



LANDTECH CONSULTANTS, INC.  
Civil Engineering • Land Surveying

SURVEY REPORT FOR THE ESTABLISHMENT OF STREET RIGHT OF WAY LINE FOR CITY OF HOUSTON WATER MAIN REPLACEMENT PROJECT NO. 10378 LOCATED WITHIN THE FOURTH WARD, IN THE OBEDIENCE SMITH SURVEY, ABSTRACT NO. 696 AND THE JOHN AUSTIN SURVEY, ABSTRACT NO. 1, HARRIS COUNTY, TEXAS.

This report covers the survey of the area generally bounded by West Dallas, Interstate Highway 45, Webster, and Taft 2nd offers a brief explanation of the right of way of Allen Parkway between Taft and Gillette. It encompasses the following subdivisions: Castania Addition filed April 12, 1848, W.R. Baker Addition SSBB unrecorded, West End Addition filed February 21, 1894, Runnels Addition SSBB unrecorded, Porter/Baker Addition filed May 13, 1889, Powars Addition SSBB filed April 2, 1900, Andrews Addition, SSBB filed January 2, 1909, Fair Ground Extension filed January 25, 1894, Hadley & Franklin Addition dated March, 1866, the Subdivision of the Boecher 10-1/5 Acre Tract (Volume 2, Page 201 11th District Court Minutes), and Houston Street Railway Co.'s Land Addition filed January 15, 1874. The W.R. Baker Addition SSBB has never been officially recorded, however, there was a map without any dimensions filed June 26, 1861 and another map showing the blocks and streets pattern with conflicting dimensions filed December 14, 1865. The purpose of the survey is to establish the street right of ways for a waterline replacement project.

#### FIELD INVESTIGATION

Field work was conducted in July and August, 1996 and all traverse work was accomplished by a Topcon total station. The traverse is tied into the City of Houston Street Reference Lines for the determination of street alignments. Bearing orientation is referenced to the Texas Coordinate System, South Central Zone and based on the position of City of Houston Monument Nos. 5357-1111 and 5357-1211.

City Rod Nos. 307, 354, 92, and 94 were used to establish the alignment of West Dallas. City Rod Nos. 335 and 538 were used to establish the alignment of Wilson. These two Street Reference Lines served as the primary control monuments for this project.

There are several other City Rods called for in the City's record but they appear to have been obliterated.

#### DISCUSSION

The Street Reference Line is a system of street center rods set by the City of Houston Engineering Department identifying and perpetuating the location of city streets. In July, 1868 Mr. William H. Griffin, City Engineer and Surveyor made a report to the City Council recommending the adoption of a street reference line system for all surveyors to follow in order to avoid street encroachments as set forth in Book of Council Minutes of "1865-1869", Page 402 to 406. The prudent practice of using these street centers as the control to establish street right of way lines has been accepted by the surveying community for over 100 years. The monuments have long been acquiesced to and used by surveyors and the public and affixed the establishment of streets.

The West Dallas Avenue Street Reference Line marked by City Rod Nos. 92 and 94 served as the baseline for all east and west streets from West Dallas to Webster. The only exception is the section of West Dallas from Wilson to Taft which is controlled by City Rod Nos. 354 and 357. This street has a 0 degree 52 minutes deflection marked by City Rod No. 354 at Wilson along the west side of the City Cemetery concurring with Mr. Griffin's report dated back some 129 years ago. All streets in the north and south direction are governed by the Wilson Street Reference Line marked by City Rod Nos. 335 and 538.

The angular relationship between the westerly projection of City Rod Nos. 92 and 94 to the intersection with the northerly projection of City Rod Nos. 335 and 538 is within 0 degree 02 minutes 08 seconds of the called and generally accepted angle of 90 degrees. The measured distance from the West Dallas Street Reference Line to City Rod No. 538 is 0.50 foot longer than the published distance shown in the City Surveyor's field notes. This excess distance was prorated equally through the nine blocks with each block receiving 0.055 foot.

It appears that street improvements and physical signs of occupancy match reasonably well within the street right of ways as established by the Wilson and West Dallas reference lines except for the following areas:

Ruthven and Cleveland from Valentine to IH 45 - the roadways are not parallel to the street right of way. At the IH 45 intersections, the roadway encroaches approximately 5 feet into private property at Ruthven and 18 feet at Cleveland. There are ancient maps and field notes in the City Surveyor's records indicating a discrepancy existed along the Cleveland street right of way since the early 1900's. In 1909 Mr. Gillespie prepared a survey to establish the alignment of Cleveland from Crosby to Mason. He showed the fence line to be 11.6 feet encroaching into the right of way at the Cleveland and Heiner (IH 45) intersection. In 1918 Mr. Gillespie contradicted himself by setting the southwest block corner of the same intersection at 14 feet south of his previous establishment of Cleveland as shown on City Field Book Volume 23, Page 62. We recovered a 5/8 inch iron rod under the asphalt roadway marking the south line of Cleveland at the Heiner intersection. It is located 8 feet south of the north curb line and it is within 0.3 feet of the calculated position using the West Dallas Street Reference Line.

Mason from West Gray to Andrews - the eastern edge of the roadway is located 15 feet past the east right of way line of Mason. City records indicated that the City Engineering Department has two contradicting opinions of the location of Mason from using two different sets of city street reference lines. In April, 1932 Mr. Gillespie established Mason using City Rod Nos. 670 and 671 at Peden and the roadway appeared to follow such alignment. Later in August, 1933 Mr. Wise established the centerline of Mason as being perpendicular from the Saulnier street reference line. Mr. Gillespie's interpretation will cause a shortage of approximately 20 feet on the three blocks of lots between Mason and Genesee; however, if one follows Mr. Wise's footsteps, all of the blocks from Taft to Genesee will receive their share of land as called for in each respective plat. We concurred with Mr. Wise and adopted his construction of Mason.

Allen Parkway from Taft to Gillette - the south right of way line of Allen Parkway west of the east boundary of Temple Terrace Addition was determined by City of Houston right of way acquisition. No deed, easement, or map was found indicating additional right of way acquisition for the widening of Allen Parkway east of Temple Terrace. This property was owned by Harris County (for Jeff Davis Hospital). It is possible there is no deed conveyance was made for the road widening, as Harris County, already owned the affected property.

## RECOMMENDATION

It has been well documented that the public has in good faith maintained a long and open continued usage of the roadways and utilities along the streets within the Fourth Ward. The adjoining property owners have apparently acquiesced to the encroachments and raised no objection to the City's facilities. The City of Houston may have satisfied the statutory requirements for acquiring a prescriptive easement on the encroachments. Considering the extensive amount of confusion and conflicting interpretation of the location of the street right of ways existing within the Fourth Ward, it may be advantageous for the City to seek an ordinance from the City Council to identify and to perpetuate the establishment of the street right of ways as they currently exist and occupy together with any prescriptive easements obtained through public usage.

October 31, 1996



Paul P. Kwan  
Reg. Prof. Land Surveyor No. 4313

