

WLIA Standard
PLSS Database Definitions

Version: June 2000

WLIA Standard 2000 - 7

June 2000

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Frontispiece

This standard was developed by the Wisconsin Land Information Association PLSS Database Definitions, a task force operating under the direction of the WLIA's standing Technical Committee.

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Task Force Mission Statement:

The WLIA PLSS Database Definitions Task Force is charged with the following:

1. Evaluate the opportunity to standardize the elements and naming conventions for Public Land Survey System corners.
2. Provide recommendations to the WLIA Technical Committee for establishing guidelines and/or standards related to PLSS database definitions.

Table of Contents

1.0	Purpose	page 1
2.0	Background	page 1
3.0	Logical Model - Entity and Attribute Definitions	page 2
4.0	Physical Model - Table and Field Definitions	page
11		
	Appendix A Corner Type Definitions	page 16
	Appendix B Survey System Definitions	page 19

1.0 Purpose

The purpose of this database is:

1. To serve as a standard set of definitions for data related to PLSS Section corner and other corner data. These standard definitions will facilitate data exchange, encourage the wide dissemination and use of common corner definitions, and provide an inventory of PLSS and other corners that are needed to support land records modernization in Wisconsin.
2. To provide the standards for databases related to PLSS and other corners in a way that supports communication, land surveying, mapping, and GIS applications.

2.0 Background

This document is based on definitions contained in the Federal Geographic Data Committee (FGDC) Subcommittee on Cadastral Data Cadastral Data Content Standard. This standard took four years to develop and finalize. It was adopted by the FGDC in December 1996. Committee membership included land surveyors, GIS specialists, and land records managers.

The FGDC standard definitions have been adapted to Wisconsin conditions. This document includes the logical data definitions as well as physical tables that reflect this design. There are some limitations on the physical design information.

1. The table and field names are expressed in all capital letters. No numbers or lower case letters are used.
2. The table names and field names are a maximum of six letters long. This accommodates the computer naming systems and keeps the names brief.
3. The table names and field names are short, but are as mnemonic as possible given the six letter limit.
4. Attributes that end in ID are a sequentially assigned number, which is always an integer and is used for internal database relationships.
5. Menus and interfaces may use longer and more descriptive information for prompts and menus and displays.
6. Repetitive fields do not need to be stored in internal databases. For example, the Township direction of North holds for the entire state and should be included on displays and exports, but is not necessary for internal databases.
7. The term free text in domain of values means that there is no domain specified. If the

term free text follows a list of domain values, it means that other values can be added. This concept is used to keep the standard as flexible as possible.

3.0 Logical Model - Entity and Attribute Definitions

This section defines the entities and attributes used in the Physical Model. These are listed in alphabetical order.

AGENT

An Agent is an individual, organization, or public agency that has established a monument or coordinate value for a corner.

ATTRIBUTES:

Agent ID

The Agent is the primary key, which identifies each record or occurrence in the Agent entity.

Domain: numeric

Former Agent ID

The Former Agent points to another record in the Agent entity, and typically, points to a previous name by which the Agent was known.

Domain: numeric

Alias Agent ID

The Alias Agent has additional information about the Agent. Typically, this attribute is used to point to an alternate name by which the Agent is also known.

Domain: numeric

Agent Name

This is the name of the Agent. This can be the name of a firm, an individual, or an agency.

Domain: free text

CORNER

A Corner is a legal location that in this database is a corner of the Public Land Survey System or some other major division of land, such as a Military Reservation. In the Public Land Survey System and other major land divisions, each corner of the area is in one place. Over time there may be multiple representations of this corner, but there is legally one place and one occurrence for each corner.

Corner ID

The Corner ID is the primary key, which identifies each record in the Corner entity.

Domain: numeric

Corner Type

The Corner Type is a corner classification. The corner classification and the corner qualifier in the original FGDC standard have been combined to form this attribute called the corner type. See Appendix A for definitions.

Domain: Aliquot Part Corner, Angle Point, Auxiliary Meander Corner, Center Quarter Section Corner, Intersection Point, Crossing Closing Corner, Location Corner, Location Monument, Meander Corner, Mile Corner, Mile Post, Point on Line, Quarter Corner, Section Corner, Special Meander Corner, Township Corner, Witness Point, free text

The words closing, witness, auxiliary, or amended can be added to any of the corners on this list as needed to describe the corner type.

Corner Local Label

The Corner Local Label is an internal identifier, such as the Forest Service Number, a Control Diagram Number, the DNR/Romportl Number or other local, label for identifying the corner.

Domain: free text

CORNER POINT

A Corner Point is a record about a corner which contains information about the monument, the coordinate, or the monument and coordinate of a corner. A corner could have multiple corner point records. For example, one corner might have multiple corner monument records. A corner could also have multiple coordinate values, such as a 1:100,000 and a 1:24,000 coordinate. If the coordinate value applies to a particular monument, then the monument type and monument record information should be included with the coordinate information.

ATTRIBUTES:

Corner Point ID

The Corner Point ID is the primary key, which identifies each record in the Corner Point entity.

Domain: numeric

Corner ID

The Corner ID is a foreign key, which points to a record the Corner entity, where information about the Corner can be found.

Domain: numeric

Control Point

A Control Point is a spatial or geographic control point that is not coincident with a corner location. WLIA has an established standard for geodetic control points. This

attribute could point to a geodetic control database. It is included in this design to illustrate the linkage between WLIA standards.

Domain: text

Monument Type

The Monument Type describes the material, composition, and other characteristics of the physical corner marker, if present.

Domain: Aluminum Cap, Aluminum Marker, Axle, Bolt, Brass Cap, Cap-And-Bolt, Concrete Post, Disk, Fence Post, Iron Pipe, Iron Post, Marked Stone, Metal Rod, Nail, PK Nail, Rebar, Rock, Rock Cairn, Steel Pin, Tree, Water Cap, Wooden Hub, Wooden Stake, free text

Agent ID

The Agent ID a foreign key which points to an occurrence in the Agent entity, where information about the agent which established the monument can be found.

Domain: numeric

Monument Record

The Monument Record is the information about where the Monument Record for a corner or control point can be found. For Control Points this may be the Blue Book Record or the traditional NGS Stations Information Sheet. For PLSS Corners this will be the Wisconsin Monument Record.

Domain: text

CORNER POINT MEASURED COORDINATE

The Corner Point Measured Coordinate is a X,Y; X,Y,Z,; or Z value for a Corner Point.

ATTRIBUTES:

Corner Point ID

The Corner Point ID is a foreign key, which points to a record in the Corner Point entity, where information on the Corner Point can be found.

Domain: numeric

Agent ID

The Agent ID is a foreign key, which points to an occurrence in the Agent entity, where information about the agent which established the coordinate values can be found.

Domain: numeric

Horizontal Accuracy

The Horizontal Accuracy describes the relative and/or absolute quality of the horizontal components of the coordinate value. Specifying the National Geodetic Survey Class or Order, National Map Accuracy Standards, or an error ellipse value from an adjustment are examples of absolute positioning. The linear error of closure or an estimate of the relative accuracy in distance are examples of relative accuracy.

Domain: free text

Vertical Accuracy

The Vertical Accuracy describes the relative and/or absolute quality of the vertical or elevation components of the coordinate value. A level line closure is a relative accuracy and a specified national Geodetic Survey order or class is an absolute accuracy.

Domain: free text

Coordinate Method

The Coordinate Method describes the procedures used to establish the coordinate value. These may include traditional field traverse, digitized, global positioning system, or estimated placement.

Domain: free text

Source Material

The Source material is used to determine what sources were used for the Coordinate Methods. For example, a corner may be digitized and the source material may be a USGS quadrangle map or a digital orthophotography image.

Domain: free text

X Coordinate

This is the X Coordinate value or easting for a coordinate set.

Domain: numeric

Y Coordinate

This is the Y Coordinate value or northing for a coordinate set.

Domain: numeric

Z Coordinate

This is the Z Coordinate value or elevation, which may occur with or without associated X and Y values.

Domain: numeric

Current

Current is used to specify whether or not the listed coordinate value is the currently used value in the GIS or land records modernization system.

Domain: Y or N

METADATA LINK

Metadata Link describes information that pertains to an entire file or database system.

This information needs to be connected to the database system, but does not need to be repeated for every record. Typically this information can be held in a separate, used for display and added to any data files that are exported or shared. WLIA has a task force on Metadata that will specify the required information for metadata files.

Contact Information

Name, address, telephone number, fax number, email, and other information necessary to locate and communicate with the custodian of this database and the person who will be handling data distribution. This is not the contact information for individual coordinate values or individual Monument Records.

Domain: free text or various fields (dependent on WLIA Metadata Task force)

Horizontal Datum

This is the horizontal reference datum used for the coordinate values.

Domain: NAD83(91), NAD83(86), NAD27, none, free text

Vertical Datum

This is the value for the vertical reference surface for points with elevation values.

Domain: NAVD29, NGVD88, local, none, free text

Coordinate System

The coordinate system includes the definition of the parameters for coordinate values. If the coordinate system is not a standard system defined in the Wisconsin State Cartographer's publication Wisconsin Coordinate Systems, then the full coordinate system definition must be provided.

Domain: Wisconsin County Coordinate (name the County), State Plane Coordinate (name the zone) Universal Transverse Mercator (name the zone) Wisconsin Transverse Mercator, latitude-longitude, free text

Units of Measure

These are the units of measure used for the horizontal and vertical coordinate values.

Domain: survey feet, international feet, meters, degrees, free text

PUBLIC LAND SURVEY SYSTEM TOWNSHIP

In the Public Land Survey System a Township refers to a unit of land, that is nominally six miles on a side, usually containing 36 sections. All Public Land Survey Townships in Wisconsin are based on the Fourth Principal Meridian. This information can be added to all records if there is a data exchange with another state or the Federal Government.

ATTRIBUTES:**PLSS Township ID**

The PLSS Township ID is a primary key, which identifies each record in the Public Land Survey System Township entity.

Domain: numeric

Township Number

The Township Number indicates the number of rows of townships, north or south from a

Public Land Survey System Origin. All Townships in Wisconsin are North of the Baseline, so the Township Direction is not included in this database, but can be added for exchange with other states or the federal government.

Domain: numeric

Township Fraction

Township Fractions are created when there are gaps between surveyed Township boundaries or due to excess size in Townships that arose from executing original surveys.

Domain: 1/4 Township, ? Township, 3/4 Township

Range Number

The Range Number indicates the number of columns of townships, east or west from a Public Land Survey System Origin.

Domain: numeric

Range Direction

The Range Direction is the direction of a column of townships from a Public Land Survey System Origin.

Domain: East, West

Range Fraction

Range Fractions are created when there are gaps between surveyed Township boundaries or due to excess size in Townships that arose from executing original surveys.

Domain: 1/4 Range, ? Range, 3/4 Range

PUBLIC LAND SURVEY SYSTEM TOWNSHIP FIRST DIVISION

Public Land Survey System Townships first divisions are normally Public Land Survey System Tracts or Public Land Survey System Sections. This entity is the primary or first subdivision of a Public Land Survey System Township.

ATTRIBUTES:

PLSS First Division ID

The PLSS First Division ID is a primary key, which identifies each record in the Public Land Survey System Township First Division entity.

Domain: numeric

PLSS Township ID

The PLSS Township ID is a foreign key, which points to a record in the Public Land Survey System Township entity, where information on the Public Land Survey System Township can be found.

Domain: numeric

First Division Type

The First Division Type of a Public Land Survey System Township is the primary or first subdivision category.

Domain: Section, Lot, Tract, Protraction Block, Township Lot, PLSS Tract, Parcel, Fractional Section, free text

First Division Designator

The First Division Designator is the letter, number, or letter number combination that identifies the First Division.

Domain: free text

PUBLIC LAND SURVEY SYSTEM TOWNSHIP SECOND DIVISION

Public Land Survey System Townships second division is normally a Public Land Survey System Aliquot Part. This entity is the second subdivision of a Public Land Survey System Township.

ATTRIBUTES:

PLSS Second Division ID

The PLSS Second Division ID is a primary key, which identifies each record in the Public Land Survey System Township Second Division entity.

Domain: numeric

PLSS First Division ID

The PLSS First Division ID is a foreign key which points to a record in the Public Land Survey System First Division entity, where information on the Public Land Survey System First Division can be found.

Domain: numeric

Second Division Type

The Second Division Type of the Public Land Survey System is the second subdivision category. For normal PLSS divisions this would be a section division.

Domain: Block, Lot, Other Aliquot Part, Protracted Lot, Quarter, Parcel, Lot, Tract, free text

Second Division Designator

The Second Division Designator is the letter, number, or letter number combination that identifies the Second Division.

Domain: N, S, E, W, N2, S2, E2, W2, NE, NW, SE, SW, NE, NW, SE, SW, free text.

PUBLIC LAND SURVEY SYSTEM TOWNSHIP THIRD DIVISION

Public Land Survey System third division is normally a Public Land Survey System Aliquot Part or government lot that extends to the sixteenth part. This entity is the third subdivision of the Public Land Survey System.

ATTRIBUTES:

PLSS Third Division ID

The PLSS Third Division ID is a primary key, which identifies each record in the Public Land Survey System Township Third Division entity.

Domain: numeric

PLSS Second Division ID

The PLSS Second Division ID is a foreign key which points to a record in the Public Land Survey System Second Division entity, where information on the Public Land Survey System Second Division can be found.

Domain: numeric

Third Division Type

The Third Division Type of a Public Land Survey System Township is the third subdivision of the township, normally into sixteenth parts.

Domain: Block, Lot, Other Aliquot Part, Government Lot, Protracted Lot, Sixteenth (quarter-quarter), Half Quarter, Parcel, Lot, Tract, free text

Third Division Designator

The Third Division Designator is the letter, number, or letter number combination that identifies the Second Division.

Domain: N, S, E, W, N2, S2, E2, W2, NE, NW, SE, SW, NE, NW, SE, SW, free text.

SURVEY SYSTEM DESCRIPTION

A Survey System is a named or numbered area of land that can be identified by a type and a designator. These are generally areas where the Public Land Survey System has not been established, such as in farm lots in Crawford County and Military Reservations in Brown County.

ATTRIBUTES:

Survey System Description ID

The Survey System Description ID is a primary key, which identifies each record in the Survey System Description entity.

Domain: numeric

Survey System Type

Survey System Type indicates the category or major class of the description. See Appendix B for definitions.

Domain: Assessor Plat, Cemetery, Condominium, Farm Lot, French Long Lot, Grant of Land, Homestead Entry, Indian Allotment, Indian Claim, Land Grant,

Military Reservation, Mineral Survey, Plat of Survey, Private Claim, Protraction Block, Subdivision, Survey, free text

Survey System Designator

The Survey System Designator is an identifying name or number for a specific type of Survey System area.

Domain: free text

SURVEY SYSTEM FIRST DIVISION SURVEY SYSTEM FIRST DIVISION

The First Division is the primary division of the Survey System.

Survey System First Division ID

The Survey System First Division ID is a primary key, which identifies each record in the Survey System First Division entity.

Domain: numeric

Survey System Description ID

The Survey System Description ID is a foreign key, which points to a record in the Survey System Description, where information on the Survey System Description can be found.

Domain: numeric

First Division Type

The First Division Type describes the classification of the First Survey System Division.

Domain: Block, Lot, Tract, Right of Way, Unit, Fractional Part, Claim, Parcel, Plot, Survey, free text

First Division Designator

The Survey System First Division Designator is an alpha, numeric, or alpha-numeric designator used to identify the First Division of the Survey System.

Domain: free text

4.0 Physical Model - Table and Field Definitions

For the following, each box is a table in a physical database. The Table Names and Attribute Names can be found in the Logical Model Definition. There is a noticeable difference between the number of tables and the number of entities. The tables have been "denormalized" which means that some records will be repeated for the sake of ease of processing.

The first entry in the table is the physical table name.

This is the table for the overall system metadata

Table/Attribute	Physical Name	Mandatory (Y/N)	Type	Length
METADATA	METADATA			
Contact Information	CONTCT	Y	Text	200
Horizontal Datum	HDATM	Y	Text	10
Vertical Datum	VDATM	Y	Text	10
Coordinate System	CRDSYS	Y	Text	10
Units of Measure	UNITS	Y	Text	10

This is the table that tracks and assigns all of the unique identifiers for each corner in the jurisdiction.

Table/Attribute	Physical Name	Mandatory (Y/N)	Type	Length
CORNER	CRNLOC			
Record ID ⁽¹⁾	RECID	Y	Long Integer	
Corner Location Identifier	CORNID	Y	Long Integer	
Other Division ID	DIVID		Long Integer	
Township	TWNSHP		Integer	3
Township Fraction ⁽²⁾	TWNFRT		Integer	1
Range	RANGE		Integer	3

Range Fraction ⁽²⁾	RNGFRT		Integer	1
Range Direction ⁽³⁾	RNGDIR		Text	1
Section	SECTN		Integer	2
Survey System Type	SURSYS		Text	40
Survey System Name	SURNAM		Text	50
Position ⁽⁴⁾	POSTN		Text	2
Corner Type	CRNTYP	Y	Text	50

⁽¹⁾ This attribute is added to the physical database so that each record has a unique key that may be used by other databases.

⁽²⁾ This is a coded attribute which is 1 = 1/4 and 2 = 1/2 and 3 = 3/4

⁽³⁾ This is E for east and W for west. Wisconsin also has a number for east and west that could be used in this field. The letter is preferred since there is no confusion about what the direction is.

⁽⁴⁾ The Position describes the relative placement of the corner in the PLSS Area or Survey Area

NOTE 1: In this table each PLSS or Survey System corner is assigned a sequential unique identifier. The label for the identifier is based on which PLSS Areas or Survey System Areas the corner is related. For example a corner can be the South Quarter Corner of Section 6 and the North Quarter Corner of Section 7. This one corner would have one Corner ID but would have two records in this table.

NOTE 2: The reason the PLSS Fields and Survey System Fields are not mandatory is that a corner could be inside a military reservation, but not part of the PLSS or vice versa. Generally, either PLSS Values or Survey System Values will be filled in.

This is the table for divisions that are below section or are not section divisions. The attributes in this table are related to the Location Table above and they become unique when placed in combination with the township and range or survey system in the table above.

Table/Attribute	Physical Name	Mandatory (Y/N)	Type	Length
Division Table	DIVISION		Long Integer	
Other Division ID	DIVID	Y	Long Integer	
First Division Type	FRSTTP		Text	10

First Division Designator	FIRST		Text	10
Second Division Type	SECTP		Text	10
Second Division Designator	SECOND		Text	10
Third Division Type	THRDTP		Text	10
Third Division Designator	THIRD		Text	10

This is the table that contains the coordinate values for the corners identified in the corner location table.

Table/Attribute	Physical Name	Mandatory (Y/N)	Type	Length
CORNER POINT	CONTROL			
Record ID ⁽¹⁾	PTID	Y	Long Integer	
Corner Location Identifier	CORNID	Y	Long Integer	
Control Point	PNTNM		Text	50
Monument Type	MONTYP		Text	50
Monument Record	MONREC		Text	50
X Coordinate	NORTH		Real or Double	5 decimal places
Y Coordinate	EAST		Real or Double	5 decimal places
Z Coordinate	ELEV		Real or Double	5 decimal places
Agent ID ⁽²⁾	AGNTID	Y	Long Integer	
Horizontal Accuracy	HACC		Text	10
Vertical	VACC		Text	10

Accuracy				
Method ⁽⁴⁾	METHOD		Text	10
Source Material	SOURCE		Text	20
Current ⁽⁵⁾	CRNT	Y	Text	1

⁽¹⁾ This attribute is added to the physical database so that each record has a unique key that may be used by other databases.

⁽²⁾ The agent identifier in this case is for the agent that established the coordinate value. the agent that established the monument is recorded on the tie sheet. A separate database could be built to capture the tie sheet information, in which case the agent on the tie sheet would be the monument agent.

⁽³⁾ If an agency decided to use one coordinate system for the entire database, this field would not be filed in for every record, but would be added when the data when shared. This values used to identify the datums and coordinate systems, such as county for the county coordinate systems, and lat-long for latitude and longitude and SPC for state place can be developed.

⁽⁴⁾ This is the method used to establish the coordinate value. Codes for this can be developed, but a mnemonic abbreviation such as GPS, Digitize, Survey, Converted can be used in the interim.

⁽⁵⁾ This value is either Y for current or N for not current. Some databases implement this with a validation rule while others same a field type for logical or binary logical which can only have Y or N.

Example Look up Table for the Agent Name

Table/Attribute	Physical Name	Mandatory (Y/N)	Type	Length
AGENT	AGENT (Table)			
Agent ID	AGNTID	Y	Long Integer	
Former Agent ID	FRMRID	N	Long Integer	
Alias Agent ID	ALSID	N	Long Integer	
Agent Name	AGNTNM	Y	Text	50

NOTE: The Agent ID in this database design can be linked to other tables in the database system where address, telephone, email, fax and other contact information can be maintained. This way changing contact information is updated once and used by other tables.

Many other look up tables can be added - such as a table for monument type and a table for coordinate systems. The idea here is that when information is exchanged we will focus on the two tables and then can move information from the look up tables to the full table for exchange. The Agent Look up Table is included since there may be a benefit to working with one look up table to test how well exchanges work. The Agent ID can be replaced with the Agent Name if this does not work well.

Appendix A

Corner Type Definitions

Domain

Description

ALIQUOT PART CORNER - A corner that establishes the limits of a division of a PLSS Section below the quarter division, such as a sixteenth corner or a government lot corner.

ANGLE POINT - A point of survey where the alignment or boundary deflects from a straight line. Any break in bearing on a survey can be considered an angle point. A corner set by a private survey to establish the limits of a certified survey lot, a land subdivision lot, or other parcel survey is generally an angle point.

AUXILIARY MEANDER CORNER - A corner established at a suitable point on the meander line of a lake lying entirely within a quarter-section or on the meander line of an island falling entirely within a section and which is found to be too small to subdivide. A line is run connecting the auxiliary meander corner to a regular corner on the section boundary (BLM 1973, paragraphs 121 and 122). Also established where lines other than regular subdivision of section lines intersect a meander line (BLM 1973, sample plat).

CENTER QUARTER SECTION CORNER - A special case of a quarter-corner. "To subdivide a section into quarter sections, run straight lines from established quarter-section corners to the opposite quarter-section corners. The point of intersection of the lines thus run will be the corner common to several quarter sections, or the legal center of section." (BLM 1973, paragraph 3-87). The above definition is sometimes termed the "federal center quarter-section corner" and applies to BLM cadastral surveys. Under state jurisdiction alternate methods of section subdivision may exist and a non-federal method center quarter-section corner determined. In some cases, such as completion surveys, it is possible for one section to have more than one center quarter-section corner.

INTERSECTION POINT - The point of intersection to mark the intersection of two or more independently surveyed lines.

CROSSING CLOSING CORNER - Crossing Closing Corner is a term used to describe a corner set where a township or section line intersects (crosses) the line of a surveyed mineral claim, forest homestead claim, small holding claim or the like. "A closing corner monument is not set at intersection with the line of a surveyed mineral claim, forest homestead claim, small holding claim or the like, unless required to provide an interval of monumentation of one half mile or less. In instances crossing closing corners may be needed for operational or litigation purposes, in which event they should be provided for in the special instructions." (BLM 1973, paragraph 3-71).

LOCATION CORNER - A term applied to a position determined and marked by the locator (claimant) of a mineral right to distinctly and clearly define the boundaries of a mining claim on the ground. This is not the same as a Location Monument.

LOCATION MONUMENT - "When a mineral survey is situated in a district where there are no corners of the public survey and no other monuments within 2 miles, a location monument is established." (BLM 1973, paragraph 10-32.) "A location monument is most frequently used as a reference for one or more mineral surveys. It may also be used in any situation where no corner of an existing survey is available to provide a satisfactory connection for an isolated special survey. The monument is generally established in a conspicuous position with good visibility from every direction. The corner of a special survey may be designated as a location monument if it meets this qualification." (BLM 1973, paragraph 4-18). This definition includes U.S. Mineral Monuments and U.S. Location Monuments.

MEANDER CORNER - A meander corner is established at every point where a Township line, section line, Land Grant, Homestead Entry Survey, Donation Land Claim or other survey intersects the bank of a navigable stream or other meanderable body of water. (BLM, 1973, paragraph 3-117.)

MILE CORNER OR MILE POST - "The mile corner of a State, Reservation or other grant boundary does not mark a point of a subdivision; it is a station along the line, however, long usage has given acceptance to the term." (BLM 1973, paragraph 5-4). The mile post includes Half Mile post corner categories.

POINT ON LINE - A stake or object a surveyor has placed on a line for convenience, such as for a backsight. Points on line are set in prominent places to facilitate identification of lines. Modern BLM cadastral surveys may refer to points on line as Witness Points. Points on Line may also be Line Trees.

QUARTER-CORNER - A corner at the extremity of a boundary of a PLSS quarter-section, not including the section corner. Written as 1/4 not one fourth.

SECTION CORNER - A corner at the extremity of a PLSS section boundary.

SPECIAL MEANDER CORNER - "A corner established at: 1) the intersection of a surveyed subdivision of section line and a meander line of a body of water or an island; 2) the intersection of a computed center line of a section and a meander line of an island over 50 acres in area which is located entirely within a section." (BLM 1973, paragraphs 121 and 122).

TOWNSHIP CORNER - A corner at the extremity of a PLSS township boundary. Normally a PLSS township has four township corners. This does not include section, quarter-section or section subdivision corners which are on a PLSS township boundary.

WITNESS POINT - "A witness point is a monumented station on a line of the survey that is used to perpetuate an important location more or less remote from and without special relation to any regular corner." (BLM 1973, paragraph 4-17).

<u>Domain Qualifiers</u>	<u>Description</u>
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CLOSING - "Closing corners are intended to be established where a closing line intersects a boundary already fixed in position. While the closing corner thereafter controls the direction of the closing line, a failure to place it at the true intersection does not alter the position of the line closed upon..." (BLM 1973, paragraph 3-73).

WITNESS - "A witness point is a monumented station on a line of the survey that is used to perpetuate an important location more or less remote from and without special relation to any regular corner." (BLM 1973, paragraph 4-17).

AMENDED - There are two primary applications of amended monuments stated in the BLM Manual of Instruction. In general a monument whose position no longer marks the true position for the corner. The monument is marked A.M. "If it is known that a mineral survey, homestead entry, small holding claim, right of way, reservoir, or other survey has been connected with a corner of an exterior subject to rectification, the fact is stated in the special instruction. In such a case the marks **A.M. (signifying amended monument)** are added to the original corner monument and the old corner is connected by course and distance to the new." (BLM 1973, paragraph 3-36.) "A recovered closing corner not actually located on the line that was closed upon will determine the direction of the closing line, but not its legal terminus. The correct position is at the true point of intersection of the two lines. The new monument in those cases where it is required will always be placed at the true point of intersection. An off-line monument in those cases where a new monument is required will be marked **A.M. (for amended monument)** and will be connected by course and distance." (BLM 1973, paragraphs 5-41 and 8-16(6).)

AUXILIARY - A corner established at a suitable point on the meander line of a lake lying entirely within a quarter-section or on the meander line of an island falling entirely within a section and which is found to be too small to subdivide. A line is run connecting the auxiliary meander corner to a regular corner on the section boundary (BLM 1973, paragraphs 121 and 122). Also established where lines other than regular subdivision of section lines intersect a meander line (BLM 1973, sample plat).

Appendix B

Survey System Definitions

Domain

Description

ASSESSOR'S PLAT - An Assessor's Plat is a survey and description of one or more areas of land owned by two or more persons in severalty that is ordered to be done by a governing body with property taxation authority for the purpose of making sufficient and accurate determination of assessment, taxation, or tax title. The rules for Assessor's Plats are defined by State law.

CEMETERY - A Cemetery divides the land into lots and rights-of-way. The rules for Cemetery Plat, which describe the extent of lots and rights-of-way, are defined by State law.

CONDOMINIUM - A Condominium Plat is a map and description of rights to land or space that are defined by State law and contain allocated interests, common elements, and independent use units. The laws governing the creation, survey, and definition of condominiums are defined by State law.

FARM LOT - A Farm Lot is an elongated lot that occurs outside the Public Land Survey System on lands that were occupied prior to survey. These lots are generally elongated and generally run perpendicular to a body of water, such as a river.

FRENCH LONG LOT - A French Long Lot is an elongated lot that occurs outside the Public Land Survey System on lands that were occupied prior to survey and established by the French explorers and traders. These lots are generally elongated and generally run perpendicular to a body of water, such as a river.

GRANT OF LAND - Grants of Land are areas of land to which title has been confirmed or conferred to any person or organization by the U.S. for a particular reason or purpose.

INDIAN ALLOTMENT - An Indian Allotment is an allocation of a parcel of public lands or Indian Reservation lands to a Native American for his or her individual use. Indian Allotments are identified by either a name or a number.

INDIAN CLAIM - An Indian Claim is a private land ownership patent to native Americans that were not part of the allotment programs. Indian Claims are identified by a number.

MINERAL SURVEY - A Mineral Survey is a survey of one or more lode claims, placer claims, or mill sites with all their notes and plats. This type of survey is executed by a U.S. Mineral Surveyor for the purposes of marking the legal boundaries of mining claims on the public domain. Mineral Surveys are identified by number. Mineral surveys may be subdivided into lodes, placers or millsites.

PLAT OF SURVEY - A Plat of Survey is a document prepared by a registered land surveyor for the purposes of clarifying property boundaries, generating a legal description, or establishing the location of improvements or topographical characteristics.

PRIVATE CLAIM - An Private Claim is a US Government Patent issued to an individual as a grant of land. Private Claims are identified by a number.

PROTRACTION BLOCK - A Protraction Block is a designation for sections of uncertain acreage which lie between the coordinate based interior and the prior surveyed boundaries of record which generally form the exterior perimeters of the protracted areas. (BLM IM 93-353, 9/30/93).

SUBDIVISION - A Subdivision is a unit of land defined by a survey which is governed by State subdivision law or local ordinance. A subdivision plat is a simultaneous land division where all divisions of land within the subdivision plat are created simultaneously, on one being senior to another.

SURVEY - A Survey is a measurement of the land recorded on a survey map, that describes areas of land and is completed by a land surveyor registered to practice in Wisconsin.

TOWNSITE - A Townsite is an area which has been segregated for urban development, often subdivided into blocks which are further subdivided into lots. One type of townsite is a survey of street and lot boundaries executed to segregate from public lands an area of land qualifying under the townsite laws. Another type of Townsite may be a city subdivision.