



WASHINGTON STATE DEPARTMENT OF  
**Natural Resources**

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**Peter Goldmark** - Commissioner of Public Lands

# “What’s required on a Record of Survey”

2012 LSAW Conference  
Tulalip Resort

Larry Pederson, PLS  
DNR Region Surveyor

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Manager of DNR Public Land Survey  
Office

# **Survey Recording Act**

## **Why Does It Exist?**

RCW 58.09.010 Purpose -- Short title.

The purpose of this chapter is to provide a method for preserving evidence of land surveys by establishing standards and procedures for monumenting and for recording a public record of the surveys. Its provisions shall be deemed supplementary to existing laws relating to surveys, subdivisions, platting, and boundaries.

# History of the Survey Recording Act

## A Research Memo to the Legislative Council

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To: Representative Thomas L. Copeland, Chairman,  
and members of the State Government Committee

Date: April 4, 1972

From: Victor B. Moon, Research Analyst

Re: Uniform Land Survey Recording Legislation

# From the 1972 Research Memo

- Historical Background:
- The Public Land Survey System, which began in Washington about 1850, was the first comprehensive statewide land survey. The survey ... was completed by 1930. This completed land survey, with the field notes of the surveyors and the official township plat, constituted the basis for the federal government's transfer of land title to the state.  
...

# From the 1972 Research Memo

- ... There were more than 250 thousand markers which made up the delineation for the public survey. At the present time many of these markers have been lost or obliterated. Much of the original evidence which made up the land survey is in a state of disarray and many of the original maps have deteriorated beyond recovery. As this evidence of the Public Land Survey deteriorates and as more and more private surveys are conducted, ...

# From the 1972 Research Memo

- .... the total state record is becoming more and more confused, and it is becoming vitally important to the state to maintain an adequate land survey record and to restore as many of the original markers as possible during the course of normal survey operations. As there is a greater development of land and more roads constructed, the need increases for complete records which could be maintained at the county level.

# From the 1972 Research Memo

- Problems This Proposal is Trying to Solve:
  1. Many old records of past surveys have been lost or have deteriorated to the point where they cannot be reproduced. As surveyors go out of business or die, very often the records of private surveyors are lost.

# From the 1972 Research Memo

- Problems This Proposal is Trying to Solve:
- 2. There has been a lack of cooperation in sharing data of surveys between some surveyors and often results of surveys are not recorded since there is no uniform method or requirement to do so.

# From the 1972 Research Memo

- Problems This Proposal is Trying to Solve:
- 3. There is absolutely no uniformity in record keeping or drafting of survey reports and notes.

# From the 1972 Research Memo

- Problems This Proposal is Trying to Solve:
- 4. There is lack of information on what surveys have been conducted or are being conducted in many areas, causing a duplication of effort and greater expense to landowners.

# Discussion

RCW 58.09.060 Records of survey, contents  
-- Record of corner, information.

(1) The record of survey as required by  
RCW 58.09.040(1) shall show:

(a) All monuments found, set, reset,  
replaced, or removed, describing their  
kind, size, and location and giving other  
data relating thereto;

RCW 58.09.060 Records of survey,  
contents -- Record of corner,  
information.

(1) The record of survey as required by  
RCW 58.09.040(1) shall show:

(b) Bearing trees, corner  
accessories or witness monuments,  
basis of bearings, bearing and length  
of lines, scale of map, and north  
arrow;

RCW 58.09.060 Records of survey,  
contents -- Record of corner,  
information.

(1) The record of survey as required by  
RCW 58.09.040(1) shall show:

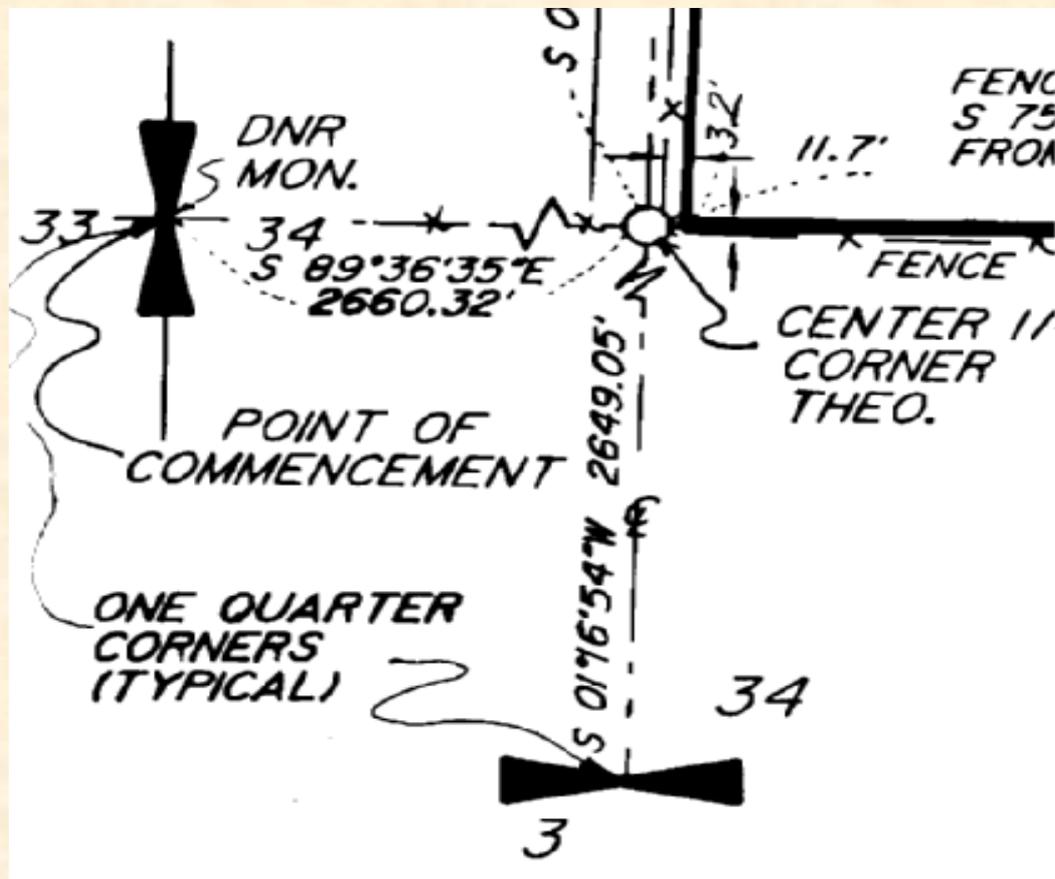
(d) Certificates required by RCW  
58.09.080;

# RCW 58.09.060 Records of survey, contents -- Record of corner, information.

(1) The record of survey as required by  
RCW 58.09.040(1) shall show:

(e) Any other data necessary for the  
intelligent interpretation of the various  
items and locations of the points, lines and  
areas shown.

(a) All monuments found, set, reset, replaced, or removed, describing their kind, size, and location and giving other data relating thereto;



(a) All monuments found, set, reset, replaced, or removed, describing their kind, size, and location and giving other data relating thereto;

**9.) 1/4 CORNER TO 14 AND 13. NOT FOUND. SET 5/8" X 30" REBAR WITH 2" ALUMINUM CAP FOR 1/4 CORNER. 2" X 30" IRON PIPE WAS LAID BESIDE CORNER. 1 1/2" IRON PIPE (ORIGIN UNKNOWN) BEARS, S 13° 11'49"W A DISTANCE OF 148.73 FEET.**

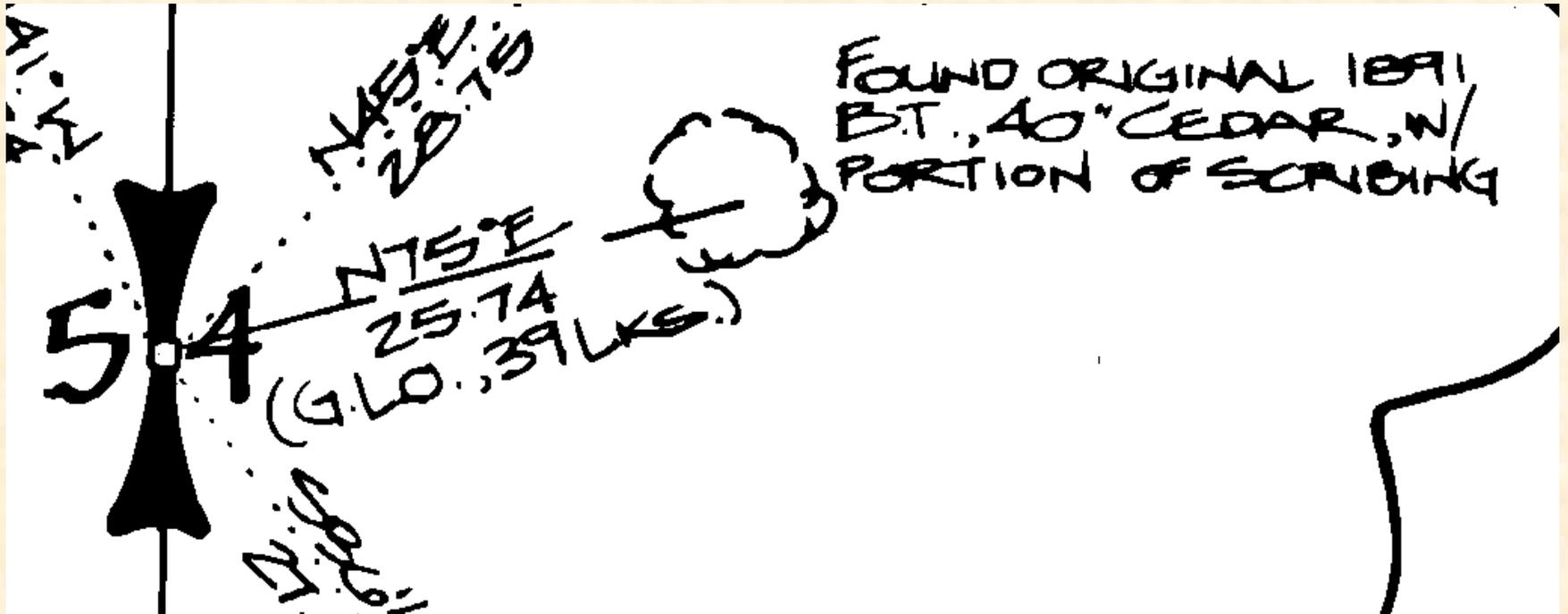
**10.) 1/4 CORNER TO 14 AND 23. FOUND 1 1/2" IRON PIPE AND POSSIBLE REMAINS OF NORTHWEST BEARING TREE. HELD FOR 1/4 CORNER. SET 2" ALUMINUM CAP IN PIPE.**

**11.) SECTION CORNER TO 14, 13, 24 AND 25. FOUND DEPARTMENT OF NATURAL RESOURCES CONCRETE MONUMENT AND TWO BEARING TREES, ONE WITH LEGIBLE SCRIBE. HELD FOR SECTION CORNER.**

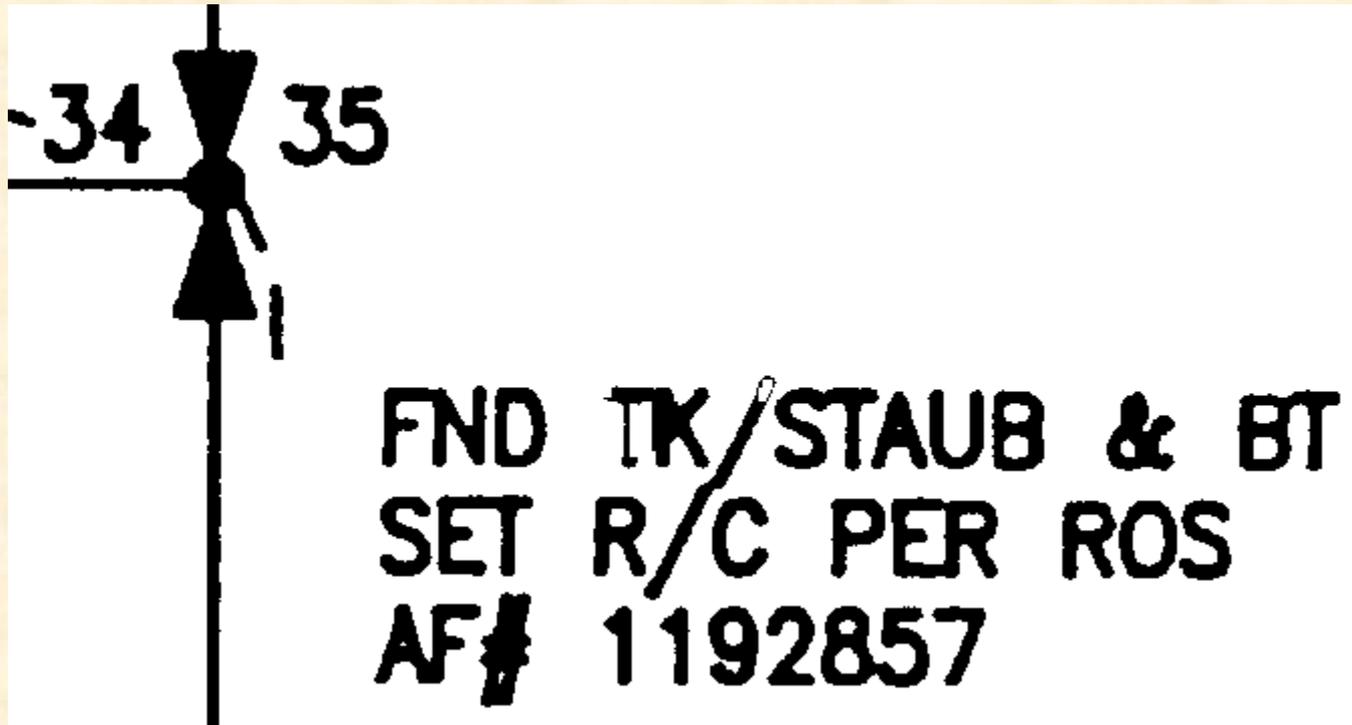
## (b) Bearing trees



## (b) Bearing trees



(b) corner accessories or witness monuments



# (b) corner accessories or witness monuments

21" FIR N45°E 33.36 FEET. SET DNR ALUMINUM TAG & NAIL 1 FOOT UP ON SE SIDE.

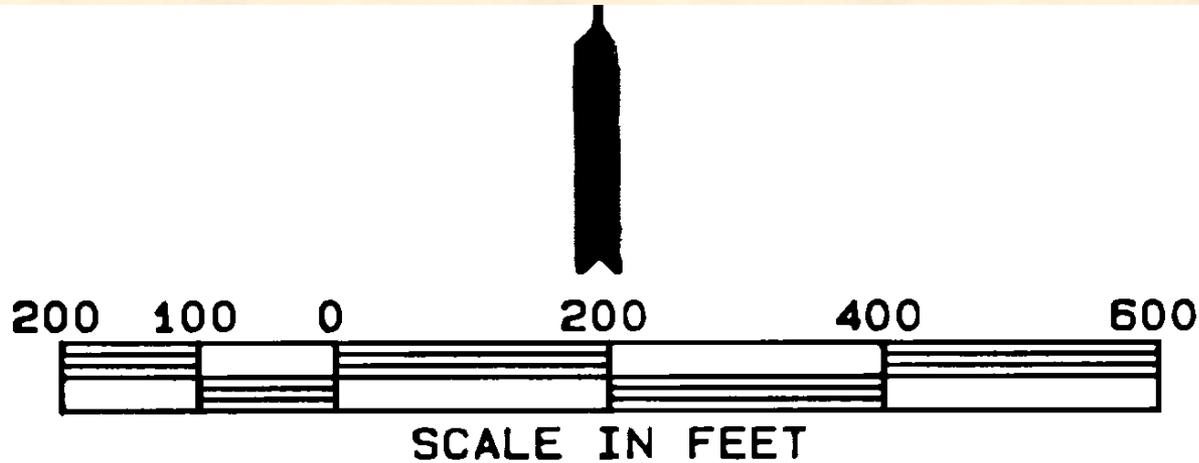
21" FIR S72°E 26.30 FEET. SET DNR ALUMINUM TAG & NAIL 1 FOOT UP ON NE SIDE.

26" FIR S13°W 23.80 FEET. SET DNR ALUMINUM TAG & NAIL 1 FOOT UP ON NW SIDE.

- (b) basis of bearings , scale of map, and north arrow



(b) basis of bearings , scale of map, and north arrow



**SCALE 1 INCH = 200 FEET**

**BASIS OF BEARING = THE EAST LINE OF SECTION 9  
AS PER SURVEY No. 1210, A.F.No. 1440042**

N 00°14'11"E

(c) Name and legal description of tract in which the survey is located

PTN. S<sup>1</sup>/<sub>2</sub>, SE<sup>1</sup>/<sub>4</sub>, SECTION 5,  
TWP. 40N., RGE. 5E., W.M.,  
WHATCOM COUNTY,  
WASHINGTON

(c) ... and ties to adjoining surveys of record;

## LEGEND

- SET IRON PIPE/ CAP #13138 (JAN. 2000)
- FOUND DEMEYER RB (JAN. 2000)
- ⊙ FOUND DEMEYER RB (JAN. 2000)
- ⊗ FOUND WEDEN RB (JAN. 2000)
- SET WOOD LINE STAKE (JAN. 2000)

(c) ... and ties to adjoining surveys of record;

2. " ● " DENOTES REBAR AND CAP MARKED "UNDERHILL LS. 18927" SET AS PER RECORD OF SURVEY A.F. No. 950120047 AND FOUND BY THIS SURVEY.

3. " ■ " DENOTES REBAR AND CAP MARKED "UNDERHILL LS. 18927" SET AS PER WINDON ACRES SHORT PLAT A.F. No. 950627037 AND FOUND BY THIS SURVEY.

(e) Any other data necessary for the intelligent interpretation of the various items and locations of the points, lines and areas shown.

## SURVEYOR'S NOTE:

THIS IS OUR SOLUTION OF THE PROPERTY BOUNDARIES, BASED ON DEED RESEARCH, AS THE INTENT OF THE DESCRIPTIONS.

(e) Any other data necessary for the intelligent interpretation of the various items and locations of the points, lines and areas shown.

## LEGAL DESCRIPTION

THE NORTHWEST QUARTER OF THE NORTHEAST QUARTER OF SECTION 34, TOWNSHIP 40 NORTH, RANGE 5 EAST OF W.M., EXCEPT THE NORTH HALF OF THE NORTH HALF THEREOF, ALSO EXCEPT THE FOLLOWING DESCRIBED TRACT: BEGINNING AT THE SOUTHEAST CORNER OF SAID NORTHWEST QUARTER OF THE NORTHEAST QUARTER; THENCE WEST 461 FEET; THENCE NORTH 472.5 FEET; THENCE EAST 461 FEET; THENCE SOUTH 472.5 FEET TO THE PLACE OF BEGINNING.

LESS ROADS.

SITUATE IN WHATCOM COUNTY, WASHINGTON.

(e) Any other data necessary for the intelligent interpretation of the various items and locations of the points, lines and areas shown.

WE FIELD-TIED INTERNATIONAL BOUNDARY MONUMENTS #37 TO #41 AND DISCOVERED THAT THE NAD83/91 WASHINGTON COORDINATES PUBLISHED BY THE NGS (NATIONAL GEODETIC SURVEY) ARE INACCURATE BY SEVERAL FEET. THE COORDINATES FOR MONUMENT #40 ARE OFF BY ALMOST 115 FEET. THE NGS DATA SHEETS INDICATE THAT THEIR COORDINATES WERE ESTABLISHED BY CLASSICAL GEODETIC METHODS IN 1991. OUR TIES WERE MADE USING CONVENTIONAL TOTAL STATION TRAVERSES WHICH WERE TIED TO 2002 GPS CONTROL POINTS. THE DIFFERENCE BETWEEN OUR COORDINATES AND THE NGS VALUES CAN BE SEEN WHEN COMPARING THE COORDINATES ON OUR MAP TO THE NGS DATA SHEETS FOR THE INTERNATIONAL BOUNDARY MONUMENTS.

# RCW 58.09.070

## Coordinates -- Map showing control scheme required.

When coordinates in the Washington coordinate system are shown for points on a record of survey map, the map may not be recorded unless it also shows, or is accompanied by a map showing, the control scheme through which the coordinates were determined from points of known coordinates.

# RCW 58.09.080

## Certificates -- Required -- Forms.

Certificates shall appear on the record of survey map as follows:

### SURVEYOR'S CERTIFICATE

This map correctly represents a survey made by me or under my direction in conformance with the requirements of the Survey Recording Act at the request of . . . . .  
. . . . . in . . . . ., 19. . .

Name of Person

(Signed and Sealed) . . . . .

Certificate No. . . . .

# RCW 58.09.080

## Certificates -- Required -- Forms.

Certificates shall appear on the record of survey map as follows:

### AUDITOR'S CERTIFICATE

Filed for record this . . . . day of . . . . . ,  
19. . . at . . . . .M. in book . . . . of . . . . at  
page . . . . at the request of . . . . .

(Signed) . . . . .

County Auditor

# RCW 58.20.180

## Recording coordinates -- Control stations.

Coordinates based on the Washington coordinate system of 1983, purporting to define the position of a point on a land boundary, may be presented to be recorded in any public land records or deed records if...

# RCW 58.20.180

## Recording coordinates -- Control stations.

... In all instances where reference has been made to such coordinates in land surveys or deeds, the scale and sea level factors shall be stated for the survey lines used in computing ground distances and areas.

BASIS OF BEARINGS AND DISTANCES:

WASHINGTON COORDINATE SYSTEM, SOUTH ZONE, N.A.D. "83/91  
DERIVED FROM GLOBAL POSITIONING SYSTEM (GPS) TIES TO THE  
FOLLOWING WASHINGTON STATE DEPARTMENT OF  
TRANSPORTATION GPS STATIONS:

(U.S. SURVEY FEET)

277	N. 425607.248	E. 1040188.283
5431	N. 419720.821	E. 988894.675
5502	N. 435361.352	E. 1017364.002

NEW POSITIONS DETERMINED BY THIS SURVEY USING GPS METHODS:

(U.S. SURVEY FEET)

147	N. 427631.671	E. 1011093.915
200	N. 431647.308	E. 1011295.573
300	N. 428787.775	E. 1007820.456
301	N. 428075.989	E. 1007808.381

CONVERGENCE:  $-1^{\circ} 49' 00''$  AT CORNER X-23.

THE AREAS AND DISTANCES SHOWN ARE GRID. DIVIDE THE  
GRID DISTANCE BY THE COMBINED GRID FACTOR OF 0.99988370  
TO OBTAIN THE GROUND DISTANCE. THE COMBINED GRID  
FACTOR IS DERIVED FROM AN ELEVATION FACTOR OF  
0.99996751 AND A LATITUDE FACTOR OF 0.99991619  
COMPUTED DURING STARNET ADJUSTMENT.

How are Survey WAC's created?

What is the designated agency?

RCW 58.24.020

Official agency designated -- Advisory board.

The department of natural resources is designated as the official agency for surveys and maps. The commissioner of public lands shall appoint an advisory board of five members, the majority of whom shall be registered professional engineers or land surveyors, who shall serve at the pleasure of the commissioner.

# What Authority Does the DNR Have?

RCW 58.24.040

Official agency designated -- Powers -- Standards, maps, records, report, temporary removal of boundary marks or monuments.

The agency designated by RCW 58.24.020 is further authorized to:

(1) Set up standards of accuracy and methods of procedure;

# What Authority Does the WAC Have?

WAC 332-130-010 Authority. The department of natural resources, in accordance with RCW 58.24.040, 58.09.050, and 58.17.160, prescribes the following regulations setting minimum standards for land boundary surveys and geodetic control surveys and providing guidelines for the preparation of land descriptions.

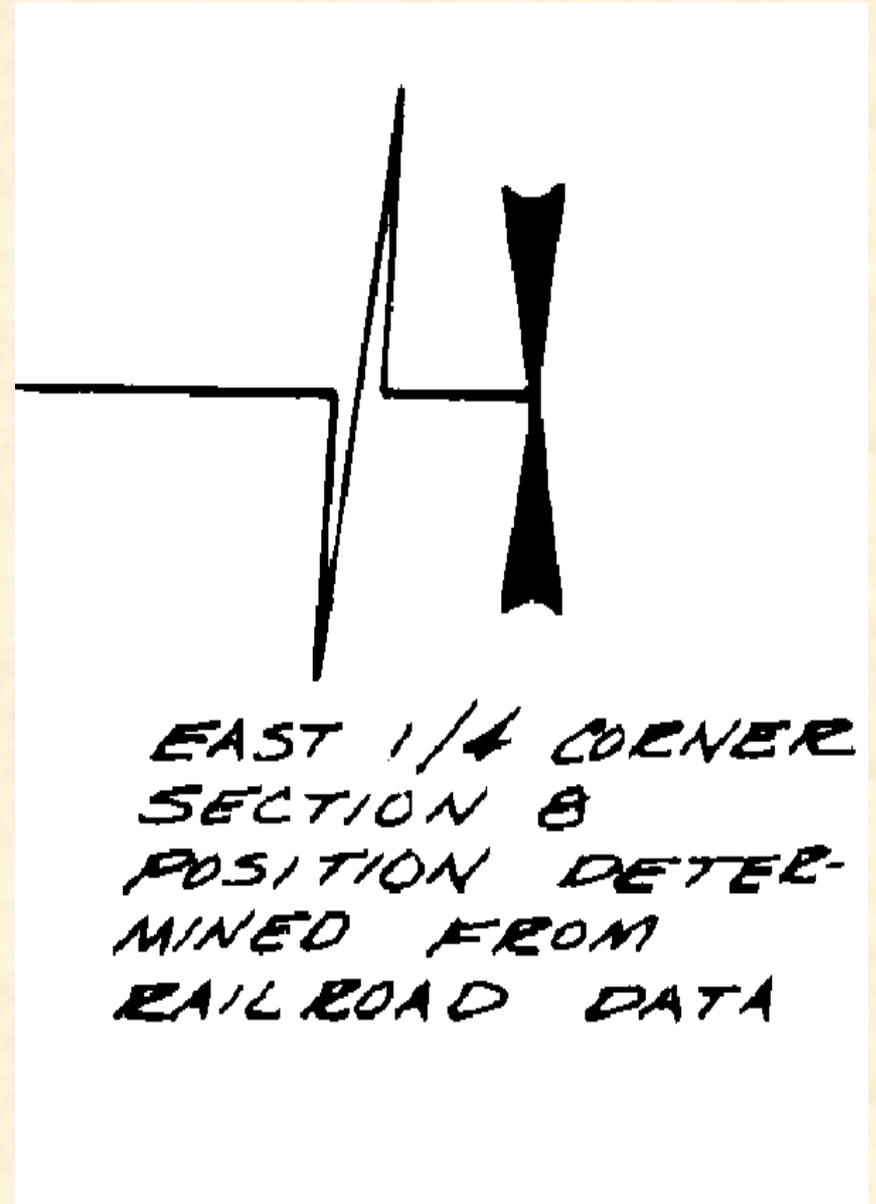
# WAC 332-130-030 Land subdivision and corner restoration standards

- (1) The reestablishment of lost GLO or BLM corners and the subdividing of sections shall be done according to applicable GLO or BLM plats and field notes and in compliance with the rules as set forth in the appropriate GLO or BLM Manual of Surveying Instructions, manual supplements and circulars. ....

# WAC 332-130-030 Land subdivision and corner restoration standards

(1) (cont.) ... Federal or state court decisions that influence the interpretation of the rules should be considered. Methods used for such corner reestablishment or section subdivision shall be described on the survey map produced.

- Is this a description of the method of reestablishing the GLO corner?



(X13) 1/4 CORNER OF SECTIONS 33 & 34

SET CALCULATED CORNER

HISTORY:

1995 MOWRER SURVEY - SHOWS A CALCULATED POSITION (13).

FIELD SEARCH:

NO EVIDENCE FOUND.

CORNER PERPETUATION:

WE SET A DNR ALUMINUM MONUMENT, MARKED WITH IDENTIFICATION, 3" UP, AT THE SINGLE PROPORTION POSITION. REFERENCES WERE ESTABLISHED AS FOLLOWS:

18" MAPLE N55°E 67.64 FEET. SET DNR ALUMINUM TAG & NAIL 2 FEET UP ON SE SIDE.

DOUBLE-MAPLE WITH 19" BASE S65°E 47.58 FEET. SET DNR ALUMINUM TAG & NAIL 3 FEET UP ON NE SIDE.

MAPLE CLUMP WITH 36" BASE S20°E 33.01 FEET. SET DNR ALUMINUM TAG & NAIL 2 FEET UP ON SW SIDE.

14" MAPLE N70°W 53.91 FEET. SET DNR ALUMINUM TAG & NAIL 4 FEET UP ON SW SIDE.

SET ORANGE CARSONITE POST ALONG NORTH SIDE.

FIELD BOOK 7039A, PAGE 24, DATED 9-9-02.

IN 1968, THE CORNER OF SECTIONS 22, 23, 26 & 27 WAS DETERMINED LOST BY LEWIS McDANIEL AND WAS CALCULATED BY DOUBLE PROPORTION BASED ON MEASUREMENTS TO IDENTIFIED CORNERS 1 MILE NORTH, 1 MILE SOUTH, 1/2 MILE EAST AND 1/2 MILE WEST. IN 1995, CONSTRUCTION SURVEYORS CALCULATED THEIR DOUBLE PROPORTION BASED ON THEIR OWN MEASUREMENTS TO THE SAME IDENTIFIED CORNERS. THE 1968 AND 1995 POSITIONS APPEAR TO DIFFER BECAUSE OF MEASUREMENT ERRORS (OR MAPPING ERRORS) ON THE 1968 PLATS OF PARADISE LAKES COUNTRY CLUB. TODAY, WHILE WEIGHING OUR OPTIONS REGARDING THIS CORNER, WE CALCULATED A DOUBLE PROPORTION BASED ON OUR OWN MEASUREMENTS TO THE CONTROLLING CORNERS. FOR COMPARISON, WE CALCULATED A GRID COORDINATE FOR CONSTRUCTION SURVEYORS' POSITION FOR THE SECTION CORNER. TO DO THIS, WE PERFORMED A ROTATION AND SCALE USING THE 1999 CONSTRUCTION SURVEYORS' KENDALL POND SHORT PLAT. OUR DOUBLE PROPORTION DIFFERS FROM CONSTRUCTION SURVEYORS' POSITION BY 3 FEET. WE CHOSE TO ACCEPT THEIR POSITION FOR THE SECTION CORNER, SAID POSITION HAVING BEEN ESTABLISHED IN GOOD FAITH AND WITHOUT GROSS ERROR.

# WAC 332-130-030 Land subdivision and corner restoration standards

(2) All maps, plats, or plans showing a land boundary survey shall show all the corners found, established, reestablished and calculated, including corresponding directions and distances, which were used to survey and which will be necessary to resurvey the parcel shown. ...

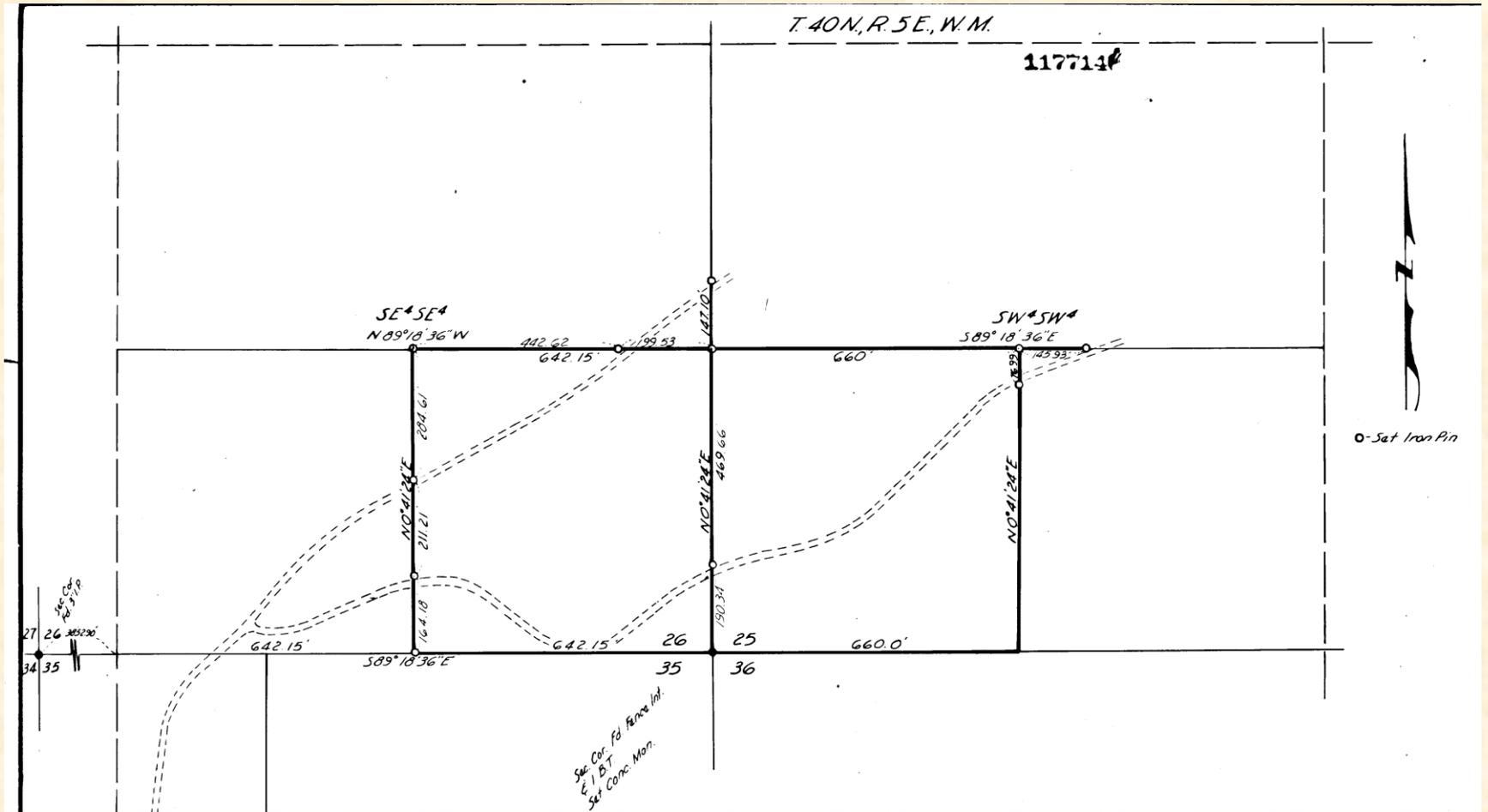
# WAC 332-130-030 Land subdivision and corner restoration standards

(2) (cont.) ... Additionally, all such maps, plats, or plans shall show sufficient section subdivision data, or other such controlling parcel data, necessary to support the position of any section subdivisional corner or controlling parcel corner used to reference the parcel surveyed.

# WAC 332-130-030 Land subdivision and corner restoration standards

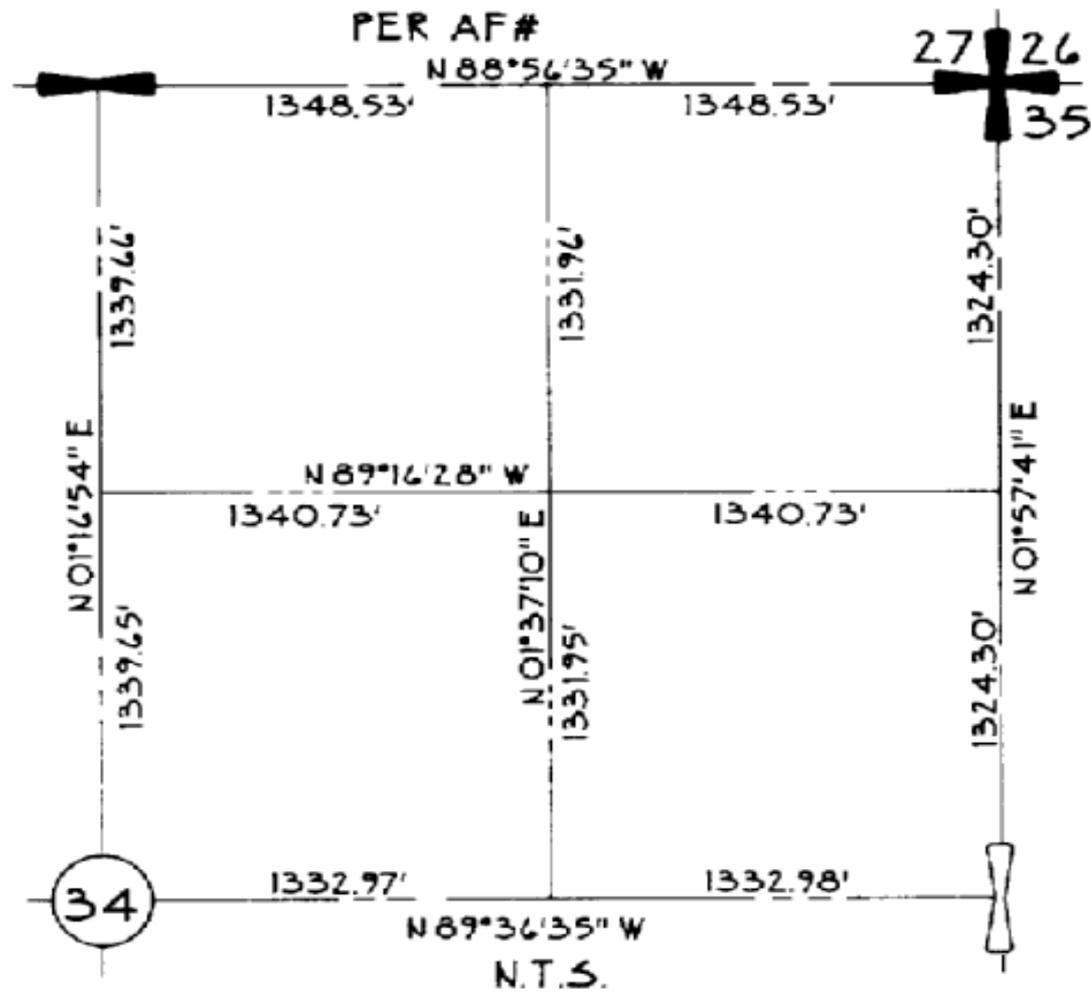
(2) (cont.) ... Where a portion or all of this information is already shown on a record filed or recorded in the county recording office of the county in which the parcel is located, reference may be made to that record in lieu of providing the required data.

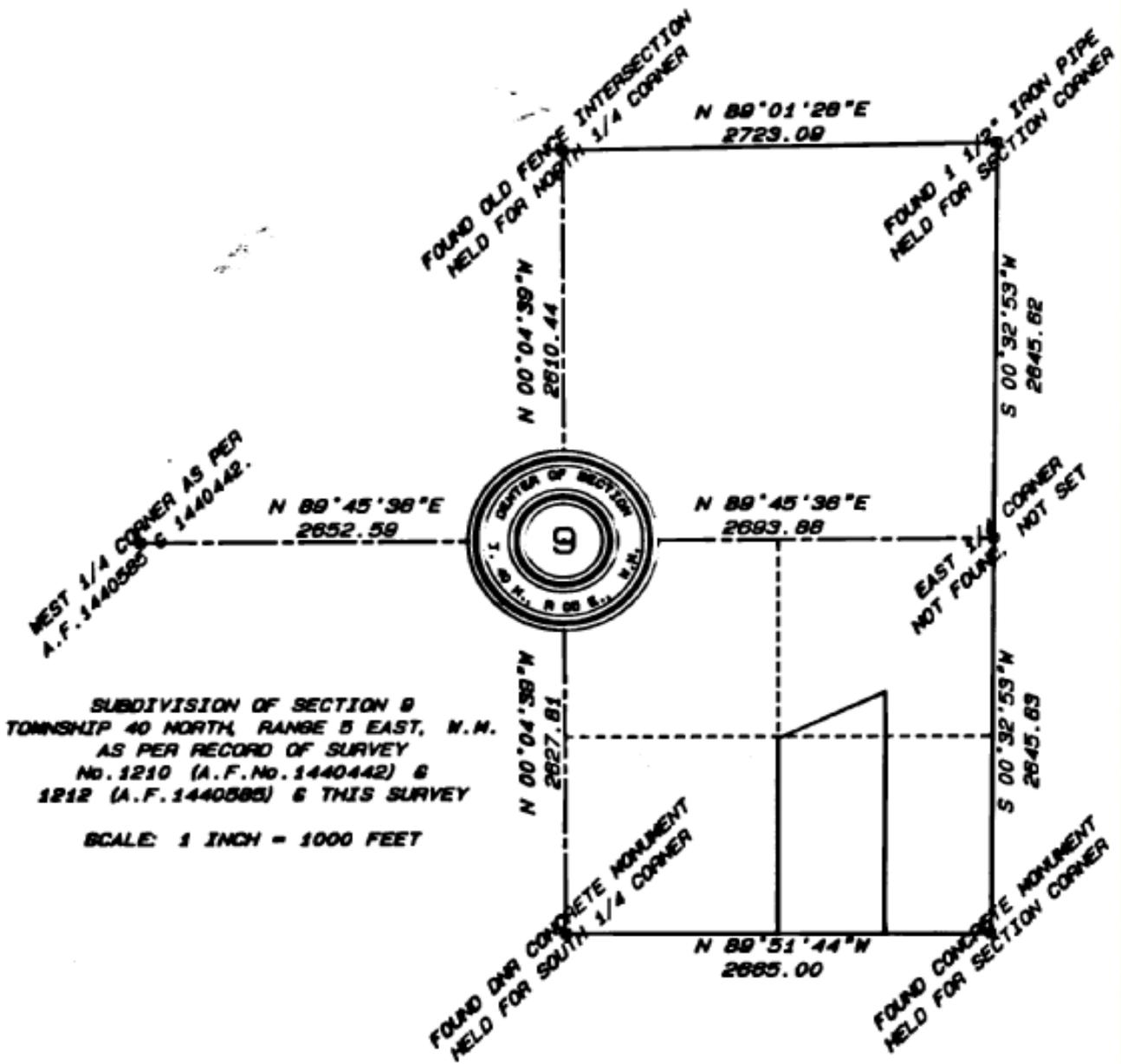
# Controlling Corners Missing



SECTION SUBDIVISION  
NE 1/4, SEC. 34-40N-5E

PER AF#





WEST 1/4 CORNER AS PER  
A.F. 1440585 & 1440442.

FOUND OLD FENCE INTERSECTION  
HELD FOR NORTH 1/4 CORNER

FOUND 1 1/2\"/>

EAST 1/4 CORNER  
NOT FOUND. NOT SET

FOUND DNR CONCRETE MONUMENT  
HELD FOR SOUTH 1/4 CORNER

FOUND CONCRETE MONUMENT  
HELD FOR SECTION CORNER

SUBDIVISION OF SECTION 9  
TOWNSHIP 40 NORTH, RANGE 5 EAST, N.M.  
AS PER RECORD OF SURVEY  
No. 1210 (A.F. No. 1440442) &  
1212 (A.F. 1440585) & THIS SURVEY

SCALE: 1 INCH = 1000 FEET

N 89°45'38\"/>

N 89°45'38\"/>

N 00°04'39\"/>

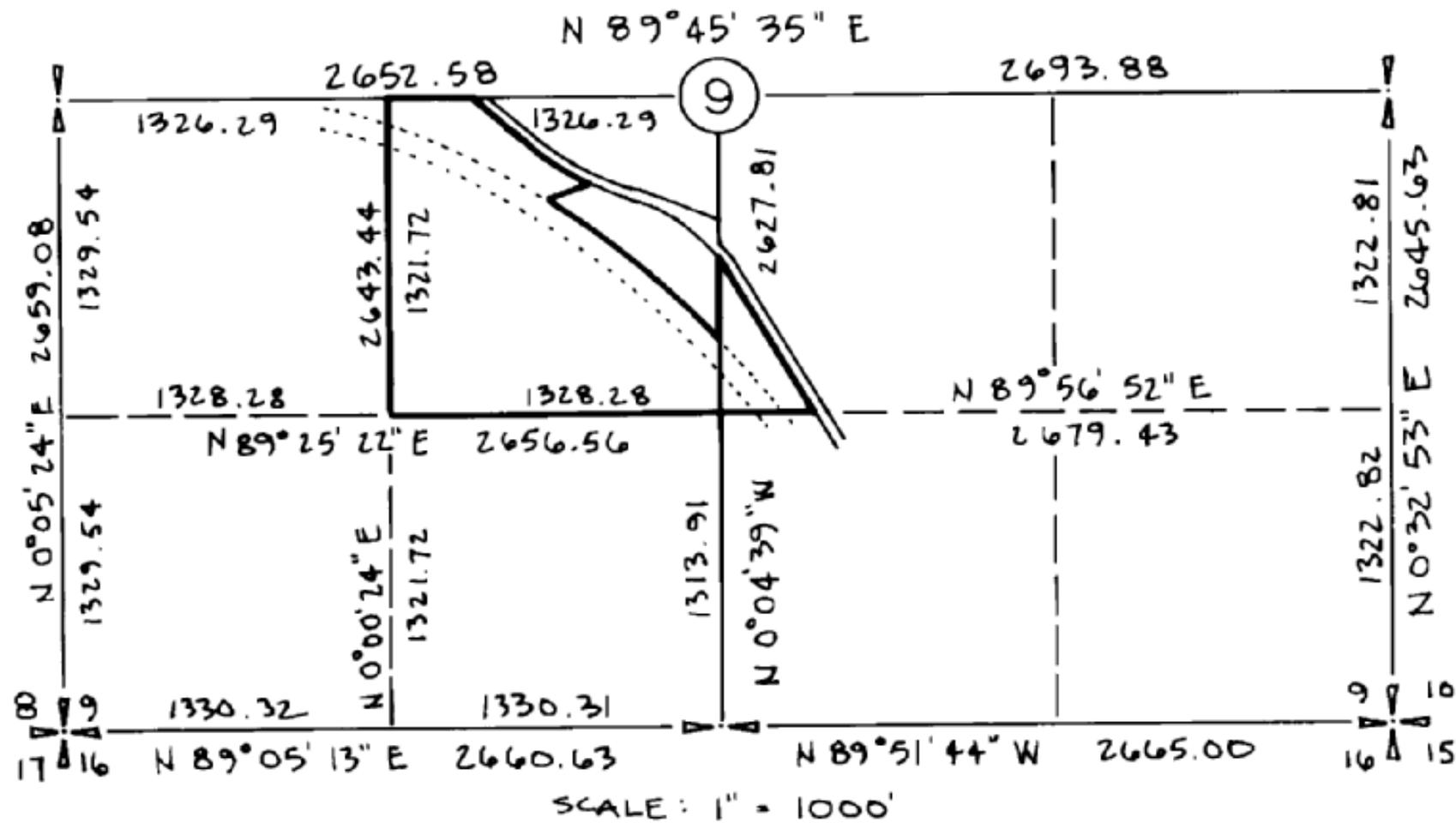
N 89°01'28\"/>

S 00°32'53\"/>

N 00°04'39\"/>

S 00°32'53\"/>

N 89°51'44\"/>



SUBDIVISION OF THE SOUTH HALF OF SECTION 9  
 PER SURVEYS RECORDED UNDER AUDITOR FILE NUMBERS  
 1355822, 1592179 AND 891023119.

# WAC 332-130-030 Land subdivision and corner restoration standards

- (4) Every corner originally monumented by the GLO or BLM that is physically reestablished shall be monumented in accordance with the Survey Recording Act. ...

# WAC 332-130-030 Land subdivision and corner restoration standards

(4) (cont.) ... If the reestablished corner is not filed or recorded as part of a record of survey, plat or short plat, at least three references shall be established and filed or recorded on a Land Corner Record Form.

# WAC 332-130-030 Land subdivision and corner restoration standards

(4) (cont.) ... If the reestablished corner is filed or recorded as part of a record of survey, plat or short plat, then ties to at least two other monuments shown on the record document may serve in lieu of the required references.

# WAC 332-130-030 Land subdivision and corner restoration standards

(4). (cont.) ... However, to best ensure an accurate relocation, references in close proximity to the corner are recommended.

# WAC 332-130-030 Land subdivision and corner restoration standards

(4) (cont.) ... Monuments placed shall be magnetically locatable and include a cap stamped with the appropriate corner designation as defined in the current BLM Manual of Surveying Instructions.



# CHECKLIST FOR SURVEY MAPS BEING RECORDED

(Adopted in WAC 332-130)

The checklist itself will not be reviewed. However, the restrictions on the checklist are important for land surveyors and county recording agents to keep in mind.

(Adopted in WAC 332-130)

The following checklist applies to land boundary survey maps and plans, records of surveys, plats, short plats, boundary line adjustments, and binding site plans required by law to be filed or recorded with the county. There are other requirements to meet legal standards. Records of survey filed pursuant to 58.09 RCW, that comply with this checklist, shall be recorded; **no other checklist is authorized for determining their recordability.**

# WAC 332-130-050 Survey map requirements.

The following requirements apply to land boundary survey maps and plans, records of surveys, plats, short plats, boundary line adjustments, and binding site plans required by law to be filed or recorded with the county.

- (1) All such documents filed or recorded shall conform to the following:

(a) They shall display a county recording official's information block which shall be located along the bottom or right edge of the document unless there is a local requirement specifying this information in a different format. The county recording official's information block shall contain:

(i) The title block, which shall be on all sheets of maps, plats or plans, and shall identify the business name of the firm and/or land surveyor that performed the survey. For documents not requiring a surveyor's certificate and seal, the title block shall show the name and business address of the preparer and the date prepared. Every sheet of multiple sheets shall have a sheet identification number, such as "sheet 1 of 5";

(ii) The auditor's certificate, where applicable, which shall be on the first sheet of multiple sheets; however, the county recording official shall enter the appropriate volume and page and/or the auditor's file number on each sheet of multiple sheets;

(iii) The surveyor's certificate, where applicable, which shall be on the first sheet of multiple sheets and shall show the name, license number, original signature and seal of the land surveyor who had responsible charge of the survey portrayed, and the date the land surveyor approved the map or plat. Every sheet of multiple sheets shall have the seal and signature of the land surveyor and the date signed;

(iv) The following indexing information on the first sheet of multiple sheets:

(A) The section-township-range and quarter-quarter(s) of the section in which the surveyed parcel lies, except that if the parcel lies in a portion of the section officially identified by terminology other than aliquot parts, such as government lot, donation land claim, homestead entry survey, townsite, tract, and Indian or military reservation, then also identify that official subdivisional tract and call out the corresponding approximate quarter-quarter(s) based on projections of the aliquot parts. ...

(iv) The following indexing information on the first sheet of multiple sheets:

(B) Additionally, if appropriate, the lot(s) and block(s) and the name and/or number of the filed or recorded subdivision plat or short plat with the related recording data;

(b) They shall contain:

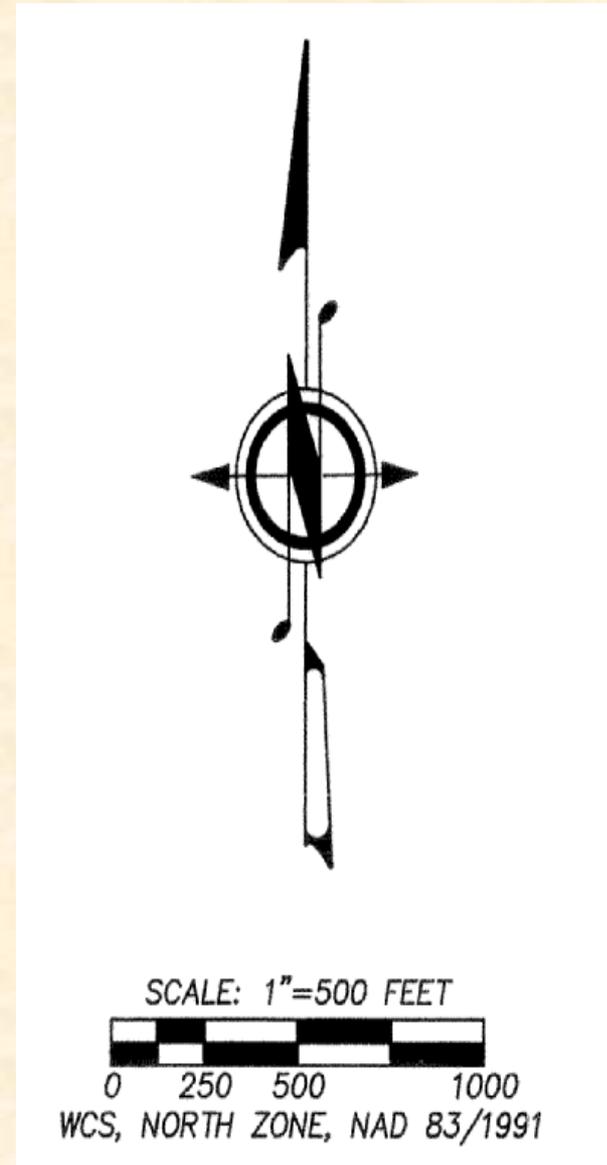
(i) A north arrow;

(ii) The vertical datum when topography or elevations are shown;

(b) They shall contain:

(iii) The basis for bearings, angle relationships or azimuths shown. The description of the directional reference system, along with the method and location of obtaining it, shall be clearly given (such as "North by Polaris observation at the SE corner of section 6"; "Grid north from azimuth mark at station Kellogg"; "North by compass using twenty-one degrees variation"; "None"; or "Assumed bearing based on ..."). If the basis of direction differs from record title, that difference should be noted;

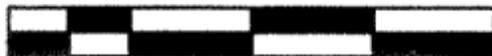
- This is not an acceptable Basis of Bearings. It doesn't describe the method and location of obtaining it.



This is an acceptable Basis of Bearings. It describes the method and location of obtaining it.



SCALE: 1"=500 FEET



0 250 500 1000  
WCS, NORTH ZONE, NAD 83/1991

BASIS OF MERIDIAN AND SURVEY SPECIFICATIONS:

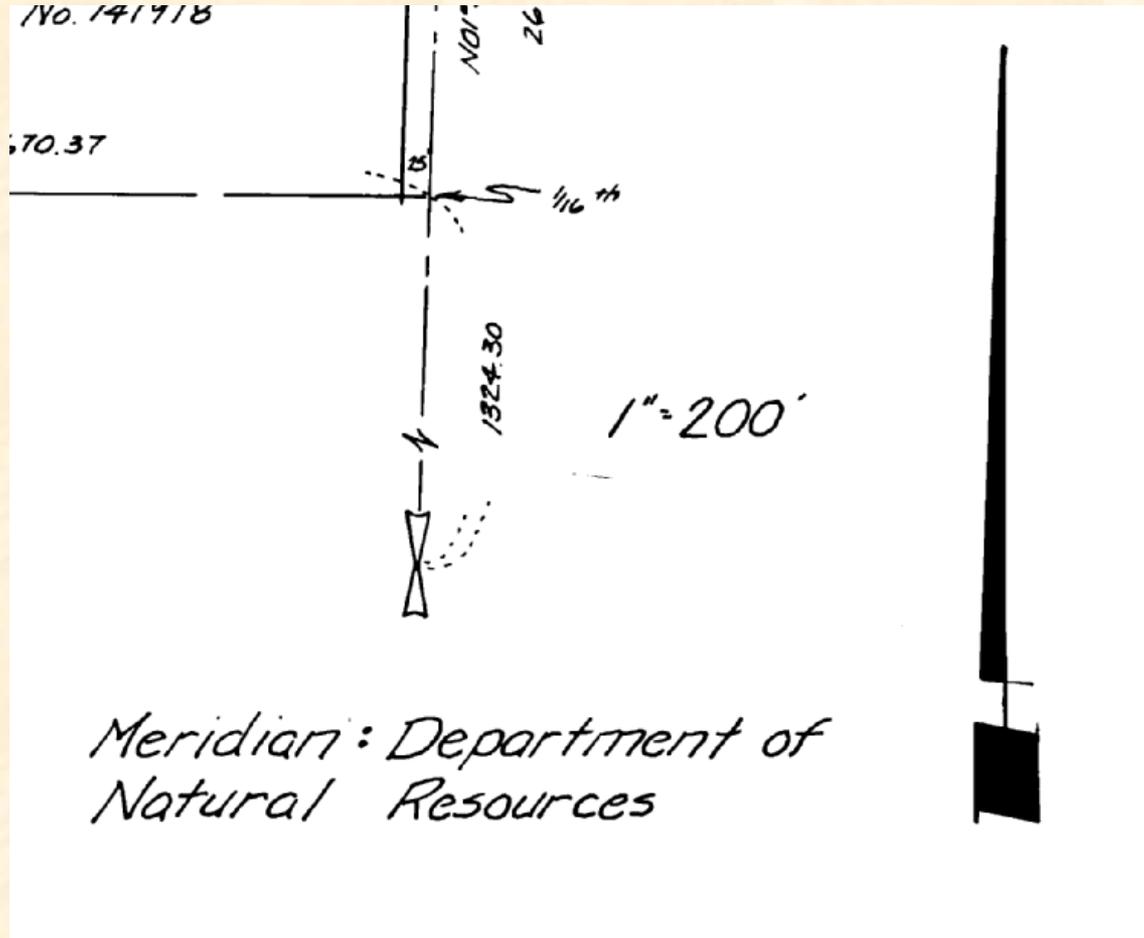
—BEARINGS SHOWN HEREON ARE RELATED TO THE 1991 ADJUSTMENT OF THE WASHINGTON COORDINATE SYSTEM, NORTH ZONE, DATUM OF 1983 (WCS GRID). CONVERGENCE, OR DIFFERENCE BETWEEN GRID AND GEODETIC NORTH IS  $-1^{\circ} 46' 35.7''$  AT THE CENTER QUARTER CORNER OF SECTION 5 (LATITUDE  $48^{\circ} 02' 07.2''$  NORTH, LONGITUDE  $123^{\circ} 13' 10.4''$  WEST).

—WCS GRID MERIDIAN IS DERIVED FROM GLOBAL POSITIONING SYSTEM (GPS) TIES TO THE FOLLOWING WASHINGTON HIGH ACCURACY REFERENCE NETWORK (HARN 1991) STATIONS:

(U.S. SURVEY FEET)

JCIA	390874.418 N	1157212.278 E
944 4090A TIDAL	420748.108 N	1001189.043 E

This certainly doesn't work.



This is on the edge.



WASHINGTON COORDINATE SYSTEM, NORTH ZONE,  
NAD 83(91) PER VOL 46 OF SURVEYS, PAGE 44

Assumed does not mean “None.” It is necessary to specify the assumptions.



*Meridian: Assumed*

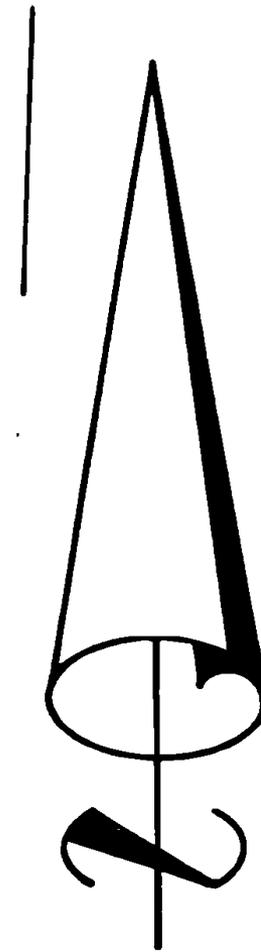
- *Denotes set #5*

This is the proper way  
to use the word “assumed.”

## BASIS OF BEARING:

ASSUMED N 00° 06' 40" E  
FROM S. 1/4 CORNER TO BOAT  
SPIKE AT INTERSECTION OF  
FROST AND REESE HILL ROADS

A reference to another survey or plat is not sufficient. The description of the “method and location of obtaining it” is missing.



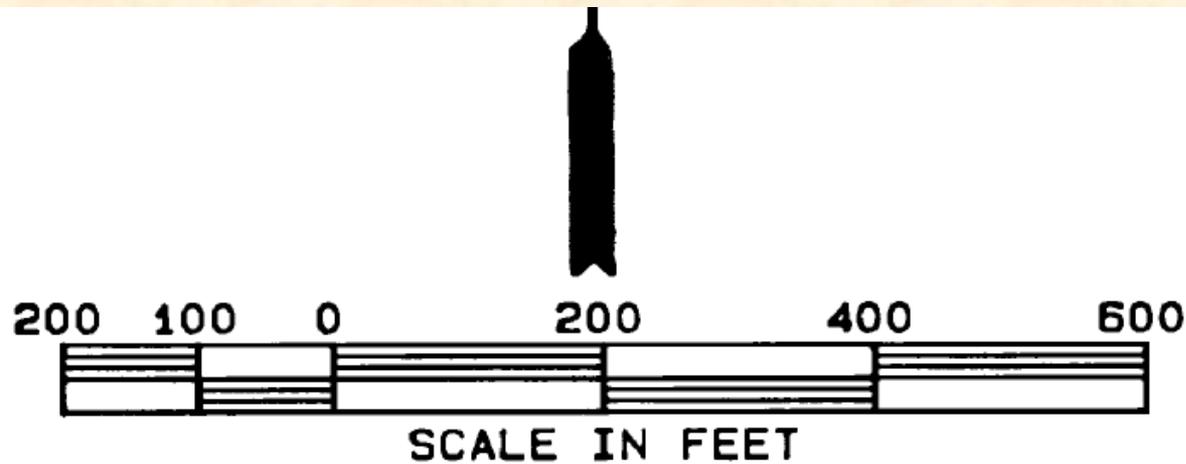
SCALE 1" = 100'

BASIS OF BEARINGS AND SECTION SUBDIVISION  
DERIVED FROM PLAT OF "THE GLEN, DIV. 7" AND  
THOSE RECORDED SURVEYS NOS. 471 AND 955

This works. The means of relating the survey to a previous survey is explained.

***BASIS OF BEARING = THE EAST LINE OF SECTION 9  
AS PER SURVEY No. 1210, A.F.No. 1440042***

Is this is OK?



***SCALE 1 INCH = 200 FEET***

***BASIS OF BEARING = THE EAST LINE OF SECTION 9  
AS PER SURVEY No. 1210, A.F.No. 1440042***

N 00° 14' 11" E

This is good.

## \*BASIS OF BEARINGS

THE NORTH LINE OF THE NE 1/4 OF SEC. 34-40N-5E,  
W.M., PER THE "KENDALL ACRES SHORT PLAT",  
RECORDED IN VOL. 20 OF SHORT PLATS, PG. 66,  
RECORDS OF WHATCOM COUNTY, WASHINGTON.  
BEARING BEING "N 88° 56' 35" W",

(iv) Bearings, angles, or azimuths in degrees, minutes and seconds;

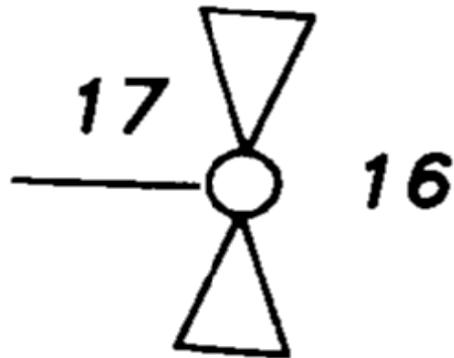
(v) Distances in feet and decimals of feet;

(vi) Curve data showing the controlling elements.

(c) They shall show the scale for all portions of the map, plat, or plan provided that detail not drawn to scale shall be so identified. A graphic scale for the main body of the drawing, shown in feet, shall be included. The scale of the main body of the drawing and any enlargement detail shall be large enough to clearly portray all of the drafting detail, both on the original and reproductions;

(f) For the intelligent interpretation of the various items shown, including the location of points, lines and areas, they shall:

(i) Reference record survey documents that identify different corner positions;



**Fnd 2 1/2" Alum. Cap  
on 1" Al. Pipe.**

**"George H. Raper, PLS  
9947, 1990. NOTE:**

**Corner set by Mike**

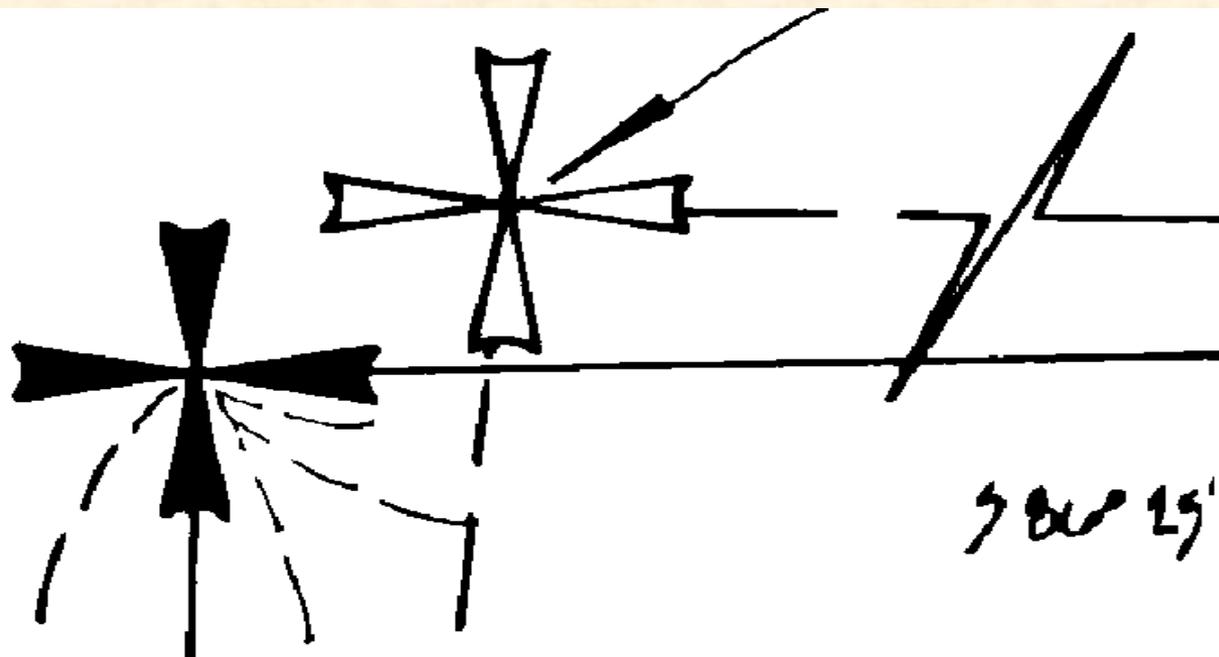
**Hobbs recorded in ROS**

**# 710 bears N46°44'W 9.17 feet.**

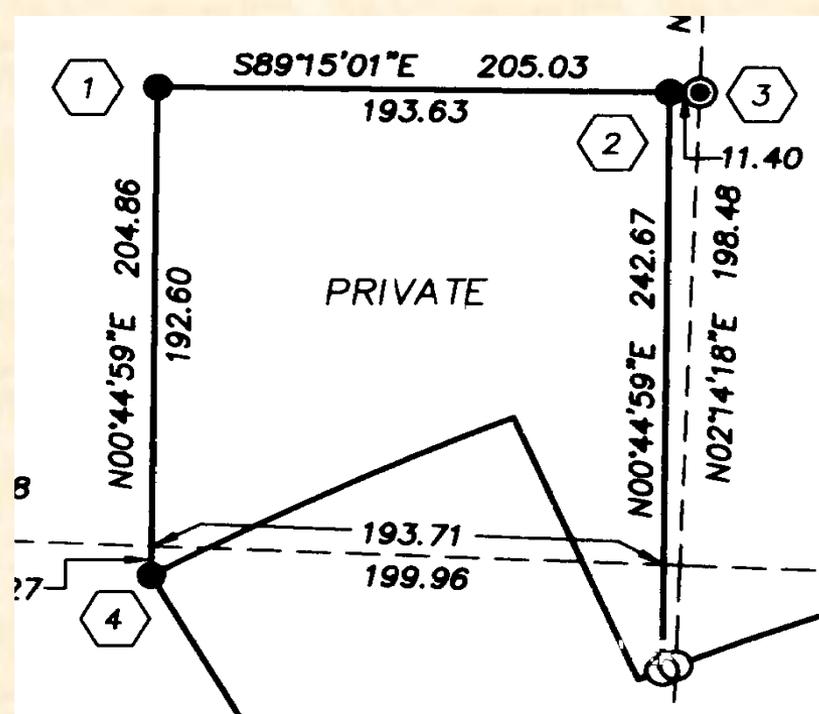
## NOTE

1. SOLID COLORED SECTION CORNERS INDICATE CORNERS USED - BREAKDOWN PER RECORDED SURVEY NO. 719 ; AS PER A.F. 1358035.
2. UNCOLORED SECTION CORNERS INDICATE ERRONEOUS POSITIONS USED PREVIOUSLY FOR STAKING PARCELS AND CREATING DESCRIPTIONS.

N.W. CORNER -  
SECTION 8 .

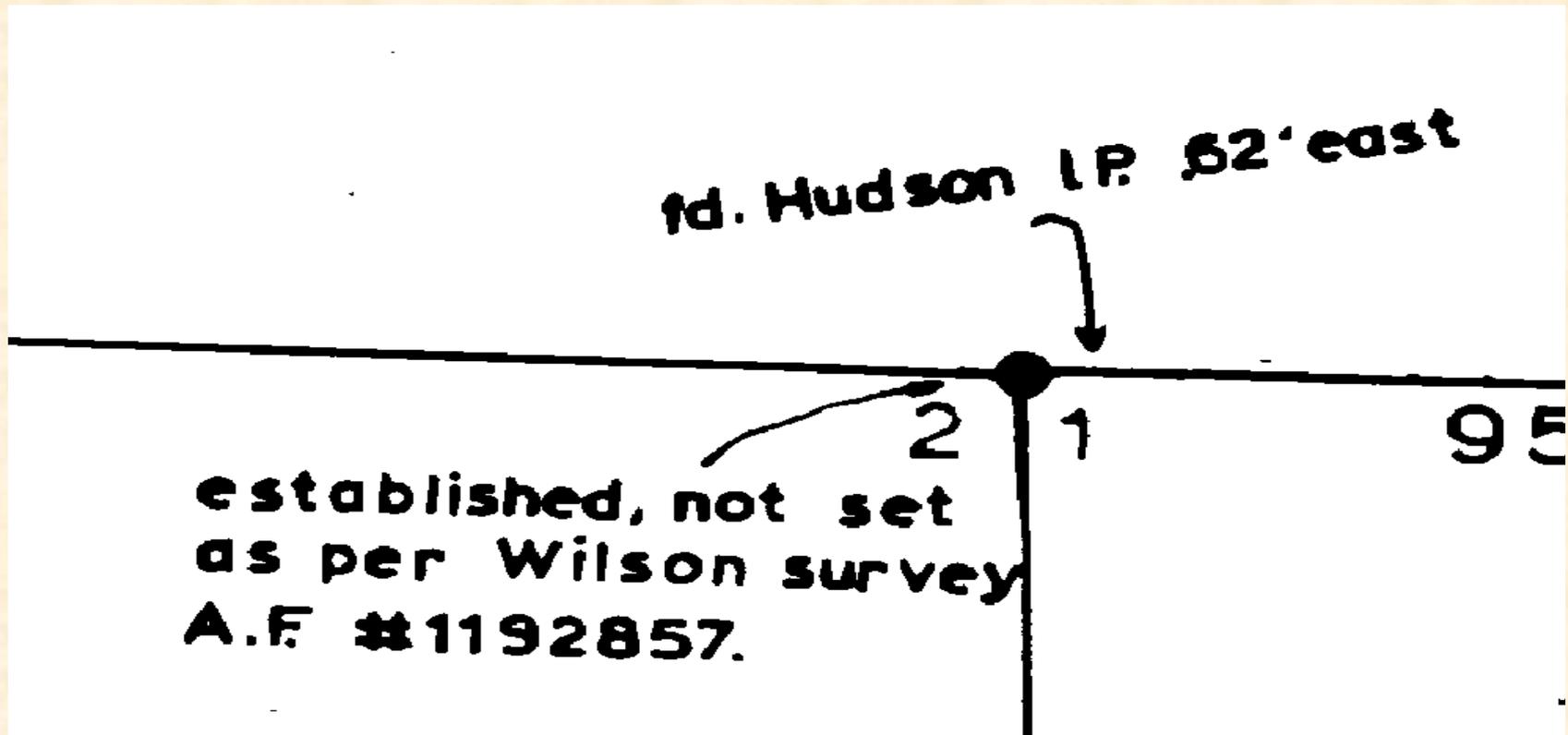


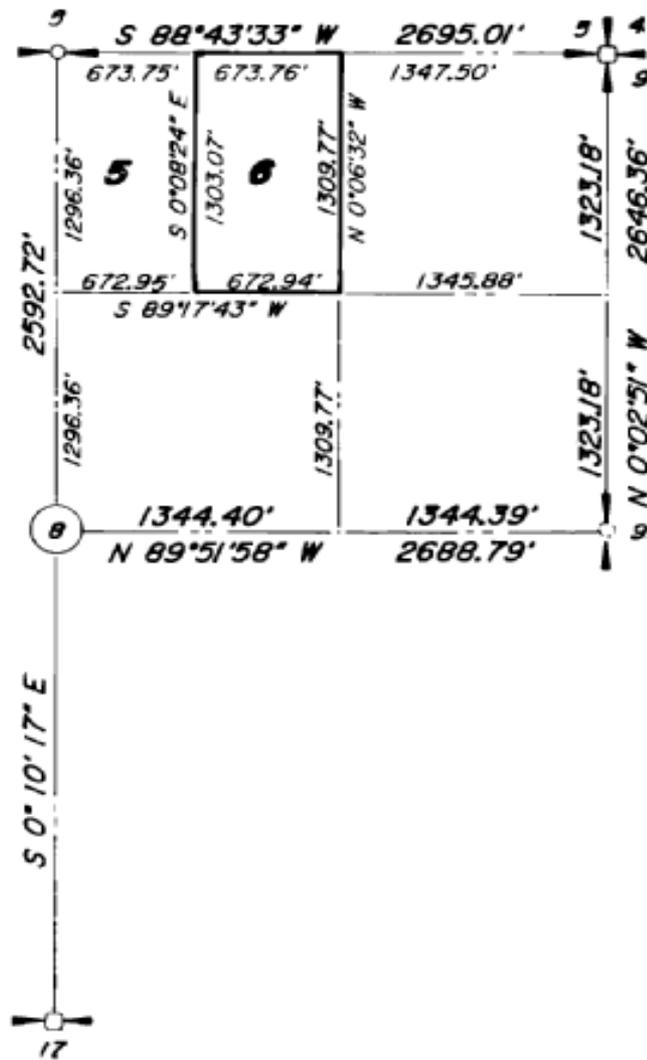
(ii) Show deed calls that are at variance with the measured distances and directions of the surveyed parcel;



EXCEPTING THEREFROM THE FOLLOWING DESCRIBED PROPERTY: BEGINNING AT A POINT ON THE NORTH RIGHT OF WAY LINE OF STATE HIGHWAY 1S, SAID POINT BEING AN IRON PIPE 577.81 FEET SOUTH AND 660.00 FEET WEST OF THE QUARTER SECTION CORNER COMMON TO SECTIONS 32 AND 33, TOWNSHIP 6 NORTH, RANGE 2 EAST OF THE W.M.; THENCE NORTH 197.24 FEET TO AN IRON PIPE; THENCE WEST 194.05 FEET TO AN IRON PIPE; THENCE SOUTH 204.76 FEET TO RIGHT OF WAY MARKER 504+00 - 250 LEFT; THENCE EASTERLY ALONG THE NORTHERLY RIGHT OF WAY LINE OF THE STATE HIGHWAY TO THE POINT OF BEGINNING,

(iii) Identify all corners used to control the survey whether they were calculated from a previous survey of record or found, established, or reestablished;





**BASIS OF SURVEY:**

*That certain record of survey filed under  
A.F. no. 1504085*

## ***CORNER DESCRIPTIONS***

- 1.) NORTH 1/4 CORNER - FOUND G.H.R. REBAR AND CAP, LS 9947, 1' DEEP IN ROAD AS PER RECORD OF SURVEY NUMBER 1143.***
- 2.) WEST 1/4 CORNER - COMPUTED POSITION AS PER RECORD OF SURVEY NUMBER 2149.***
- 3.) EAST 1/4 CORNER - COMPUTED POSITION AS PER RECORD OF SURVEY NUMBER 2147.***
- 4.) SOUTHWEST CORNER - CONCRETE MONUMENT AS PER RECORD OF SURVEY NUMBER 2149.***
- 5.) SOUTH 1/4 CORNER - FOUND CONCRETE MONUMENT AS PER RECORD OF SURVEY NUMBER 2147.***

(iv) Give the physical description of any monuments shown, found, established or reestablished, including type, size, and date visited;

## 2. $\Delta$ FOUND INTERNATIONAL BORDER MONUMENT

ALL MONUMENTS SHOWN ON THIS SURVEY VISITED FROM JAN. TO MARCH 1994.

**IBC MON. #37** INTERNATIONAL BOUNDARY MONUMENT #37

FOUND AND TIED

**HISTORY:**

- 1850'S - ORIGINAL DEMARCATION BY BOUNDARY COMMISSION.
- 1907 - RETRACEMENT BY BOUNDARY COMMISSION.
- 1988 - REPAIRS BY BOUNDARY COMMISSION.
- 1991 - NGS ESTABLISHED NAD83(1991) COORDINATES.

**FIELD SEARCH:**

ON 5-21-02 WE FOUND A STAINLESS STEEL OBELISK (6" BASE, 4" TOP, 4 1/2 FEET TALL) ON CONCRETE PAD. MONUMENT IS MARKED CANADA ON NORTH AND UNITED STATES ON SOUTH. CONCRETE PAD IS MARKED NO. 37, 1988.

FIELD BOOK 7039, PAGE 52, DATED 5-21-02.

CORNER NOTES

(A11) N1/4 CORNER SECTION 4

SEE DNR FINAL MAP #787 FOR CORNER INFORMATION - FILED  
UNDER AFN910916005, DATED 9-16-1991 (11).

(A13) CLOSING CORNER OF SECTIONS 3 & 4

SEE DNR FINAL MAP #787 FOR CORNER INFORMATION - FILED  
UNDER AFN910916005, DATED 9-16-1991 (11).

(v) Show the record land description of the parcel or boundary surveyed or a reference to an instrument of record;

**(vi) Identify any ambiguities, hiatuses, and/or overlapping boundaries;**

(vii) Give the location and identification of any visible physical appurtenances such as fences or structures which may indicate encroachment, lines of possession, or conflict of title.

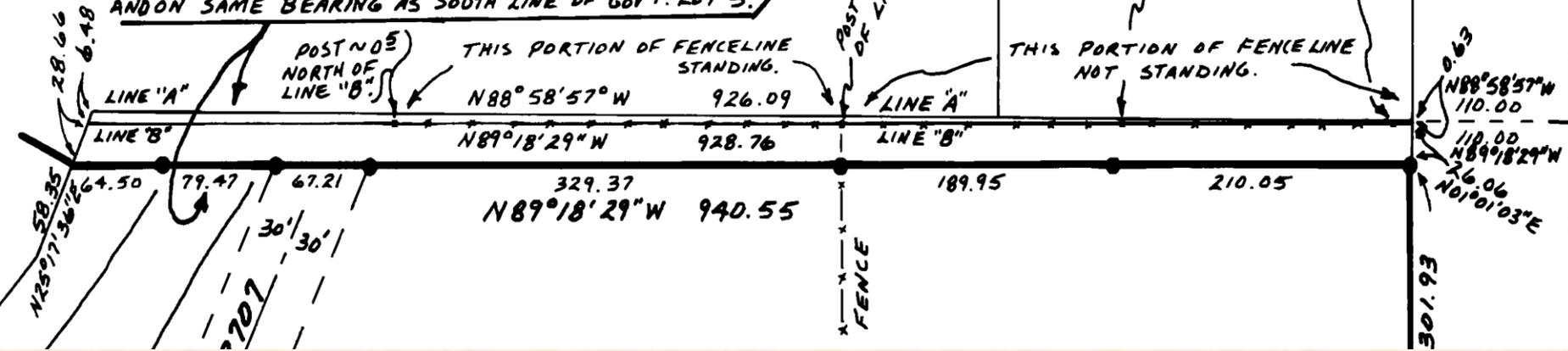
**GAP OR HIATUS BETWEEN TAX NOS. 12, 31 AND MCKEOWN:**  
 LINE "A" IS THE THEORETICAL SOUTH BOUNDARY OF TAX 12 AND TAX 31, AT 90° TO THE LINE BETWEEN SECTIONS 8 AND 9. LINE "B" IS BASICALLY AN OCCUPATION LINE, ROUGHLY FOLLOWING THE FENCELINE AND ON SAME BEARING AS SOUTH LINE OF GOV'T. LOT 5.

**TAX 12**  
 A.F.N. 284783

**TAX 31**  
 A.F.N. 259275

REMAINS OF POST IN GROUND ON LINE "B"

UNCERTAIN REMAINS OF POST ~ 1/3 NORTH OF LINE "B"



(b) Alterations, amendments, changes, or corrections to a previously filed or recorded map, plat, or plan shall only be made by filing or recording a new document;

(c) All such documents filed or recorded shall contain the following information:

(i) A title or heading identifying the document as an alteration, amendment, change, or correction to a previously filed or recorded map, plat, or plan along with, when applicable, a cross-reference to the volume and page and auditor's file number of the altered document;

(ii) Indexing data as required by subsection (1)(a)(iv) of this section;

(iii) A prominent note itemizing the change(s) to the original document. Each item shall explicitly state what the change is and where the change is located on the original;

## WAC 332-130-080 Relative accuracy

- Control traverses were run using conventional field methods. These traverses were either closed loops or closed on previously known positions and have met or exceeded the standards established in WAC 332-130-090/080.
- Control traverses and measured data analyzed using a comprehensive least squares adjustment. The adjustment passed the CHI squared test at the 95% confidence level.
- Relative to fixed control the mean station coordinate semi major error ellipse at the 95% confidence region is .xx of a foot.

## WAC 332-130-100 Equipment and procedures.

- (1) All land boundary surveys filed or recorded shall contain a statement identifying the type of equipment used, such as 10-second theodolite and calibrated chain, or 10-second theodolite and electronic distance measuring unit, and procedures used, such as field traverse, photogrammetric survey, global positioning system survey or a combination thereof to accomplish the survey shown;

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FEB 16 1994

BPD

**Summary:**

It is the committee's belief that the scenarios discussed herein will generally cover those instances of unique circumstances that will generate the most questions and confusion. If a practicing land surveyor truly reads the law and applies good professional judgement, they will find that most surveys in plats or short plats should be recorded. At a minimum a licensed land surveyor should keep in mind the overall benefit surveys provide to the public in general and not just their clients or their client's wishes.

It is also important to remember that the original intent of the survey recording act was to create a public record of survey information for public benefit. While this report discusses situations that permit a surveyor to not record a survey, a surveyor should keep in mind the overall benefit that is obtained when a recording is made.



## Contact Information

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WASHINGTON STATE DEPARTMENT OF  
**Natural Resources**

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**Peter Goldmark** - Commissioner of Public Lands