is the Wisconsin State Cartographer's Office (SCO) statewide PLSS layer project. It is my intent to include adequate fields of information across several tables to allow such integration.

Given this brief background, I am proposing four main tables to allow this information to be maintained effectively. Inside these tables there are other opportunities to further divide the dataset, which I have denoted with an asterisk (*) and added comments.

Table 1: PLSS CORNERS

This table shall serve as the main table in the database, containing information for every PLSS corner within the County and will provide essential location information for the corner as related to the PLSS. This table shall have one-to-many relationships with the other tables, as each corner may have multiple documents and/or coordinates assigned to it, but there is only one corner location, being where it was originally placed in the original Government Land Office (GLO) survey.

Field	Example	Description	Comments
Corner Number	41101270000	Romportl System Number	Primary Key .PDF guide attached
Volume	11N01E	6-digit Township & Range Value	For use in building a GCS index for ROD .PDF guide attached
Page	0105	4-digit Corner Index Number from Current System w/ leading zeroes	For use in building a GCS index for ROD .PDF guide attached
Corner Type	Closing Corner, ¼ Corner, Section Corner, Meander Corner, Witness Corner, Offset Corner	GLO/BLM Corner Type Description	Use GLO/BLM Corner Type Descriptions

Table 2: PLSS DOCUMENTS

This table will relate to the PLSS Corners Table by the Corner Number and will contain fields of information taken from documents pertaining to the PLSS corners that are filed in the Register of Deeds office. U.S. Public Land Survey Monument Records or "Tie Sheets" are the primary form of these documents. Additionally, Maintenance Records and Miscellaneous documents also exist within the files.

Field	Example	Description	Comments
Corner Number	41101270000	Romportl System Number	.PDF guide attached
Document Number	272560	Unique, 6-digit Document Number Assigned by the ROD	To link to image file through RODDirect. Unique ID of Record when combined with Corner Number.
Document Type	Tie Sheet, Maintenance Record, Miscellaneous	Type of Document	3 Options as stated under the example column. *
RLS Number	2185	4-digit Surveyor License Number certifying document	To link to Surveyor Table for additional attributes
Document Date	01/01/2012	RLS Signature Date	
Filing Date	01/01/2012	ROD Filing Date	
URL	...272560.PDF	Link to Document Image	Image in RODDirect System (URL+Document Number)

Table 3: PLSS COORDINATES

This table will relate to the PLSS Corners Table by the Corner Number and will contain fields of information taken from documents pertaining to the PLSS corners that are filed in the Register of Deeds office as well as coordinates and elevations derived from various other sources such as remonumentation projects and bounty system reimbursements. Richland County's GIS is referenced horizontally to WISCRS, therefore this table will only contain values related to this coordinate system. Many elevation values have also been compiled through various sources. These values will be tabulated, but should not be relied upon as benchmarks due to inadequate information as to which vertical datum the values are related to as well as the vertical instability of many PLSS corner monuments.

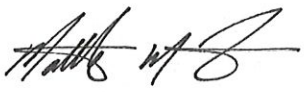
Field	Example	Description	Comments
Corner Number	41101270000	Romportl System Number	.PDF guide attached
Position Number	001	Auto Assigned	Unique ID of Record when combined with Corner Number
RLS Number	2185	4-digit Surveyor License Number providing location	To link to Surveyor Table for additional attributes
Monument Type	RCCIM, Harrison, 1¼" Rod, Etc.	Monument Type	Allow for unique entries and build lookup table*
WISCRS Northing	123,456.789	Northing (Y) Value	Expressed in Decimal US Feet
WISCRS Easting	123,456.789	Easting (X) Value	Expressed in Decimal US Feet
WISCRS Adjustment	NAD83(91), NAD83(97), NAD83(2007), NAD83(2011)	NAD 83 Adjustment	Adjustment Value, currently four (4) options noted at left
Northing Accuracy	0.033	Error Estimate of Northing (Y) Value	Expressed in Decimal US Feet
Easting Accuracy	0.033	Error Estimate of Easting (X) Value	Expressed in Decimal US Feet
Elevation	901.025	Elevation	Expressed in Decimal US Feet
Elevation Datum	NGVD29 or NAVD88	Vertical Datum	Expressed in Decimal US Feet
Elevation Accuracy	0.033	Error Estimate of Elevation (Z) Value	Expressed in Decimal US Feet

Table 4: SURVEYORS

Look up table for information about the Surveyor and agency responsible for the PLSS Document and/or PLSS Coordinates for a PLSS Corner.

Field	Example	Description	Comments
RLS Number	2185	4-digit Surveyor License Number	To link to Document and Coordinate Tables
Last Name	Filus	Surveyor Last Name	
First Name	Matthew	Surveyor First Name	
Middle Initial	M	Middle Initial	

Respectfully Submitted,



Matthew M Filus
Richland County Surveyor
Wisconsin Registered Land Surveyor 2185

Wisconsin Corner Point Identification System

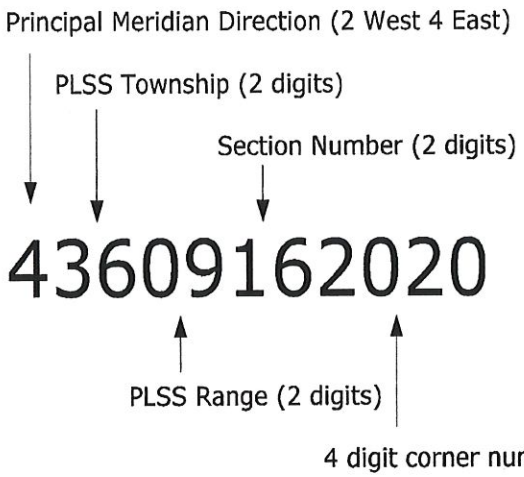
January 2006

The Wisconsin Point Identification system was developed by a special committee chaired by Mike Romportl, Oneida County Surveyor in the early 1990's. This system has been adopted by the Wisconsin Department of Natural Resources (WDNR) in their Land Net program and has been propagated by the Wisconsin Land Information Program.

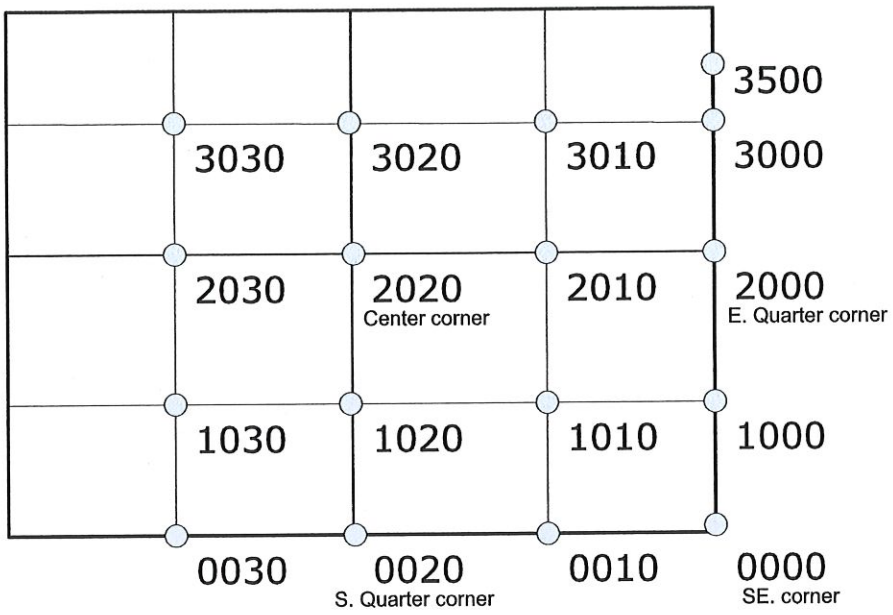
This paper is based on the original document from the Romportl special committee.

Definition

The Wisconsin Point ID is a system of numbering corners of the Public Land Survey System in Wisconsin that provides a unique number for each corner. The basic components of the Wisconsin Point ID are as shown below.



The 4 digit corner number identifies the corner based on its position within the section. A section divided in sixteenths is shown below.



This system uses the south to north approach in a section as shown above. Rows are numbered from 00-30 south to north and columns are numbered east to west 00-30. As shown in the figure above the Southeast corner of a section is always the origin of the system being 0000. Other corners are numbered as shown in the Figure, for example the South quarter corner is 0020; the center corner is 2020; and the East quarter corner is 2000.

These numbers always identify the locations listed regardless of the size of the section. The row and column number is prefixed by the principal meridian indicator, town, range, and section number that is immediately north and west of the corner or point being defined. In Wisconsin, there is only one principal meridian so there is no need for an identifier of the principal meridian itself.

To make the number unique the south and eastern most section lines always take precedence. So in the figure above the corners along the north line of the section illustrated are numbered from the section number to the North.

Special Situations

Closing Corners

Closing corners are numbered according to the section in which they close not the section above or to the west. Use ~~row~~ 40 and the corresponding row and/or column to assign the number.

In special cases such as a closing corner on a standard parallel (correction line), the row would be assigned 90 and the town, range, and section which the closing corner controls would be its prefix. The 40-90 row series acts as a red flag situation.

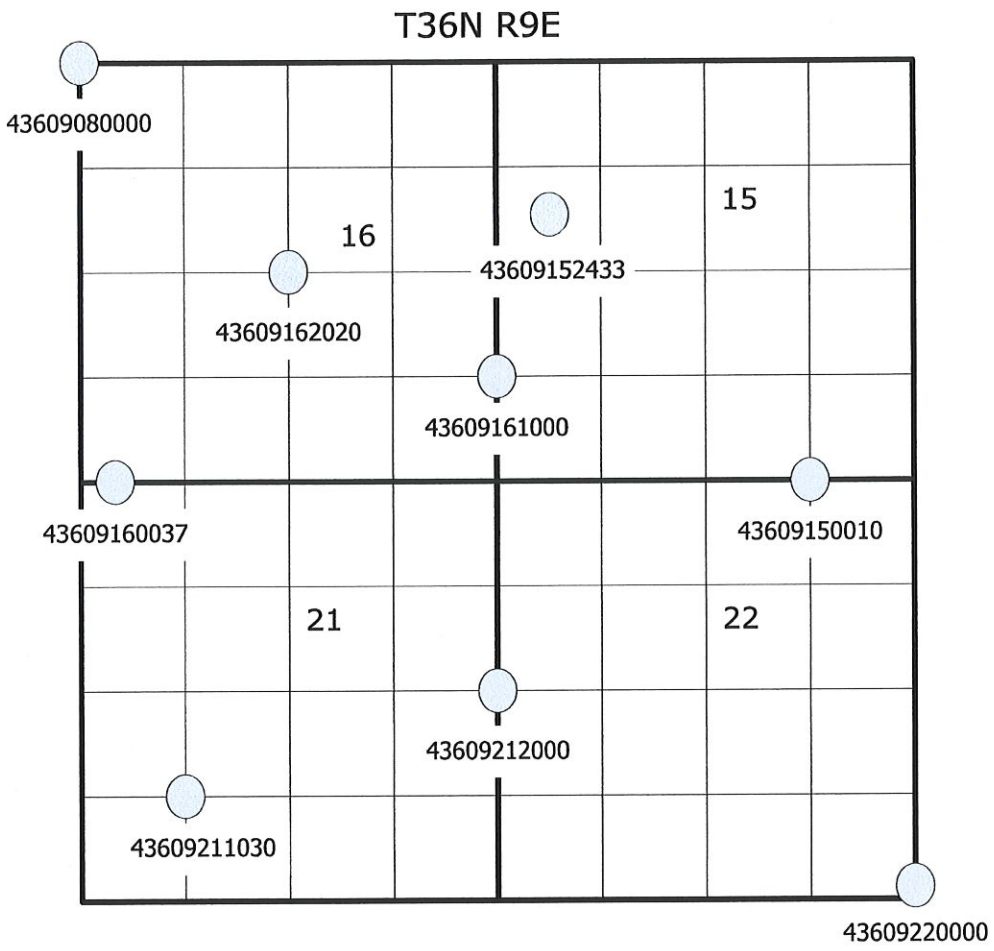
Excess
Another special case is when excess or deficiencies in sections which were put into the north and west part or the township and Government Lots were assigned resembling ¼-¼ sections. For these cases the rows and/or columns could continue up to 80 to accommodate this condition.

Meander Corners
Meander Corners would be assigned identifications based on an approximation of the row and column number where it lies in the section since they do not fall in predicted locations.

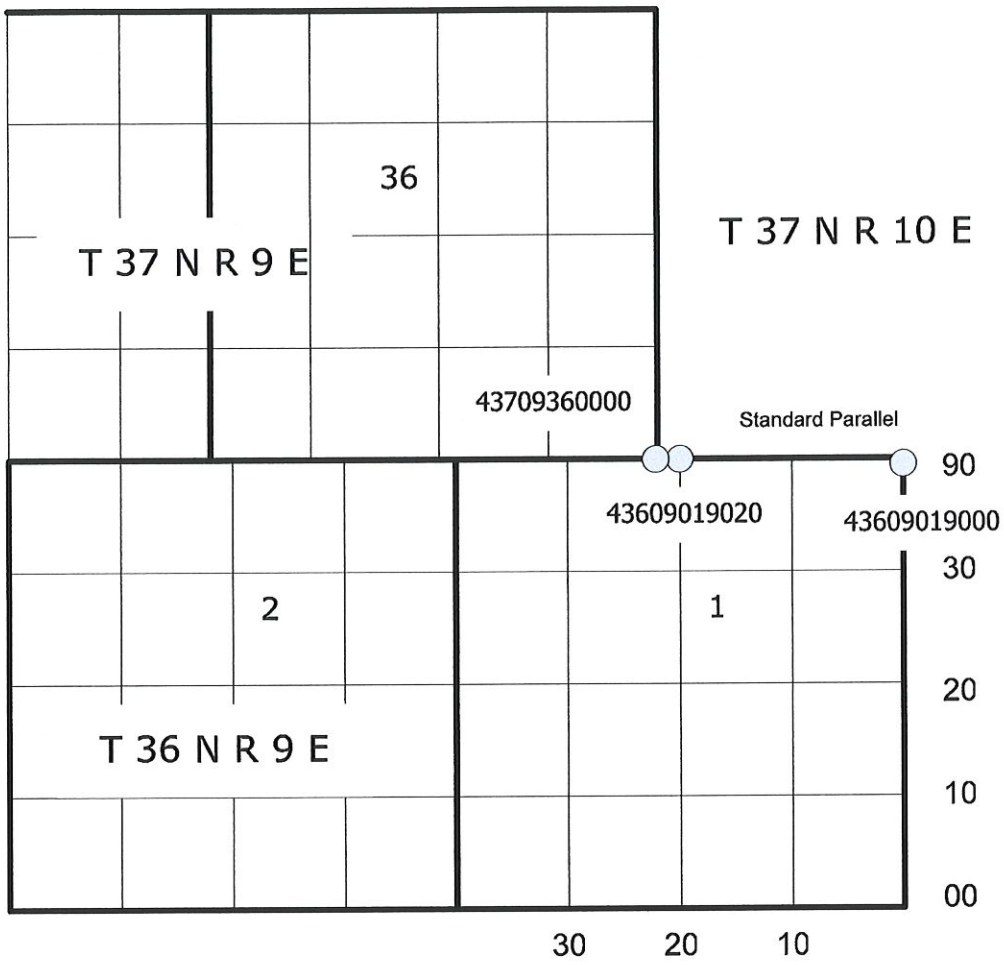
Control
Other control points both vertical and horizontal are included in this schema by assigning identifications of an approximate row/column number. This places the control approximately inside a sixteenth area.

Some Additional Examples

The following figures describe the use of the Wisconsin ID system.



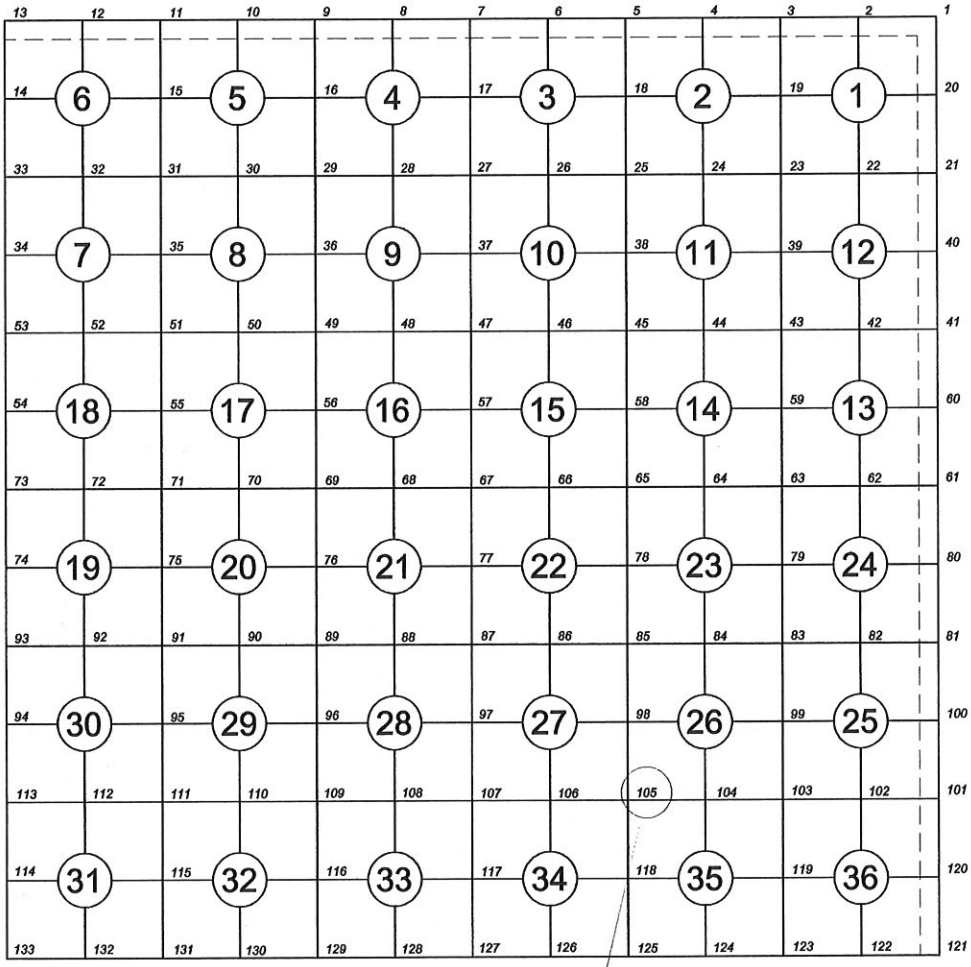
- ID 43609220000 is the SE corner of section 22 T36N R09E and the SW corner of section 23 T36N R09E and the NW corner of section26 T36N R09E and the NE corner of section 27 T36N R09E.
- ID 43609212000 is the E¼ corner of section 21 T36N R09E and the W¼ of section 22 T36N R09E
- ID 43609211030 is the center 1/16 corner of the SW quarter of section 21 T36N R09E
- ID 43609150010 is the East 1/16 corner on the south line of section 15 T36N R09E
- ID 43609160037 is a meander corner on the south line of section 16 T36N R09E, approximately 37 units west of the southeast corner of section 16
- ID 43609161000 is the south 1/16 corner on east line of section 16 T36N R09E
- ID 43609162020 is the center corner of section 16 T36N R09E
- ID 43609152433 is a point in the SW¼-NW¼ of section 15 T36N R09E, approximately 24 units north and 33 units west of the southeast corner of 15
- ID 43609080000 is the SE corner of section 8 T36N R09E, the SW corner of section 9 T36N R09E, the NW corner of section 16 T36N R09E and the NE corner of section 17 T36N and R09E



- ID 43709360000 is the SE corner of Section 36 T37N R09E and the SW corner of section 31 T37N R10E
- ID 43609019000 is the NE corner of section 01 T36N R09E and the NW corner of section 06 T36 R10E. The 90 series indicates corner is on a standard parallel
- ID 43609019020 is the N¼ corner of section 1 T36N R09E

VOLUME / PAGE NUMBERING RULE DIAGRAM

U.S. PUBLIC LAND SURVEY MONUMENT DIAGRAM
TOWN 11 NORTH - RANGE 1 EAST
ROCKBRIDGE TOWNSHIP
RICHLAND COUNTY, WISCONSIN



RULES & EXAMPLE

THE VOLUME (TOWN & RANGE EG 11N01E) AND PAGE (CORNER INDEX NUMBER EG 0105) SHALL BE DERIVED FROM THE SUBJECT TOWNSHIP EXCEPT FOR THE NORTHERN AND EASTERN TIERS OF CORNERS, WHICH WILL BE DERIVED FROM THE APPRORIATE, ADJOINING TOWNSHIP.

EXCEPTIONS TO THIS RULE ARE:

1) CLOSING CORNERS

2) THE LIMITS OF THE COUNTY (COUNTY LINES)

IN THESE CASES, THE NUMBERS SHALL BE DERIVED FROM THE SUBJECT TOWNSHIP

N

SCALE: 1" = 5000 FEET ±

Table 1: PLSS CORNERS

Field	Example	Description	Comments
Corner Number	41101270000	Romportl System Number	Primary Key .PDF guide attached
Volume	11N01E	6-digit Township & Range Value	For use in building a GCS index for ROD .PDF guide attached
Page	0105	4-digit Corner Index Number from Current System w/ leading zeroes	For use in building a GCS index for ROD .PDF guide attached
Corner Type	Closing Corner, ¼ Corner, Section Corner, Meander Corner, Witness Corner, Offset Corner	GLO/BLM Corner Type Description	Use GLO/BLM Corner Type Descriptions

Table 2: PLSS DOCUMENTS

Field	Example	Description	Comments
Corner Number	41101270000	Romportl System Number	.PDF guide attached
Document Number	272560	Unique, 6-digit Document Number Assigned by the ROD	To link to image file through RODDirect. Unique ID of Record when combined with Corner Number.
Document Type	Tie Sheet, Maintenance Record, Miscellaneous	Type of Document	3 Options as stated under the example column. *
RLS Number	2185	4-digit Surveyor License Number certifying document	To link to Surveyor Table for additional attributes
Document Date	01/01/2012	RLS Signature Date	
Filing Date	01/01/2012	ROD Filing Date	
URL	...272560.PDF	Link to Document Image	Image in RODDirect System (URL+Document Number)

Table 3: PLSS COORDINATES

Field	Example	Description	Comments
Corner Number	41101270000	Romportl System Number	.PDF guide attached
Position Number	001	Auto Assigned	Unique ID of Record when combined with Corner Number
RLS Number	2185	4-digit Surveyor License Number providing location	To link to Surveyor Table for additional attributes
Monument Type	RCCIM, Harrison, 1¼" Rod, Etc.	Monument Type	Allow for unique entries and build lookup table*
WISCRS Northing	123,456.789	Northing (Y) Value	Expressed in Decimal US Feet
WISCRS Easting	123,456.789	Easting (X) Value	Expressed in Decimal US Feet
WISCRS Adjustment	NAD83(91), NAD83(97), NAD83(2007), NAD83(2011)	NAD 83 Adjustment	Adjustment Value, currently four (4) options noted at left
Northing Accuracy	0.033	Error Estimate of Northing (Y) Value	Expressed in Decimal US Feet
Easting Accuracy	0.033	Error Estimate of Easting (X) Value	Expressed in Decimal US Feet
Elevation	901.025	Elevation	Expressed in Decimal US Feet
Elevation Datum	NGVD29 or NAVD88	Vertical Datum	Expressed in Decimal US Feet
Elevation Accuracy	0.033	Error Estimate of Elevation (Z) Value	Expressed in Decimal US Feet

Table 4: SURVEYORS

Field	Example	Description	Comments
RLS Number	2185	4-digit Surveyor License Number	To link to Document and Coordinate Tables
Last Name	Filus	Surveyor Last Name	
First Name	Matthew	Surveyor First Name	
Middle Initial	M	Middle Initial	