

Part of Dawson Co.
Rolled Sketch #8

I, W. J. Williams, licensed land surveyor of Texas, do hereby certify that in preparing to survey the South half of Section No. 17, Block C39, Dawson County, I made search for the original corners made by W. D. Twichell and upon which he based his survey of the school lands lying West and North of Block M in the northwestern part of Dawson County and in the northeastern part of Gaines County, as well as Terry and Lynn Counties.

Also, I tied all of the corners, I was able to identify, into the U. S. Coast & Geodetic Survey doing good third order work, reading angles to within 2 or 3 seconds of the true angles. These results are shown on Sketch "W" filed herewith.

The 5" pipe set by Surveyor Twichell for the N.W. corner of Section 117, Block M, and his North corner of Section No. 1, Block C30, and his S. W. corner of Section No. 21, Block C31 is on South side of corner post in fences running West-North and N. 75° E. It is generally recognized and used as the original corner of the above named school land surveys. It is in Latitude 32° 54' 02.228", Longitude 102° 14' 37.231".

The original Northwest corner of Section No. 11, Block C33 is a 1" galvanized pipe now near middle of East-West lane and in line with where old fence running South once stood. It is marked NEG31 and by it is a pile of stones all buried under about 2 feet of sand. It is in latitude 32° 57' 49.288", longitude 102° 12' 32.840". Surveyor Twichell gave three bearings to this corner all of which fit but with courses compared to an assumed Meridian 0° 05' 30" to right of true North at this place. "Dewey" windmill bears true N. 56° 05' 30" E. about 2 miles. Woods' N.E. corner of Gaines County a stone 20x18x2", marked NEGCo NWDCo with a 1½" galvanized pipe marked NEGAINES By DS WOODS by it set by Surveyor R. E. Estes, bears N. 57° 01' W. 329.5 varas and "Hobson" windmill bears N. 79° 43' 45" W. (True courses).

The Twichell Northwest corner of Section No. 117, Block M bears true S. $24^{\circ} 48' 25''$ W. 9102.1 varas - by Twichell assumed course S. $24^{\circ} 42' 54''$ W.

Beginning at the original N.W. corner of Section No. 11, Block C38 as above described and using the Twichell assumed Meridian as determined by "Dewey Mill" and "Hobson Mill" to determine comparative courses I ran East 1197 varas and set a 1/2 in. pipe in road for N. W. corner of Section No. 10, Block C38 from which "Dewey Mill" bears N. $46^{\circ} 53'$ E. by Twichell course. (No corner found).

I then turned N. 45° E. by this course and ran three (3) diagonal miles of 2688.1 varas each, falling in disturbed places in first two miles, and in sandy soil the third mile. Continued to the fourth diagonal mile which would be the N. E. corner of Section No. 10, Block C39 and found a stone the size described by Twichell 6X5X4 inches, and marked "X" lying loose on ground which had been plowed once. Near it was a piece of 1/2 in. pipe also lying loose. These were lying within 5 varas of the Twichell course and distance position. I was not able to identify certainly the windmill called for by the Twichell description of this corner but concluded that the course and distance position would be the proper place for this corner. I set a 1-1/4 in. pipe about 1 ft. below surface of ground, under stone.

I then ran South from course and distance point using the Twichell course, at 7604 varas point (1197 + 7604) 8801 varas East of Twichell's N. W. corner of Section No. 11, Block C39 as described above;

THENCE, South at 1901 varas set 1/2 in. pipe for N. E. corner of Section No. 15, Block C39, at 3802 varas set a 2 in. galvanized pipe for Southeast corner of said section No. 15, Block C39;

THENCE, South 1170 varas to point in middle of lane, where I buried a piece of fire brick and broken bottle about 3 ft. below surface, then set 2 in. galvanized pipe with top below surface of ground for Southeast corner of Section No. 16 and Southwest corner of Section No. 17, Block C39. This is where course and distance from Twichell's N. W. Section No. 11, Block C39 would fall, using

his course as determined by windmill bearings at that place.

From this pipe and brick for Southwest corner of Section No. 17, Block C39 the Twichell 5 in. pipe for Southwest corner of Section No. 21, Block C31, brs. S. $75^{\circ} 28' 48''$ W. (true course) and S. $75^{\circ} 21' 10''$ W. (Twichell course) 13030.5 varas, and the line joining them stays near middle of road for about three (3) miles westward to where the road goes northward and southward.

I then projected this line Eastward, N. $75^{\circ} 21' 10''$ E. by Twichell's course 1237.2 varas and set a 1-1/2 in. pipe in public road for Southeast corner of Section No. 17, Block C39, a 2 in. pipe under North fence of lane bears North 14.4 varas.

This Southeast corner of Section No. 17, Block C39 is in latitude $32^{\circ} 55' 40.711''$, longitude $102^{\circ} 07' 07.322''$ Twichell's 5" pipe for Northwest corner Section No. 117, Block M and Southwest corner Section No. 21, Block C31 bears true S. $75^{\circ} 29' 10''$ W. 14267.7 vrs and a one inch galvanized pipe marked NE 32 M C41 set by WDTwichell for NE 32 M and SE 10 C41, bears true N. $75^{\circ} 15' 20''$ E. 10460.3 varas the line being in county road all the way.

From said one inch galvanized pipe I ran N. $77^{\circ} 12' 10''$ W. true course 617.3 varas, and set a 3/4 in. galvanized pipe, driven below surface, and bedded four stones lying near, one marked X (Twichell's), over pipe and in line with fence to West for Southwest corner of Section No. 4, Block C41. The owner of Section No. 10, Block C41 said this point was where he remembered seeing the corner before it was disturbed.

The windmills upon which Surveyor Twichell took bearings are gone and I could not use them to identify the corner further.

I then ran N. $45^{\circ} 08' 40''$ E. 1803 varas and set a 1-1/2 in. steel pipe on ridge north side of road for a Control Station and connected from here to Geodetic Stations to East.

Later, I found Twichell's 4 in. pipe in center line of roads East-West-South in East side of draw. It was N. $45^{\circ} 10' 27''$ E. (true course) from the restored Southwest corner of Section No. 4, Block C41, and 2690.1 varas, Twichell's Northeast Corner Section No. 4.

I have been associated with State Surveyor W. D. Twichell, acting as his transitman a great deal of the time, since shortly after he made the survey and set the corners, I have undertaken to identify. It has been his practice, when undertaking to conform with older work on a large scale, to make his work generally to follow near a parallel of latitude passing through the work. This would conform with the theory of work done with a compass.

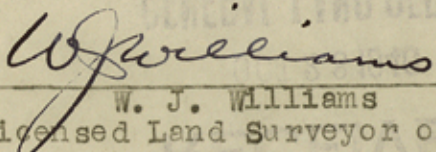
The South line of Section No. 17, Block C39, as surveyed course and distance from the Northwest corner of Section No. 11, Block C38, falls in the middle of public road which is being used for a street in the town of Welch, Dawson County.

It seems like local surveyors have probably used Twichell's Northwest corner of Section No. 11, Block C38, and Northeast corner of Section No. 10, Block C39 to locate the South line of Section No. 17, Block C39, when it was first occupied. Running to the Northeast corner of Section No. 32, as marked by said Surveyor Twichell, resulted in throwing all of the curvature of the parallel allowed by Twichell, into a bend at the Southeast corner of Section No. 17, Block C39. This amounts to a deflection of 13' 40" at this place and conforms with the construction and use of Block M and the adjoining school lands on the ground.

Surveyor Twichell's "West" from his Northwest corner of Section No. 11, Block C38 strikes his "Southeast corner of Section No. 80, Block DD", a 1 in. pipe set in middle of road East-West-North, as I identified it by bearings on windmills given in Twichell's filed notes to Section No. 20, Block C34 in Gaines County.

This certificate is intended to accompany Sketch "W" compiled by me and filed herewith. *Recorded in Book 2, Page 123, Surveyors' Records, Dawson County, Texas.* Respectfully,

Plainview, Texas
October 26, 1940


W. J. Williams
Licensed Land Surveyor of Texas

Counter 20574



October 28, 1940
El Paso, Texas

Respectfully,
General Land Office

Respectfully,

RECEIVED
OCT 28 1940
GENERAL LAND OFFICE

This certificate is intended to accompany Exhibit "M" com-
piled notes to Section No. 30, Block C34 in Garza County.

North, as I identified it by bearings on windmills given in Twitchell's
No. 90, Block DD, a 1 in. pipe set in middle of road East-West-
Section No. 11, Block C33 strikes his "West" from his Northwest corner of
Surveyor Twitchell's "West" from his Northwest corner of
ing school lands on the ground.

and conforms with the construction and use of Block M and the adjoin-
Block C33. This amounts to a deflection of 13' 40" at this place
Twitchell, into a bend at the Southeast corner of Section No. 11, Block
skipped in showing all of the surveys of the parcels allowed by
corner of Section No. 38, as marked by said Surveyor Twitchell, re-

Sk. File No. 18
Dawson County

Blocks C38, C39, C41 & H in
northern Dawson and adj. counties
northwest

Filed Nov. 8 1940
Bascom Giles Com'r

W. Wood Rosenberg
File Clerk

see Dawson Co.
Rolled Sk. #8

Block C33 when it is occupied. Running to the Northwest
from the Northwest corner of Section No. 11,
Block C33, as surveyed
the middle of public road which is being used
Dawson County.

with other work on a large scale, to make his work generally to
identity. It has been his practice, when undertaking to conform
after he made the survey and set the corners, I have undertaken to
setting as his first man a great deal of the time, since shortly
I have been associated with State Surveyor W. D. Twitchell,