



**City of Wheat Ridge
Land Surveying Information Packet**

Table of Contents

Information Page	Page Number
Geodetic Surveying Requirements	2
Section Tie Example	4
Plat Review Checklist	5
Survey Monument General Notes	8

Geodetic Surveying Requirements for Final Plats

TITLE OF PLAT: _____

Notice to Surveyor:

⇓ Initial each item as completed. This form shall accompany the Final Plat submittal.

- _____ 1. All distances for the above referenced Plat are shown using (ground) modified State Plane measurements (U.S. survey feet rounded to the nearest 0.01') consistent with the ***Current City Datum***, AND the following datum information is shown on the Final Plat:
- a. The ***Current City Datum*** Coordinate System used is a ground-based modified form of the **NAD83/92 State Plane Coordinate System, Colorado Central Zone 0502**.
 - b. Vertical Datum used is the **North American Vertical Datum of 1988 (NAVD88)**.
 - c. Ground to Grid Combined Scale Factor is **0.99974780300**, scaled from base point **PHAC 1** (Permanent High Accuracy Control Point #1) having the following NAD83/92 State Plane coordinates: **PHAC 1: Northing: 1701258.75, Easting: 3118217.58, Elevation: 5471.62**.
- _____ 2. Modified State Plane coordinates consistent with the ***Current City Datum*** have been used, and the ***City of Wheat Ridge Datum Conversion Information & Procedure*** has been followed prior to performing any Global Positioning System fieldwork.
- _____ 3. The following curve data for the site boundary, and for all lot lines and easement boundaries, shall be shown on the Final Plat. All angular measurements shall be to the nearest second and all distances to the nearest 0.01':
- a. Arc length.
 - b. Chord length.
 - c. Chord bearing.
 - d. Central angle (delta).
 - e. Radius.
- _____ 4. The **Section Tie** control points shall be on the ***Current City Datum*** and shown using (ground) modified State Plane distances and bearings with the Latitude/Longitude and modified State Plane coordinates shown per City of Wheat Ridge published values. All associated property boundary corners shall be in modified State Plane values consistent with the ***Current City Datum***; a minimum of two (2) property boundary corners of the site shall be tied to any of the three (3) following control point types within the City of Wheat Ridge network:
- a. Section corners.
 - b. Quarter-section corners.
 - c. City of Wheat Ridge Permanent High Accuracy Control (PHAC) points.
- _____ 5. A **Basis of Bearing Statement** shall be shown specifying the two (2) City of Wheat Ridge monuments selected to establish the modified State Plane (***Current City Datum***) bearings used for the Plat. Specify the City monument identification number, the ***Current City Datum*** coordinates and the Latitude/Longitude for each of the two monuments used for the Basis of Bearing, and show the modified State Plane distances and bearings between them.

- _____ 6. The following information is included on the Plat for all monuments used:
- a. The City-based monument identification number.
 - b. Modified State Plane coordinates on the *Current City Datum* (as supplied by the City).
- _____ 7. Provide one (1) 24"X 36" paper copy on the Current City Datum as listed on this Plat, with all bearings relative to the Current City Datum Basis of Bearing, and all coordinates relative to said *Current City Datum*.
- _____ 8. Two **digital files** of the Final Plat **positioned correctly on the *Current City Datum*** have been provided with the Plat submittal as follows:
- a. One (1) file in the currently acceptable version of **AutoCAD DWG** format (please contact the Department of Public Works at 303.235.2861 for version info).
 - b. One (1) file in **Adobe PDF** format.
- _____ 9. A **Closure Report** showing the error of closure for the platted area was provided with the plat submittal. The error of closure shall not exceed 1:50,000 for all linear and angular (bearing) measurements per Section 26-407-D of the City of Wheat Ridge Municipal Code of Laws.
- _____ 10. The following statement is included on the plat: "*Per Colorado Revised Statutes Sec. 38-51-106 (L), all lineal units depicted on this Land Survey Plat are U.S. Survey Feet. One Meter equals 39.37 divided by 12 U.S. Survey Feet according to the National Institute of Standards and Technology.*"
- _____ 11. Per C.R.S. 38-52-106, the Final Plat shall contain a **Statement of Accuracy**, as defined by the National Ocean Survey/National Geodetic Survey, used to derive the coordinates shown on the Final Plat.

The form of the **Statement of Accuracy** shall be:

The geodetic point coordinate data shown herein has been derived from the NAD 83 HARN State Plane Colorado Central FIPS 0502 Coordinate System, and has a horizontal Accuracy Classification of 0.07 U.S. Survey Feet at the 95% Confidence level, as defined in the Geospatial Positioning Accuracy Standards of the Federal Geodetic Control Subcommittee (FGDC-STD-007.2-1998).

I hereby acknowledge all the above requirements have been addressed in a full and complete manner.

Surveyor Name (Please Print)

Surveyor Signature

Firm

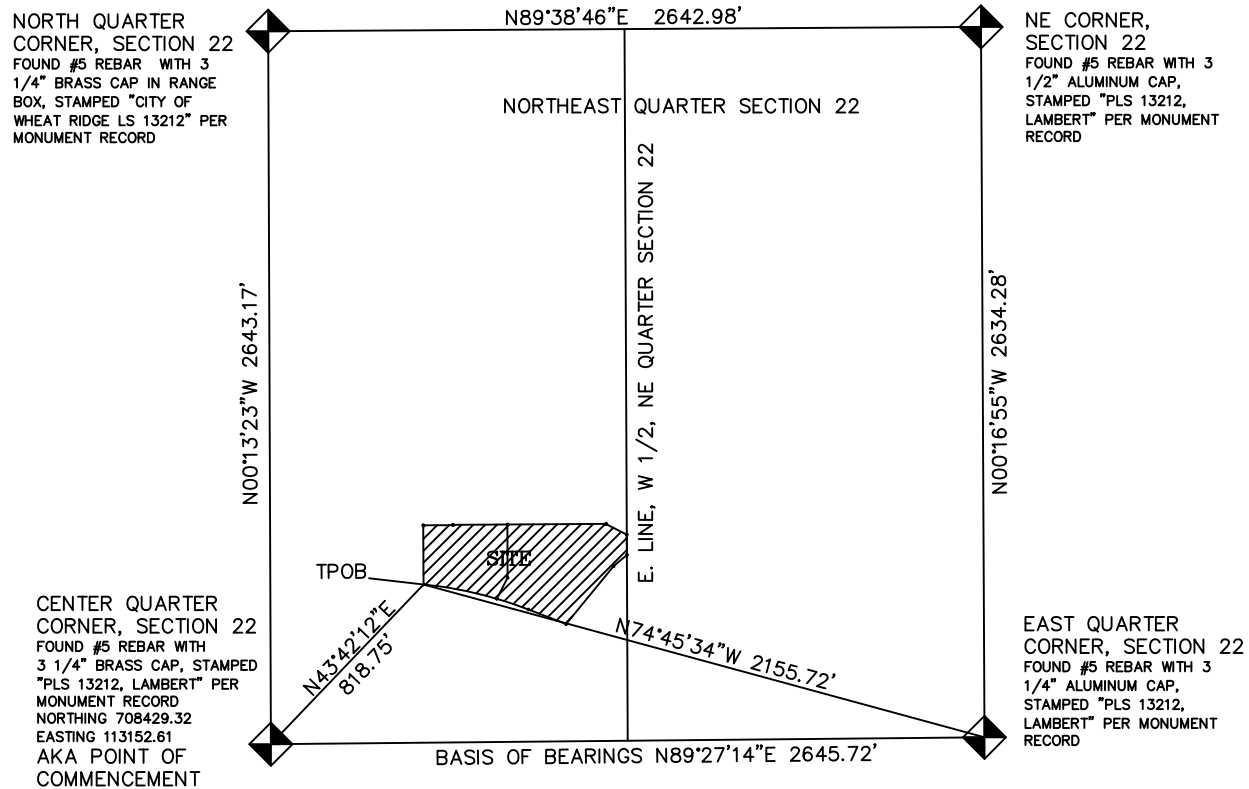
Date

For information pertaining to Section and Quarter Corner information, PHAC points, benchmarks, or for general City surveying monumentation information, please visit the City of Wheat Ridge website at:

www.ci.wheatridge.co.us

Or contact the Department of Public Works, Engineering Division at 303.235.2861.

SECTION TIE EXAMPLE



BASIS OF BEARINGS/SECTION TIE DETAIL (1" = 500')

PLAT REVIEW

CASE NO:	A
CASE NAME:	B
LOCATION:	C
REVIEW NO.:	D

GENERAL INFORMATION	OK	NOT OK	N/A	COMMENTS
NAME OF SUBDIVISION PLAT (UNIQUENESS)				
SUBTITLE				
LEGAL DESCRIPTION (SHOWN)				
SCALE BAR (NOT LESS THAN 1:100)				
NORTH ARROW				
LEGEND				
DATE OF PREPARATION/REVISION				
CASE HISTORY BOX				
GENERAL NOTES (SHOWN & APPLICABLE)				
VICINITY MAP				
DEDICATORY STATEMENT				
ZONING ON AND ADJACENT TO SITE				
ADJACENT SUBDIVISIONS SHOWN				
READABILITY FOR RECORDING PURPOSES				
SURVEYOR'S NAME				
SURVEYOR FIRM NAME, ADDRESS, & PHONE				
LETTER SIZE (1/8" minimum)				
MARGINS (2" on left, min. 1" on top, 1/2" on sides)				
CERTIFICATION BLOCKS:	OK	NOT OK	N/A	COMMENTS
OWNER'S SIGNATURE(S) & NOTARY				
CITY CLERK				
MAYOR				
DIRECTOR OF COMMUNITY DEVELOPMENT				
DIRECTOR OF PUBLIC WORKS				
COUNTY CLERK & RECORDER				
SURVEYOR'S CERTIFICATION				
PLANNING COMMISSION (If Applicable)				
LIEN HOLDER & NOTARY (If Applicable)				

PLAT REVIEW

LEGAL DESCRIPTION	OK	NOT OK	N/A	COMMENTS
CORRECT SECTION, TOWNSHIP, & RANGE				
PROPER QUARTER SECTION				
LOTS & BLOCKS IDENTIFIED				
SECTION TIE INCLUDED IN LEGAL DESC.				
LEGAL DESCRIPTION CLOSURE (>1:50,000) AS WRITTEN.				Closure: = City Closure: =
LEGAL DESCRIPTION CLOSURE (>1:50,000) PER DRAWING.				Closure: = City Closure: =
CLOSURE SHEET PROVIDED (meeting 1:50,000)				
AREA OF TOTAL SITE (& match to Legal Description)				
INDIVIDUAL LOT CLOSURES				
AREA OF INDIVIDUAL LOTS				
LAND SURVEYING	OK	NOT OK	N/A	COMMENTS
HORIZONTAL DATUM ID (modified NAD83/92)				
GROUND-GRID COMBINED SCALE FACTOR				USED = City Factor = 0.99974780300
NOS/NGS STATEMENT OF ACCURACY				
LINEAL UNITS SHOWN AS "U.S. SURVEY FEET"				
PT. OF BEGINNING / PT. OF COMMENCEMENT				
BASIS OF BEARINGS (to be on Current City Datum)				USED = City Basis =
ALL CURVE DATA SHOWN (AL, CHL, CHB, R, Δ)				
HORIZONTAL DISTANCES ARE SHOWN TO 0.01'				
ANGLES SHOWN TO NEAREST SECOND				
BEARINGS & DISTANCES OF BOUNDARY				
BEARINGS & DISTANCES OF INDIVIDUAL LOTS				
BEARINGS & DISTANCES OF EASEMENTS				
SECTION TIES (min. of 2 different property corners tied)				
PLATTED PARCEL FITS THE SECTION				
PROPERTY LINE GAPS/OVERLAPS IDENTIFIED				
SET & FOUND PINS IDENTIFIED				
ROW DEDICATION ("Hereby Dedicated by this Plat")				
LOT LINES ("Hereby Created/Removed by this Plat")				
SECTION MONUMENT INFO (Description, City ID#, N & E)				

PLAT REVIEW

EASEMENTS, DEDICATIONS, & MISC.	OK	NOT OK	N/A	COMMENTS
ACCESS EASEMENTS (w/language)				
SIDEWALK EASEMENTS (w/language)				
DETENTION/DRAINAGE EASEMENTS (w/language)				
EXISTING UTILITY EASEMENTS				
PROPOSED UTILITY EASEMENTS				
IRRIGATION DITCH EASEMENTS (w/language)				
STANDARD EASEMENT LANGUAGE				
ADDITIONAL DEDICATIONS (If Applicable)				
ENCROACHMENTS ONTO SITE ID'd (If Applicable)				
ROW WIDTH(S), CENTERLINE(S) (& distance to site)				
SURROUNDING STREETS SHOWN				
PROPOSED STREET NAME(S) SHOWN				
LOCATION OF PROPOSED STREETS DEFINED				
CITY BOUNDARY IDENTIFIED (If Applicable)				
STREET MONUMENTS TO BE SET (If Applicable)				
LOCATION OF BUILDING ENVELOPES (If Applicable)				
REQUIRED SUBMITTAL ITEMS	OK	NOT OK	N/A	COMMENTS
PROPERTY DEED(S)				
GEODETTIC SURVEYING REQMT. CHECKLIST				
DIGITAL PLAT FILE (AutoCAD .dwg)				
BOUNDARY ERROR OF CLOSURE PRINTOUT				Provided Closure: = City Closure: =
REVIEWER COMMENTS:				
1)				
2)				
3)				
4)				
5)				
6)				

PW PLAT REVIEW COMPLETED BY: _____ **DATE:** _____



Survey Monuments

General Notes

1. All Survey Monuments are to be set using ties to section corners and/or quarter corners found within the City of Wheat Ridge Datum.
2. Coordinates for all section corners and quarter corners used (or set) will be consistent with the City of Wheat Ridge Datum and are available from the Department of Public Works, Engineering Division.
3. All Section Corners, Quarter Section Corners, and Aliquot Corners set are required to have a Monument Record filed with the State of Colorado pursuant to Title 38, Article 53, Colorado Revised Statutes (1994). A copy of said Monument Record shall be submitted to the Department of Public Works, Engineering Division within thirty days of submittal to the State.
4. All monuments are to be set by or under the direct supervision of a Professional Land Surveyor licensed in the State of Colorado.
5. Within thirty calendar days of completion, the Professional Land Surveyor responsible for the monumentation project shall provide to the City a letter of certification stating that the work has been completed in accordance with all approved City Monumentation Requirements.
6. Asphalt patchback is to be per the current City of Wheat Ridge typical HMA Asphalt Detail.