

SURVEYOR'S REPORT

Sand Beach Reserve
City of Austin, Travis County, Texas

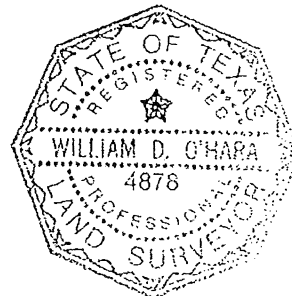
Surveyor's Certificate

I, William D. O'Hara, Registered Professional Land Surveyor, do hereby certify that I have prepared the report herein containing pages 1 through 19 inclusive. This report includes Exhibits listed on page 3 and said Exhibits are a part hereof.

Witness my hand and seal on this the 21st Day of October, 1999.

William D. O'Hara

William D. O'Hara
Registered Professional Land Surveyor
State of Texas - No. 4878
Licensed State Land Surveyor



INTRODUCTION

I have been employed by the City of Austin to further investigate the location of the north line of the Sand Beach Reserve. The following report, including exhibits, discusses the location of the north line of the Sand Beach Reserve in the City of Austin, Travis County, Texas.

A question asked of me by people unfamiliar with the issues to be discussed herein is, "What is the Sand Beach Reserve?" The Sand Beach Reserve is a part of the original City of Austin tract reserved for the public by the laws of the Congress of the Republic of Texas and the State of Texas. In 1945, the State of Texas patented to the City of Austin the area known as the Sand Beach Reserve. This area, situated along the Colorado River, naturally had very sandy soil, hence the name, "Sand Beach Reserve."

Another question asked is, "Where is the Sand Beach Reserve?" The Sand Beach Reserve is located in the present inner city of Austin, Texas. Generally speaking, it is bounded on the south by Town Lake, on the east by a prolongation of the west line of West Avenue, on the west by the east line of the George Spear League being approximately a prolongation of the east line of West Lynn Street, and on the north by the south lines of Outlot 1 and Outlot 11 of Division Z, of the original government tract adjoining the City of Austin.

People more familiar with the issues concerning the location of the Sand Beach Reserve might ask, "Why are the boundaries of the Sand Beach Reserve so uncertain?" Actually, the south, east and west boundaries of the Sand Beach Reserve are certain and locatable. The uncertainty is with its north boundary, particularly the area east of North Lamar Boulevard. The location of the north boundary line of the Sand Beach Reserve, being the south line of Outlot 1 and Outlot 11, Division Z, is the focus of this report.

The location of the north line of the Sand Beach Reserve can be discussed only after one is fully aware of the history of events in the area. In this report, I will provide a summary of the events, which effect the location of the subject line. For a thorough account of the history effecting the Sand Beach Reserve I refer the reader to a report dated August 30, 1998, as submitted by Mr. Kent Neal McMillan, RPLS, (Exhibit "M") and a report dated August 31, 1998, prepared by Mr. Ansel Gary Glover, RPLS, (Exhibit "N"). Mr. McMillan, a professional land surveyor in private practice, was hired by the City of Austin to study the issues concerning the position of the north line of the said Sand Beach Reserve. Mr. Glover, a professional land surveyor employed with the City of Austin's Infrastructure Support Services Department, has been studying the Sand Beach Reserve issue for the past decade. Both reports are very informative and based upon a thorough investigation of the available records.

My involvement with the Sand Beach Reserve boundary issue began in 1992, while I was employed with the Texas General Land Office. In that year, the Texas Attorney General's Office brought a lawsuit against the City of Austin concerning the nature of the use of the Sand Beach Reserve. (See Cause No. 477,213, in the 201st Judicial District Court of Travis County, Texas, State of Texas vs. City of Austin.) During the following two years I spent time investigating the archives and records of the General Land Office and Travis County records, and performing an on-the-ground survey in the vicinity of the Sand Beach Reserve.

Missouri Pacific Railroad Company, owner of a called 3.19 acre tract adjoining the recognized south line of Outlot 11, Division Z, being the recognized north line of the Sand Beach Reserve, joined the lawsuit as Intervenor. The Court found in favor of Missouri Pacific Railroad Company in that lawsuit.

In this report, I will outline the historical events pertinent to the location of the north line of the Sand Beach Reserve. Based on the historical data and available evidence, I will define six (6) possible locations of the north line of the Sand Beach Reserve and discuss the merits and faults of each.

DISCUSSION OF THE HISTORICAL EVENTS PERTINENT TO THE LOCATION OF THE NORTH LINE OF THE SAND BEACH RESERVE

This section of my report is merely a synopsis of the history surrounding the Sand Beach Reserve boundary issue. The historical aspects covered in the reports by Mr. McMillan (Exhibit "M") and Mr. Glover (Exhibit "N") are more thorough in detail. Also, for clarity, the reader is encouraged to have available a copy of the 1863 Reichel map (Exhibit "C") while reading this section of the report.

The City of Austin was established by an act of the Congress of the Republic of Texas entitled "An Act for the Permanent Location of the Seat of Government" (Gammel's Laws of Texas, Volume II, Page 161) on January 14, 1839. The act authorized the Republic of Texas to purchase eight contiguous tracts of land along the Colorado River from the private owners. The eight tracts of land were original surveys located in 1838. The total area purchased by the Republic was approximately 7,580 acres of land and known as the Town Tract or Government Tract.

Under terms of the "Act for the Permanent Location of the Seat of Government", 640 acres of the Government Tract were to be surveyed into town lots. Edwin Waller was appointed as agent for the Republic of Texas to oversee the sale of the lots. The town lots, also know as "in-lots" were first offered for sale at public auction on August 1, 1839.

The Congress of the Republic of Texas passed a resolution entitled "Joint Resolution for the Survey and Sale of the Austin Town Tract" (Gammel's Laws of Texas, Volume II, Page 386) on January 5, 1840.

Section 1 of the resolution stated:

"That it shall be the duty of the Secretary of the Treasury to cause to be surveyed the remaining portion of the tract of land belonging to the government, and adjoining the city of Austin, in lots varying from five to forty acres each, and cause to be laid out such roads and alleys as may be deemed necessary upon a plan to be approved by the President."

Section 7 of the resolution stated:

"That it shall be the duty of the Secretary of the Treasury to reserve in the plan fixed on, four hundred acres for such public purposes as Congress may hereafter direct."

Soon after the "Joint Resolution for the Survey and Sale of the Austin Town Tract" was passed, S.C. Wiltse, Civil Engineer, was appointed as surveyor by Secretary of Treasury James H. Starr. From available records, it is evident that Mr. Wiltse had completed his survey of the boundaries of the Town Tract by January 20, 1840, and concluded the survey of the outlots by the end of March 1840. Outlot 11, Division Z, was not part of the original subdivision of the Town Tract and therefor, was not surveyed by Mr. Wiltse.

Following the survey by Mr. Wiltse, Treasurer James H. Starr appointed William H. Sandusky to prepare three maps of the Town Tract showing the lots, streets, streams and reserves. The maps were to be prepared based on the survey data obtained from S.C. Wiltse.

The first sale of the outlots was held on February 24, 1840. The first sale of Outlot 11, Division Z, as a portion of the reserve tract, to Francis C. Gordon, "provided the quantity of land shall not exceed 60 acres", occurred on January 25, 1841. Gordon subsequently defaulted on the terms of the sale and Outlot 11 reverted back to the Republic.

James H. Raymond received a patent for Outlots 1, 2 and 5 in Division Z on October 16, 1848. The lots are described in Patent No. 140 (Exhibit "A") as "Being lots Nos. 1, 2, 5, (one, two and five) in Division Z, of the Government tract adjoining the City of Austin, Lot 1 containing forty acres, lot No. 2 containing thirty one acres and lot No. 5 containing thirty and one half acres as will fully appear by reference to the plan of said tract now in the General Land Office." Outlot 11, Division Z, also patented to James H. Raymond on October 16, 1848, is described in Patent No. 139 (Exhibit "B") with a bounds description as follows:

"... grant to James H. Raymond his heirs or assigns forever Sixty acres of land situated and described as follows, being part of Government Reserve of the Government tract adjoining the City of Austin. Beginning where the lower line of Pecan Avenue in said city crosses West Avenue and opposite the south East corner of Lot No. 2, in Division Z a stake. Thence with the line of said street and parallel to Lot 2 in Division Z until it intersects the N.E. corner of Lot No. 1 in said Division. Thence S.E. with the line of said Lot No. 1 to its corner on or near the bluff of the River Commons. Thence with the meanderings of said bluff including sixty yard below to West Avenue near the Penitentiary square. Thence N.E. with said Avenue line to the beginning corner."

In 1871, The Raymond Plateau subdivision of Outlot 11, Division Z, prepared by Michael J. Doyle, Civil Engineer (Exhibit "E"), was recorded in Book V, Page 401, Deed Records of Travis County, Texas. This plat, bearing the seal of the DeCordova & Rector General Land Agency, was prepared for the sale of the lots. Little survey data is shown on the plat. However, the lot lines in the southern blocks (Blocks 6, 7, 8 and 9), as depicted on the plat, extend to a line that appears to be a graphic representation of the bluff line shown above the Sand Beach on the north side of the Colorado River.

The first sale of a lot in the Raymond Plateau occurred in about 1872.

James H. Raymond conveyed the east one-half of Outlot 1, Division Z, to Thomas Duval on March 22, 1875, recorded in Volume 28, Page 649, Deed Records of Travis County, Texas. Mr. Duval subsequently created a subdivision known as the Duval Subdivision. The east line of the Duval Subdivision adjoins the west line of the Raymond Plateau subdivision.

On January 23, 1885, the Raymond Plateau subdivision plat was recorded in Book 1, Page 30, of the Plat Records of Travis County, Texas (Exhibit "F"). This version of the subdivision plat is to scale. It illustrates the area in acres of each lot except the lots in Block 6, and gives distances in units of feet along many of the block lines and lot lines. As on the first map of the Raymond Plateau, the recorded plat illustrates a line, presumably the bluff line called for in the patent to Raymond, as the southern boundary of the subdivision.

In 1916, Mr. O.E. Metcalfe performed a survey of the Sand Beach Reserve at the request of E.C. Bartholomew, Superintendent of the Light and Power Department of the City of Austin. The "Metcalfe line" was established and has since been recognized by the City of Austin and local surveyors as the location of the north line of the Sand Beach Reserve.

The International and Great Northern Railroad Company (I&GN RR Co.) made a survey and prepared a map dated June 1917 (Exhibit "L"). This map, showing the railroad company's land adjacent to the Sand Beach Reserve, is filed with the Interstate

Commerce Commission. The railroad company had acquired title to the lots in Blocks 6, 7 and 8 of the Raymond Plateau subdivision from the various owners, and the remaining portion of Outlot 11 lying below the bluff from James H. Raymond, by 1880. The south line of the railroad company tract, as shown on their map, is a considerable distance north of the "Metcalf line."

On July 3, 1945, acting in accordance with an act of the Texas Legislature, The Honorable Coke R. Stevenson, Governor of Texas, issued a patent to the City of Austin for three tracts of land in Travis County, Texas. The tracts of land were described in the patent as follows:

"Three thousand (3,00) acres of land situated and described as follows: In Travis County, known as the two tracts of land marked "Reserve" on the map of the City of Austin according to a survey by Sandusky in 1840, which is on file in the General Land Office, and also the bed, banks of the Colorado River, and the islands in said River, with the present City Limits of the City of Austin

First Tract: Seventy-seven (77) acres of land, more or less, commonly known as "Reserve", bounded on the North by Outlots 1 and 11, Division Z, City of Austin, as established by a survey made by William H. Sandusky under an Act of Congress of the Republic of Texas, passed January 5, 1840,; on the East by West Avenue as located by said survey; on the South by the Colorado River; and on the West by the East line of the George W. Spear League; said tract being marked "Reserve" on the Sandusky map above referred to;

Second Tract: Sixty-seven (67) acres of land, more or less, bounded on the North by Outlots Numbers 62, 63, 66, 67, 68, 69, 70 and 71 in Division "O" in the City of Austin, shown by the Sandusky map above referred to; bounded on the East by the Colorado River; bounded on the South by the Colorado River; and on the West by East Avenue and Colorado River.

Third Tract: All land in the Colorado River, within the city limits of the City of Austin, including the bed and banks thereof and islands therein."

The patent to the City of Austin also include the clause:

"The Grant hereby made to the City of Austin is made for public purposes and in the event of sale by the City of Austin, of the property herein granted, all parts thereof so sold shall revert to the State."

On July 29, 1949, I& GN RR Co. conveyed 3.16 acres of land to the City of Austin (present site of the Seaholm Power Plant). On December 26, 1961, Missouri Pacific Railroad Company, predecessor in title to I&GN R.R. Co. conveyed the "YMCA" tract to the City of Austin. This tract was platted as the YMCA-Town Lake Subdivision and

recorded in Book 87, Page 146D, Plat Records of Travis County, Texas. The south line of this subdivision is in the "Metcalf line."

On August 29, 1983, the Jetco Partners International Resubdivision One was platted and recorded in Book 83, Page 184A, Plat Records of Travis County, Texas. The south line of this subdivision is in the "Metcalf line."

On July 2, 1992, concerning Cause No. 477,213, the District Court of Travis County, released its Findings of Fact and Conclusions of Law.

POSSIBLE LOCATIONS OF THE NORTH LINE OF THE SAND BEACH RESERVE

The north line of the Sand Beach Reserve is in the same position as the south line of Outlot 1 and Outlot 11, Division Z. The area of concern is adjacent to Outlot 11. Therefore, it is necessary to locate the south line of Outlot 11. By doing so, the north line of the Sand Beach Reserve will be located. In my opinion, there are six (6) possible locations of the north line of the Sand Beach Reserve as follows:

1. The south line of Outlot 11, based on a construction of 60 acres per the patent.
2. The south line of Outlot 11, as scaled from the Raymond Plateau subdivision plat.
3. The south line of Outlot 11, as shown on the I&GN RR Co. survey.
4. Mr. O.E. Metcalfe's location of the south line of Outlot 11.
5. A modification of Metcalfe's line.
6. Construction of the south line of Outlot 11 using the current bluff line.

Location No. 1

CONSTRUCTION OF THE SOUTH LINE OF OUTLOT 11, BASED ON THE PATENT QUANTITY CALL FOR 60 ACRES OF LAND (1848)

The patent to James H. Raymond conveyed "... sixty acres of land situated and described as follows, Being part of Government Reserve of the Government tract adjoining the City of Austin, Beginning where the lower line of Pecan Street in said city crosses West Avenue and opposite the south east corner of Lot No. 2 in Division Z a stake. Thence with the line of said street and parallel to Lot No. 2 in Division Z until it intersects the NE corner of Lot No. 1 in said Division. Thence S.E. with the line of said Lot No. 1 to its corner on or near the bluff of the River Commons. Thence with the meanderings of said bluff including sixty yards below to West Avenue near the Penitentiary square. Thence N.E. with said avenue line to the beginning corner. Said sixty acres are hereby granted to the said James H. Raymond in accordance with ..."

The description Outlot 11 in the patent to Raymond is a "bounds description" of a sixty acre tract. There is no record evidence that it is based on an actual in-the-ground survey. Three corners and three sides of the tract can be located today using the bounds description. The corner at the intersection of the south line of West 6th Street (Pecan Street) with the original west line of West Avenue is locatable. The northeast and southeast corners of Outlot 1 are locatable. The south line of Pecan Street (West 6th Street), the occupied east line of Outlot 1, and the original west line of West Avenue are all locatable. Remaining is the call for the line sixty yards below the "meanderings" of the bluff and the call for a quantity of sixty acres.

The bluff line as it existed in 1848, the year Outlot 11 was patented to Raymond, is not evident today. There is a definite grade break in the vicinity of the probable 1848 location of the bluff line. Construction of the railroad tracks, years of excavating sand and gravel from the Sand Beach Reserve and natural forces have altered the bluff line. The bluff line east of present day North Lamar Boulevard, by review of many old maps and comparison with current topography, has suffered the greatest alteration. However, using the locatable corners and bounds called for in the patent to Raymond, and the quantity called for in the patent, the south line of Outlot 11 can be constructed in accordance with the patent. Refer to my plat, Exhibit "O", for the position of the line based on the call for sixty acres.

The approximate common north corner of Outlots 1 and 11 is marked on the ground with a one-inch iron pipe found in the south line of West 6th Street. This pipe also marks the common north corner of the Raymond Plateau and Duval Addition subdivisions. To establish the southeast corner of Outlot 1, we located the line of occupation along the said common Outlot and subdivision line. I used a distance derived from the Raymond Plateau plat extended from the found iron pipe, along the occupation line, to a point for the southwest corner of Lot 1, Block 9, Raymond Plateau, being the approximate southeast corner of Outlot 1. From the southeast corner of Outlot 1, I have projected the east line of Outlot 1 southerly 180 feet to a point for a calculated corner. Note that the southeast corner of Outlot 1 is near the top of the present bluff. The point 180 feet southerly satisfies the call for sixty yards below the bluff. From that corner, using the other locatable boundaries of Outlot 11, and the call for 60 acres, I calculated the southeast corner of Outlot 11, to be in the original west line of West Avenue. Using this method, the south line of Outlot 11 is a straight line, though the patent description calls for the line to be 60 yards below the "meanderings" of the bluff. This construction of the south line of Outlot 11, being the north line of the Sand Beach Reserve, does not conflict with the Raymond Plateau subdivision. Also, this line is further north than the other possible locations to be discussed in this report.

Some may argue that the call for quantity is of the lowest priority in the dignity of calls and therefor should be given little weight in determining the position of the south line of Outlot 11. Others may opine that with three corners and three sides of the tract located in accordance with the patent from the state, and with the absence of the original bluff line

to control the location of the south line, you must rely on the call for quantity (60 acres) to control the construction of the south line.

In my opinion, with this construction of Outlot 11, the calls in the patent have been harmonized, and the intent to convey 60 acres, met.

Location No. 2

CONSTRUCTION OF THE SOUTH LINE OF OUTLOT 11, BASED ON THE RAYMOND PLATEAU SUBDIVISION PLAT (1883)

The first rendering of the Raymond Plateau subdivision plat is from approximately 1871, twenty-three years after the patent to James H. Raymond. The subdivision plat was recorded in the plat records in 1885. Both plat drawings illustrate a line, not labeled but considered to be the bluff line, along the north side of the sand beach. The plat recorded in the plat records is to scale and has a string of distance calls along the west line of Crockett Street (Baylor Street) tying the south line of Pecan Street (W. 6th St.) to the bluff line.

Approximately twenty-three years passed from the date of the patent to Raymond to the Raymond Plateau subdivision plan being recorded in the deed records. During that time, in 1869, there was a major flood event in Austin. The following is a reference to the flood of 1869, by Frank Brown recorded in the Annals of Travis County:

"The Great Flood. - The highest, and probably the most disastrous, flood that ever came down the Colorado River within a hundred years, occurred early in July. Certainly none such ever occurred with the memory of the oldest inhabitants of the white race. The floods of 1833, 1836, 1843, 1852, and 1870 did not approach it in volume, by eight or ten feet."

The impact of the 1869 flood on the bluff line along the southerly portion of Outlot 11 is uncertain. If the bluff was impacted by the heavy rains and subsequent flooding, the result would have moved the bluff line northerly, away from the river. However, there is no substantiated evidence that the flood of 1869, or any other natural forces, altered this bluff line in any way.

To my knowledge, the Raymond Plateau Subdivision plat of record in Plat Book 1, Page 30, Plat Records of Travis County, Texas, is the best evidence of the location of the bluff line at the time of the patent to Raymond. I believe it can be relied upon to locate the bluff line, and thereby locate the south line of Outlot 11.

Based on our field survey for this project, we can sufficiently determine the position of the south line of West 3rd Street (Cypress Street on Raymond Plateau plat). This line is

also the north line of Lots 1, 2, 3 and 4, Block 6, Lots 1, 2 and 3, Block 7, Lots 1 and 2, Block 8, and Lots 1 and 2, Block 9, the southern lots of Raymond Plateau bounded by the bluff. Distances for the side lot lines of each of these lots have been scaled from the recorded subdivision plat and used to plot the sidelines of the lots along the bluff. The end points of the plotted lot lines were connected to form a graphic representation of the bluff line according to the recorded plat. We then offset that line representing the bluff 60 yards (180 feet) to the south for the south line of Outlot 11. This line is clearly shown on my survey plat, Exhibit "O".

The recorded Raymond Plateau plat is generally to scale, although there are some portions of the plat in which the scale is distorted and doesn't work. There are no corner monuments shown or called for on the plat, but there are distances and areas in acres shown. The distances measured on the ground by our recent survey, found the monuments and lines of occupation closely match the distances on the Raymond Plateau plat. I am uncertain if the Raymond Plateau subdivision was actually surveyed on the ground between 1871 and 1885, but my educated guess is that it was. It may have been a minimal survey necessary to locate the subdivision perimeter, street rights-of-way and block corners, but there is enough data on the plat and it fits on the ground sufficiently well enough to think it may be based on an actual survey. The original version recorded in the Deed Records has the name of M.J. Doyle, Civil Engineer, in the lower left corner. Mr. Doyle was a practicing surveyor in the Austin area during that time period.

In my opinion, the Raymond Plateau subdivision plat of record in the Plat Records of Travis County, Texas, is the best available record evidence by which to locate the bluff line. Distances to the nearest ten feet can be scaled with confidence from the southern side lot lines to the bluff line as shown on the plat.

Location No. 3

LOCATION OF THE SOUTH LINE OF OUTLOT 11, AS SHOWN ON THE I&GN R.R. CO. MAP (1917)

The I&GN R.R. Co. acquired title to the lots in Blocks 6, 7 and 8 of the Raymond Plateau subdivision from the various owners, and the remaining portion of Outlot 11 lying below the bluff from James H. Raymond, by 1880. The I&GN R.R. Co. made a survey and prepared a map dated June, 1917 (Exhibit "L") for submittal to the Interstate Commerce Commission. This map covers a large area, including the Railroad Company's land adjacent to the Sand Beach Reserve.

The railroad company map depicts the bluff along the south line of Raymond Plateau as a straight line. No other maps that I have seen illustrate the bluff as a straight line. The south line of the railroad company tract, being the south line of Outlot 11, as shown on their map, is drawn parallel with, and 180 feet south of, the bluff line. In comparison

with the Raymond Plateau plat, specifically the area between Fannin Street (N. Lamar Blvd.) and West Avenue, the position of the bluff line, as scaled from the railroad company map, is approximately 90 feet south of the bluff line as scaled from the Raymond Plateau plat.

The location of the south line of the railroad company tract, as shown on this map, is in the same position as the fence located and shown on the O.E. Metcalfe topographic survey of 1916 (Exhibit "T"). The railroad company, owner of the south portion of Outlot 11, occupied to the fence and apparently recognized that as their south boundary line. The south line of the 3.16 acre tract (Seaholm power plant site), described in the deed to the City of Austin, is in the south line of the railroad tract as shown on the I&GN R.R. Co. map. In my opinion, this line could be considered a formerly occupied south line of Outlot 11, and evidence of its location. Although all physical evidence of this line on the ground has disappeared, it could be re-constructed and placed on the ground.

Location No. 4

THE LOCATION OF THE SOUTH LINE OF OUTLOT 11, AS SURVEYED BY MR. ORIN E. METCALFE (1916)

Mr. Orin E. Metcalfe, Civil Engineer and Surveyor, performed a survey of the Sand Beach Reserve at the request of E.C. Bartholomew, Superintendent of the Light and Power Department of the City of Austin in 1916. In that year, Mr. Metcalfe also performed a topographic survey of "State of Texas Sand Beach" for the City of Austin under the direction of the State Board of Health. See Exhibits "H", "T", "J" and "K".

As a result of his survey, Mr. Metcalfe was able to mark on the ground a line he determined to be the south line of Outlot 11, Division Z. He also prepared a survey map, Surveyor's Report and Field Notes Description of the Sand Beach Reserve tract, based on the survey. Based on his survey, Mr. Metcalfe found Outlot 11 to contain 72.33 acres of land and the Sand Beach Reserve tract 77.15 acres of land. The "Metcalfe line" has since been recognized by the City of Austin and local surveyors as the location of the north line of the Sand Beach Reserve. The line has been perpetuated by many subsequent surveys of record in the area, including, but not limited to, the final plat of the YMCA-Town Lake Subdivision; the Jetco Partners International Resubdivision One subdivision; and the location of a called 3.19 acre tract described in a deed to Lumberman's Inc., as recorded in Volume 12038, Page 535, Real Property Records of Travis County, Texas. We found and located one of Metcalfe's corner monuments. At his location of the southeast corner of Outlot 1, we found an iron stake covered by a large, leaning, and decrepit chinaberry tree.

Having studied this issue for quite some time now, I believe the "Metcalfe line" is well south of the original intended location of the south line of Outlot 11, Division Z. In no way whatsoever do I question the integrity and reputation of Mr. Metcalfe. His work,

and the work done since by Metcalfe Engineering Company in the Austin and Travis County area, has always been considered excellent by the local surveying professional community. However, I disagree with his location of this line.

I have studied Mr. Metcalfe's technical report regarding the location of the Sand Beach Reserve. He begins his report by stating the difficulties involved in trying to locate the tract of land. Indeed, the task is no easier today than it was then. It is perhaps even more complicated because of the long use and recognition of the "Metcalfe line" since 1916.

Mr. Metcalfe states in his report, "To the best of my belief, there is no existing complete map of Austin as created by its founders." The only map of Austin existing in 1916, was the Sandusky map, copied in 1863 by Robert Reichel, on file in the Texas General Land Office. This was the map Metcalfe relied upon for his survey of the Sand Beach Reserve. He scaled the bluff line from this map and used those dimensions to determine the position of the south line of Outlot 11. There is no evidence that the bluff line illustrated on the Sandusky map was plotted from an actual survey, and therefore its accuracy is suspect.

The Raymond Plateau subdivision plat was recorded in the plat records in 1885, about 31 years prior to the Metcalfe survey. In addition, the Duval Subdivision plat had also been recorded prior to 1916. Mr. Metcalfe makes no mention of these recorded plats in his report. However, many of the lots in the south portion of these two subdivisions were occupied. Therefore, in my opinion, it stands to reason that he must have known of the existence of these plats. Why he did not refer to these plats in his report, even to discount their portrayal of the bluff, remains a mystery. His location of the south line of Outlot 11 may have been different had he referred to these plats, particularly the area adjacent to Raymond Plateau.

In preparing a survey of the Sand Beach Reserve, Mr. Metcalfe correctly determined that he must first establish the boundaries of Outlots 1 and 11, Division Z. He began by establishing the south line of Pecan Street (W. 6th St.), being the north line of the Outlots 1 and 11, from West Avenue to the east line of the George Spear League. Metcalfe states that he had prior working knowledge of the location of the Spear League. He then ran a line southerly along the east line of the Spear League to the edge of water on the Colorado River where he set a stake for the southwest corner of the Sand Beach Reserve. At that point, having satisfactorily located the north and west lines of Outlot 1, Metcalfe states that he had only scaled distances (scaled at the State Land Office with the assistance of Ernest VonRosenberg in 1913) and the patent call for the area of 40 acres to base the east and south lines. He used the scaled distances to create several trial corners for Outlot 1 and found the area to be 41.27 acres. He states that he believed the patent call for 40 acres was the controlling and most valuable feature of the description available. I don't disagree that the call for area should control. His final construction of Outlot 1, Division Z, contained 40 acres of land. Mr. Metcalfe's location of the common

line of Outlots 1 and 11 is approximately 100 feet west of its present occupied and recognized position.

The next step was for Mr. Metcalfe to construct Outlot 11. He had so far established the northeast corner of Outlot 1, being the northwest corner of Outlot 11, the southeast corner of Outlot 1, the northeast corner of Outlot 11, and the north and west lines of Outlot 11. To construct the southwest corner of Outlot 11, he extended the east line of Outlot 1, 180 feet in a southerly direction from his southeast corner of Outlot 1. Already knowing the location of the original west line of West Avenue, therefore the east line of Outlot 11, he then had only the southeast corner of Outlot 11 to establish. He states in his report, "One of the controlling features according to my opinion of the description of the Out-Lot was the area of 60 acres, but I was unable to use it, as I found a gross error east and west on the north line of Out-Lot 11 amounting to about 250 feet." The patent description of Outlot 11 is a bounds description. There are no calls for distance. I am not sure what Mr. Metcalfe was using to compare his measured east-west direction to unless it was a scaled east-west distance from the Sandusky map at the land office. However, I believe he was correct in his opinion that the patent call for an area of 60 acres was a controlling element in the patent.

Mr. Metcalfe did not rely on the call for 60 acres to establish the south line of Outlot 11. He had already determined the location of the southwest corner of Outlot 11, and finally needed to construct the south line and southeast corner of the outlot. He recognized the fact that the call for the bluff, a natural object, must be eliminated because "at the present time there is no bluff existing which I would consider to be anywhere near the original location of the river bluff." He established the location of the southeast corner of the outlot by scaling the position of the bluff line, as shown on the Sandusky map, relative to the intersection of the north line of First Street (shown on the Sandusky map as Water Street) with the west line of West Avenue. This construction by Metcalfe placed the southeast corner of Outlot 11 on the bluff line, as illustrated on the Sandusky map, not 180 feet below the bluff line.

He now had all corners of Outlot 11 established and only needed to evaluate his south line of the outlot. Within the closed figure he calculated an area of about 75 acres, an excess of 15 acres. Based on his determination that Outlot 11 was excessive in an east-west direction and being satisfied that he had correctly located all four sides of the outlot, he decided that Outlot 11 "was entitled to hold and control this excess." In evaluating his location of the south line, he again relied upon scaled distances from the Sandusky map. He compared his measured distances with distances scaled from the map and developed a ratio by which to adjust his distances along the south line. He also found that the bluff line shown on the "old map had practically three directions," meaning it was not depicted as a straight line. He adjusted the line between his location of the southwest corner of Outlot 11 and the southeast corner of Outlot 11 to have two angle points and to fit distances adjusted to the ratio he had developed earlier. His final construction of Outlot 11 contained 72.33 acres of land.

Finally, the topographic map prepared by Mr. Metcalfe (Exhibit "I") shows a line labeled "I&GN Ry. Co. Fence." This fence line is in the same relative position as the south line of the Railroad Company tract, being the south line of Outlot 11, as shown on the I&GN RR Co. map of 1917 (Exhibit "L"). In my opinion, Mr. Metcalfe disregarded this occupied line in his survey and report of survey of the Sand Beach Reserve.

Location No. 5

LOCATION OF THE SOUTH LINE OF OUTLOT 11 BY MODIFYING THE SOUTHEAST CORNER OF THE METCALFE LINE

Mr. Metcalfe, according to his report, established the southeast corner of Outlot 11, Division Z, at the point where the bluff line, as shown on the Sandusky map on file in the General Land Office, intersected the west line of West Avenue. He scaled the north-south position of this point relative to the intersection of the prolongation of the north line of First Street (Water Street on the Sandusky map) with the west line of West Avenue. In other words, he placed the southeast corner of Outlot 11 on top of the bluff (as scaled from the Sandusky map), rather than 60 yards (180 feet) below the bluff, as described in the patent to Raymond.

Placing Metcalfe's southeast corner of Outlot 11, 180 feet further south would put the "Metcalfe line" more in compliance with the patent call for 60 yards below the bluff. However, it would also put the southeast corner of Outlot 11 within a few feet of the bank of the Colorado River, and make Outlot 11 even more excessive.

In my opinion, this location of the south line of Outlot 11 should be given very little consideration.

Location No. 6

LOCATE THE SOUTH LINE OF OUTLOT 11 60 YARDS BELOW THE EXISTING BLUFF LINE

This location is considered because of the patent call for the south line of Outlot 11 to be 60 yards below the "meanderings" of the bluff of the River Commons. The call for the bluff, a natural monument, was merely a reference call, the actual south line being 60 yards (180 feet) further south. If the bluff line, as it existed in 1848, were available today, the south line of Outlot 11 could easily be located. Unfortunately, the bluff today, (actually, now more of a grade break than a bluff) especially in the area east of North Lamar Boulevard, has been greatly altered over the past one hundred plus years by industry (railroad construction and operation, sand and gravel excavation, water system filtration). In my opinion, it cannot be relied upon for location of the south line of Outlot 11.

The present day location of the bluff line/grade break, is shown on Exhibit "O".

CONCLUSION AND RECOMMENDATIONS

I believe all parties will agree the south line of Outlot 11, Division Z, is the north line of the Sand Beach Reserve. The question remains, "Where is the south line of Outlot 11, Division Z?"

In 1916, Orin E. Metcalfe, Civil Engineer and Surveyor, known to be a diligent practitioner of both professions, place on the ground a line he considered to be the south line of Outlot 11, Division Z. The survey was never filed for record in the General Land Office or Travis County records. In the years to follow, his line, known as the "Metcalfe line" has been perpetuated through its use by local surveyors and recognition by the City of Austin. He did so with apparent disregard for, or had no knowledge of, certain recorded evidence of the location of the line, namely the Raymond Plateau subdivision plat and the Duval subdivision.

The "Metcalfe line" is a considerable distance south of a line established using the recorded Raymond Plateau subdivision plat. The "Metcalfe line" is also south of the line recognized by the I&GN R.R. Co. as its south line, which would be the south line of Outlot 11. I have found neither record nor indication of a boundary dispute concerning the location of the south line of Outlot 11, prior to the Metcalfe survey and the placement of the "Metcalfe line."

I have spent a great deal of time studying this issue, first while employed at the General Land Office and most recently as a consultant to the City of Austin. In my opinion, as a professional land surveyor, based on recorded information concerning the Sand Beach Reserve I was able to examine, and on-the-ground surveys I performed, or performed under my direct supervision, the "Metcalfe line" is in the wrong position.

With that said, the question remains, "Where is the south line of Outlot 11, Division Z?"

It is the surveyor's duty to attempt to place the patent on the ground based on the calls in the patent. If the patent cannot be placed on the ground using the patent calls, then the surveyor must rely on extrinsic evidence. In this case, three sides and three corners called for in the patent description can be placed on the ground with little or no dispute. The call for the south line of Outlot 11 to be 60 yards below the meanderings of the bluff is dubious and difficult to satisfy because the bluff is not the same as it was in 1848, the date of the patent to James Raymond.

The south line of Outlot 11 can be constructed, as described in my discussion of Location No. 1, by honoring the patent call for area, sixty acres of land. A line constructed in this fashion will not put any portion of the Raymond Plateau subdivision in conflict with the Sand Beach Reserve tract. However, it will place the 3.19 acre Lumberman's Investment Company tract, the Jetco Partners International Resubdivision One subdivision and the

YMCA-Town Lake Subdivision in conflict with the Sand Beach Reserve. These tracts of land were placed on the ground based on the "Metcalf line" which, in my opinion is in the wrong position.

The Raymond Plateau subdivision plat represents the best evidence of the location of the bluff line as it existed in 1848. By locating the subdivision corners on the ground, and using annotated and scaled distances from the plat, the location of the bluff can be determined. From that location of the bluff, the south line of Outlot 11, being the north line of the Sand Beach Reserve, can be located. This position too, will place the 3.19 acre Lumberman's Investment Company tract, the Jetco Partners International Resubdivision One subdivision and the YMCA-Town Lake Subdivision in conflict with the Sand Beach Reserve.

Therefore, in my opinion, location number one or location number two are the strongest positions I recommend for the south line of Outlot 11, Division Z, being the north line of the Sand Beach Reserve. However, this is a highly complex issue that cannot be decided solely by a land surveyor, and may require a legal resolution.

As a professional land surveyor, my role on behalf of the City of Austin regarding the Sand Beach Reserve is to analyze the record data, locate physical evidence, make measurements on the ground, prepare maps and render a professional opinion for the best options to resolve the location of the line at issue. I believe I fulfilled this role.