



Gila County Public Works

Memo

To: Quintin Johnson, Tonto National Forest
From: Tom Homan, Gila County Public Works
CC: Steve Sanders, Gila County Public Works
Date: November 28, 2006
Re: Tonto Basin Cadastral Control Survey Work

Gila County is improving the level of cadastral control within the Tonto Basin area for survey and tax purposes. Prior to setting the new monuments a review and approval of the areas by Tonto National Forest (TNF) personnel needs to be accomplished.

Attached are two 24x36" size maps showing the area and planned monument locations. One has USGS quad map information, the other does not. Both have the proposed Latitude and Longitudes of the new monuments. Also attached are the NGS Attachments regarding monument construction. All printed documents will also be stored on the Gila County FTP site in PDF and/or ESRI shape file formats as relevant. URL is:

<ftp://gilafpuser:password@ftp.gilacountyaz.gov/Public/PublicWorks/GIS/TontoBasin>

Monuments will be in one of three different configurations according to National Geodetic Survey (NGS) construction of high accuracy 3-D survey monuments. Attachments 7, 8 and 9 from the NGS OPERATIONS HANDBOOK and MANUAL OF GEODETIC TRIANGULATION are the controlling documents.

Monument types are, in order of stability and preference:

Attachment 8 – Setting monument in bedrock or structure;

Attachment 9 – NGS 3-D Monument;

Attachment 7 – Concrete Mark

As there is little suitable exposed bedrock in the desired locations, the 3-D monument will be first attempted. If less than 8 feet of Stainless steel rod can be driven before refusal is met, the rod will be abandoned in place and the hole filled with concrete to complete a Concrete mark. If more than 8 feet of rod is driven then additional rod will be driven until refusal is met and the monument finished in accordance with NGS 3-D monument specifications.

In areas where the possibility of underground utilities may be encountered Blue Stake will be contacted and completed prior to monument construction.

If TNF personnel wish to visit sites with County personnel knowledgeable with the project, please contact Gary Tamietti at 928-951-1043 or email gtamietti@co.gila.az.us

A description with location of the new monuments is included below. All locations have had a steel post or lath temporarily set and flagged in pink & white with blue polka dots:

BAR X: Lat: 33° 49' 23.75 N" Lon: 111° 16' 39.27 N"

Intersection of Bar X (TNF 470) and Ewing Dr (TNF 423)

BONANZA: LAT: 33° 48' 00.06" N LON: 111° 14' 55.69" W

East of the intersection of Ewing and Bonanza. Between roadway and chain link fence. Lath Set.

BOUQUET: LAT: 33° 50' 40.44" N LON: 111° 14' 36.25" W

Near the South East corner of the Bouquet Ranch development. TNF 424. Lath Set

COTTONWOOD: LAT: 33° 58' 10.64" N LON: 111° 19' 20.28" W

Between FS 167 and SR 188 near ADOT ROW fence. Lath Set

EWING: LAT: 33° 52' 25.48" N LON: 111° 17' 35.08" W

North of intersection of Ewing Trail (TNF 423) and Greenback Valley Rd (TNF 71) NorthEast of TNF boundary sign.

GREENBACK: LAT: 33° 48' 23.83" N LON: 111° 12' 14.22" W

At the East end of TNF 426. 50 ft West of property gate. South of roadway. We had marked a boulder for drilling a monument into it's not bedrock so we would drill a hole for one of the other two types of monuments instead.

PICTURE: LAT: 33° 50' 54.33" N LON: 111° 15' 37.79" W

Near the North West corner of the Bouquet Ranch development. TNF 424.

REDNECK: LAT: 33° 51' 23.74" N LON: 111° 17' 17.33" W

At the intersection of Ewing Trail (TNF 423) and Outlaw Ln. Lath Set.

ROADSIDE: LAT: 33° 50' 33.78" N LON: 111° 16' 51.50" W

1.00mi± North of the intersection of Ewing Trail (TNF 423) and Bouquet Ranch Rd (TNF 424)

SIGN: LAT: 33° 53' 25.10" N LON: 111° 18' 42.09" W

Near to 'Welcome to Tonto Basin' sign at North end of Tonto Basin on SR 188

SLATE: LAT: 33° 56' 02.35" N LON: 111° 18' 49.74" W

South East of the intersection of Slate Creek Trail and SR 188. Near a large saguaro

SPLIT: LAT: 33° 48' 16.05" N LON: 111° 13' 39.87" W

Half way along Greenback Creek Rd (TNF 426) to the private gate.

STORE: LAT: 33° 51' 23.03" N LON: 111° 18' 37.71" W

In West side of ADOT SR 188 ROW just North of Store Milepost 261.1±