

December 17, 2015

R&M No. (2343.01-.02)

Baxter Bruce & Sullivan  
P.O. Box 32819  
Juneau, AK 99803  
Attn: Daniel G. Bruce

Faulkner Banfield, P.C.  
8420 Airport Boulevard, Ste 101  
Juneau, AK 99801-6924  
Attn: Lael Harrison

RE: Collins v. Hall 1JU-14-00771 CI  
Boundary Conflict Assessment

Dear Mr. Bruce/ Ms. Harrison:

The following is my report and conclusions regarding the boundary conflict in the above referenced Collins v. Hall case. I have reviewed the materials that you have provided to me along with other publically available on-line information. No field survey was performed as a part of this review.

#### Introduction

The subject of this report is a boundary conflict between two recreational lots on Colt Island as monumented by two separate surveys. The parcels in question are Lots 14 and 15 of the Colt Island Recreational Development<sup>1</sup>, a subdivision of U. S. Survey No. 1755. A plat for Lot 15 was prepared by R&M Engineering, Inc.<sup>2</sup> in 2012 for owner D & M Hall Community Property Trust (Hall Plat). A plat for Lot 14 was prepared by J.W. Bean, Inc.<sup>3</sup> in 2014 for owner Ray & Carol Collins (Collins Plat).

The two surveys differ in their location of the common boundary between Lots 14 & 15 by approximately 15-feet. The conflicting interpretation of the boundary location suggests that certain improvements on Lot 15 may encroach onto Lot 14.

#### Location

Colt Island is defined by U.S. Survey No. 1755 located within Section 35 of Township 41 South, Range 65 East, Copper River Meridian<sup>4</sup>. Colt Island lies between Admiralty Island and Douglas Island along Stephens Passage and is approximately 10.5 air miles southwest of Juneau.

<sup>1</sup> Colt Island Recreational Development, U.S.S. 1755 filed as Plat 75-11 on July 16, 1975, Juneau Recording District. Platted by J. W. Bean, PLS for H. H. Lockwood & Associates.

<sup>2</sup> Record of Survey of Lot 15, Area 1, Colt Island Recreational Development, U.S. Survey 1755, filed as Plat 2012-32 on 12/7/12, Juneau Recording District by R&M Engineering, Inc., 6205 Glacier Highway, Juneau, Alaska 99801 – Surveyor: Mark A. Johnson, L.S.

<sup>3</sup> Record of Survey Lot 14, Area 1, Colt Island Alaska Recreational Development, U.S. Survey No. 1755, filed as plat 2014-46 on October 8, 2014, Juneau Recording District by J.W. Bean, Inc., 1070 Arctic Circle, Juneau, Alaska 99801

<sup>4</sup> See USGS Quadrangle Juneau B-3, AK 1996



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## Survey Chronology

1. U.S. Survey No. 1285: This survey was performed in 1922 to define the homestead claim of W. D. Baney on Admiralty Island. U.S. Location Monument (USLM) No. 1285, established for this survey, would provide the basis of geographic location (latitude and longitude) and basis of bearings for the subsequent U.S. Survey No. 1755 on Colt Island.
2. U.S. Survey No. 1755: This survey was performed in 1927<sup>5</sup> in order to define the boundaries and meanders of the homestead claim of Albert Forsythe. The survey consisted of a 115 acre island property with cabin and shed improvements. What is unique about a small island survey of this type is that the General Land Office (GLO) surveyors only established a single monument on the island. This monument along with a tie to USLM No. 1285 on Admiralty Island provided a geographic location and orientation to true north for the Colt Island survey. Often, U.S. Surveys would have established multiple monuments that could be used to preserve the survey location should some of the monuments be lost to human activity or other natural events. In the case of U.S. Survey No. 1755, the preservation and identification of the original survey control monuments is critical to ensure an accurate boundary retracement at a later date.

The single monument established for U.S.S. 1755 was a Witness Corner Meander Corner (WCMC) and is not located on the boundary of the survey. The purpose of a WCMC is to “evidence” the true corner with a monument that is established upon secure ground as the Meander Corner itself would be liable to destruction. From Meander Corner No. 1, a series of 22 lines were run clockwise from MC-1 by bearing and distance to define the meanders of Colt Island. Meander lines are run not as boundaries of the tract but for the purpose of defining the sinuosities of the mean high tide line and as a means of ascertaining the quantity of land.<sup>6</sup>

The field notes for U.S.S. 1755 make the following statement regarding the MC and WCMC: *“As the above true point for meander corner falls at an unsafe place for corner, I establish a witness corner at a point which bears S.38°22’E., 0.21 chs. dist., from the true corner point, as follows: On the sharply sloping face of a bedrock ledge, showing 2 ft. x 3 ½ ft. above ground and facing northwest, I mark with cross (+) and with letters: WC MC1 S1755, for witness corner to Cor. No. 1 and M.C. of this survey,...”*

The field notes then describe the survey of the meanders: *“Thence from the true meander corner point. With meanders of Colt Island. Along line of mean high tide, over stony, sandy, and rocky beach.”*

3. Plat 75-11 Colt Island Recreational Development (U.S.S. No. 1755): A subdivision of this nature is referred to as a “paper plat”. There is no indication on the plat that a survey was performed on the ground or that the corners of the lots were monumented. This provides for a relatively inexpensive way to subdivide land and move directly into parcel sales but it merely transfers the cost and potential for conflicts to future owners. In order to limit the adverse effects caused by a “paper plat”, Alaska statutes provide the authority for local

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<sup>5</sup> Colt Island was surveyed between April 22 and 23, 1927. The plat of U.S. Survey No. 1755 was approved on October 17, 1928.

<sup>6</sup> Surveys executed by the Department of the Interior are performed according to the most recent manual of instructions published prior to the survey. Definitions and references relating to U.S.S. 1755 are paraphrased from the Advance Sheets of Chapters I to VI, inclusive, of a revision of the Manual of Instructions for the Survey of the Public Lands of the United States, dated 1919.

government to control the process by implementing a platting authority.<sup>7</sup>

At the time the Colt Island plat was prepared, there was no local or state government authority setting specific standards for platting, monumentation or access. The City and Borough of Juneau was unified in 1970, prior to the Colt Island platting, however, the local government boundaries almost appear to have been drawn to specifically exclude the Mansfield Peninsula of Admiralty Island as well as Colt Island and Horse Island directly to the south. (See Figure 1)

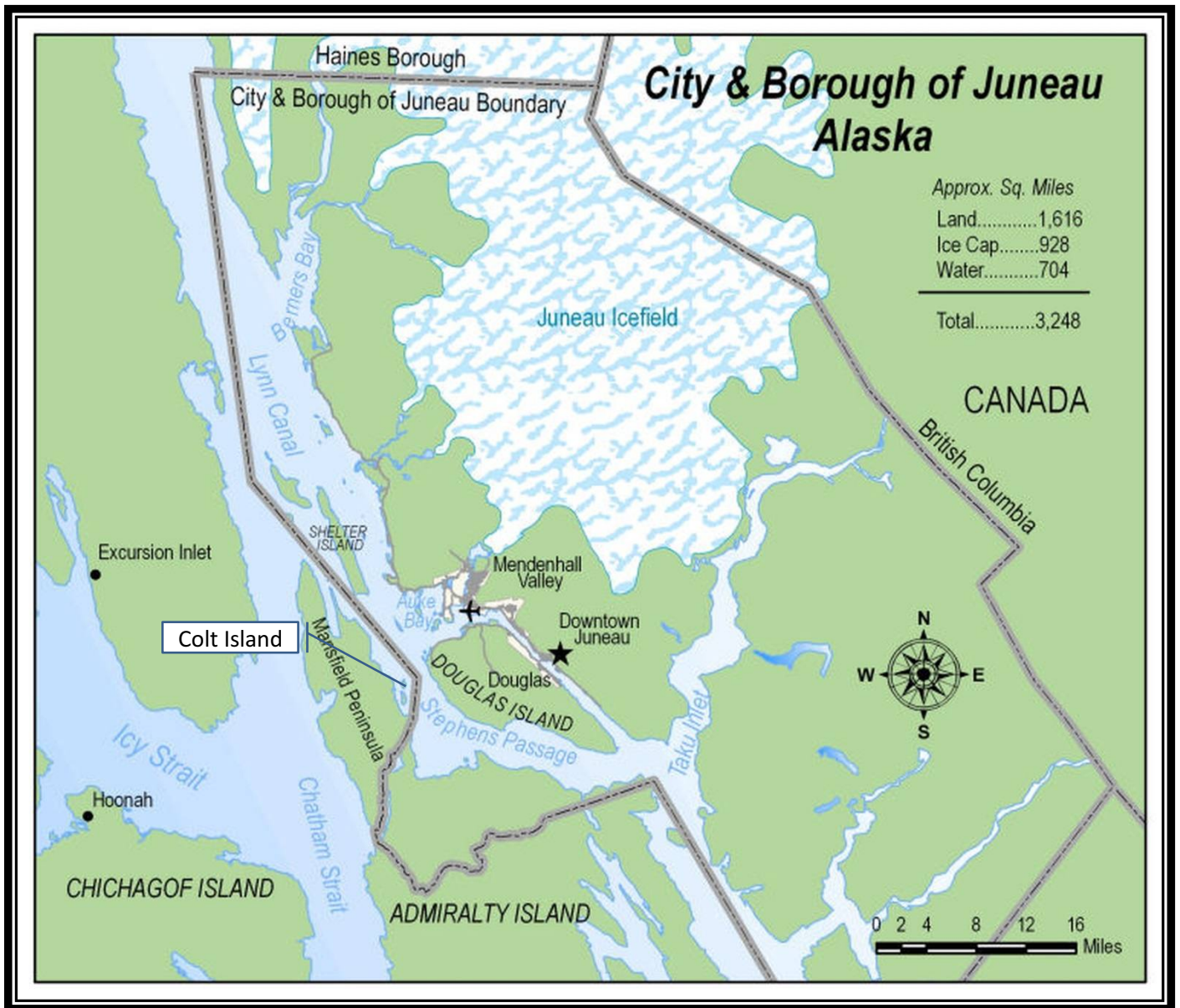


Figure 1 - City & Borough of Juneau Boundaries

<sup>7</sup> See A.S. 29.40.010 Planning, Platting, and Land Use Regulation and A.S. 29.40.070 Platting Regulation.



To address the platting issues arising where no local government platting authority existed, in 1998, the Department of Natural Resources (DNR) was established as the platting authority for the Unorganized Borough<sup>8</sup>. Regulations implementing DNR's new authority were not issued until late 2001<sup>9</sup>. While further subdivisions of Colt Island property would be subject to DNR platting jurisdiction after that point, the initial subdivision of the Colt Island lots without monumentation was not prohibited by law. We often find older subdivisions prepared prior to the establishment of a platting authority that have been surveyed, platted and monumented. Although not legally required at the time, monumentation of these subdivisions may be the result of the surveyor's minimum standards or the desire of the subdivision developer.

As no field survey was performed as a part of the Plat 75-11, the exterior boundary of the tract being subdivided was adopted from the original bearings and dimensions as published in U.S. Survey No. 1755. The Collins & Hall properties are Lots 14 and 15 respectively within "Area 1" of Plat 75-11. The westerly boundaries of the lots adjoin the second leg of the U.S.S. 1755 meanders from MC-1 running in a counterclockwise direction.

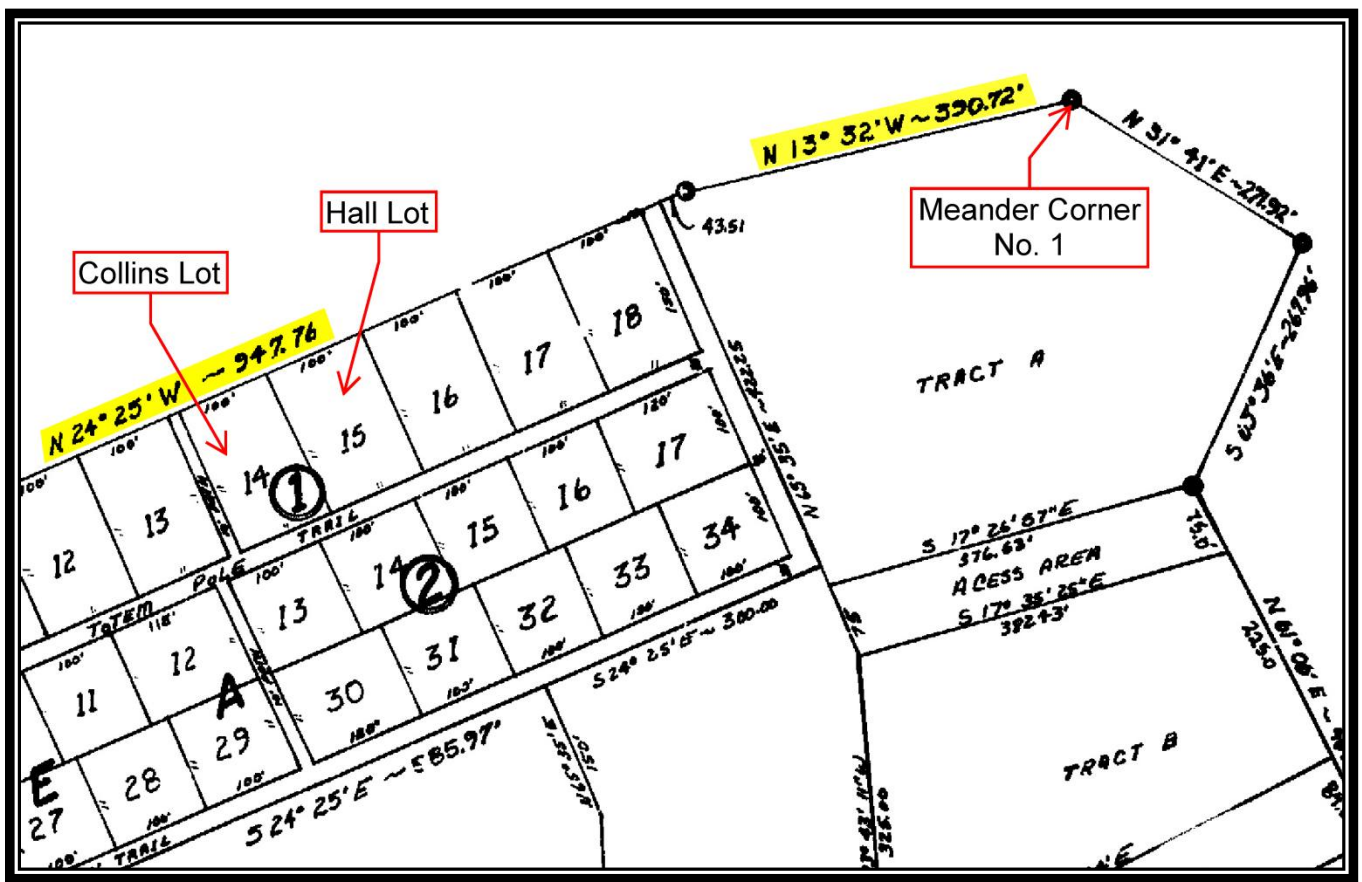


Figure 2 - Plat 75-11 Excerpt

<sup>8</sup> A.S. 40.15 Article 4 Platting in Areas Outside Certain Municipalities, effective August 18, 1998

<sup>9</sup> 11 AAC 53, Article 5. Platting Authority In the Unorganized Borough, effective October 2001.

Many of the dimensions on the digital copy of Plat 75-11 that can be downloaded from the Recorder's Office website are illegible as a result of either a poor quality original or poor quality scan. Regardless, I was able to mathematically reproduce and validate the plat dimensions within most of Areas 1 & 2 as a check of whether the boundary conflict might be a result of an error in the original plat.

4. Plat 2004-10: Alaska Tidelands Survey No. 1680.<sup>10</sup> This plat was prepared by J.W. Bean under DNR survey instructions. The purpose of the plat was to define a State tidelands lease area adjoining Tract D of the Colt Island Subdivision (Plat 75-11). This plat's relevance is related to the fact that its Basis of Bearing is the same one used for the surveys in conflict. It will be discussed later in this report.
5. 2008 Davis Survey: Included in the materials transmitted by Gabrielle Keizer (Baxter Bruce & Sullivan) on November 19, 2015 was an undated review of the "Hall" and "Collins" plats performed by Randal V. Davis, PLS for the Halls. Davis performed no field survey as a part of this review, however, his review attachments included data, calculations and photos from a survey he had been hired to perform for an unnamed Colt Island lot owner on August 6, 2008. I contacted Mr. Davis on November 11, 2015 to see if he had additional information relating to existing monumentation of the Colt Island lots. He stated that he had started a survey and upon finding conflicts between existing lot corners and the record dimensions for Plat 75-11, he determined that the resolution was beyond the scope of a single lot survey. He said that as he was unable to resolve the conflicts, he set no lot corners and filed no plats.
6. Plat 2012-32: The "Hall" plat was previously referenced in footnote 2. The plat locates Lot 15 using the record dimensions and basis of bearing reflected on Plat 75-11, Colt Island Subdivision. Highlights in Figure 3 graphically indicate that four existing secondary monuments were found, (3650-S J.W. Bean) and that they represent lot lines for Lot 15 that are estimated to be 17-feet to the north of and 18-feet to the east of the "Hall" plat survey. The highlights also indicate that if the found Bean monuments are correct, that the Hall's outhouse and shop building extend approximately 1 to 2 feet respectively into the Collins' Lot 14.

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<sup>10</sup> Filed as Plat 2004-10 on March 12, 2004, Juneau Recording District

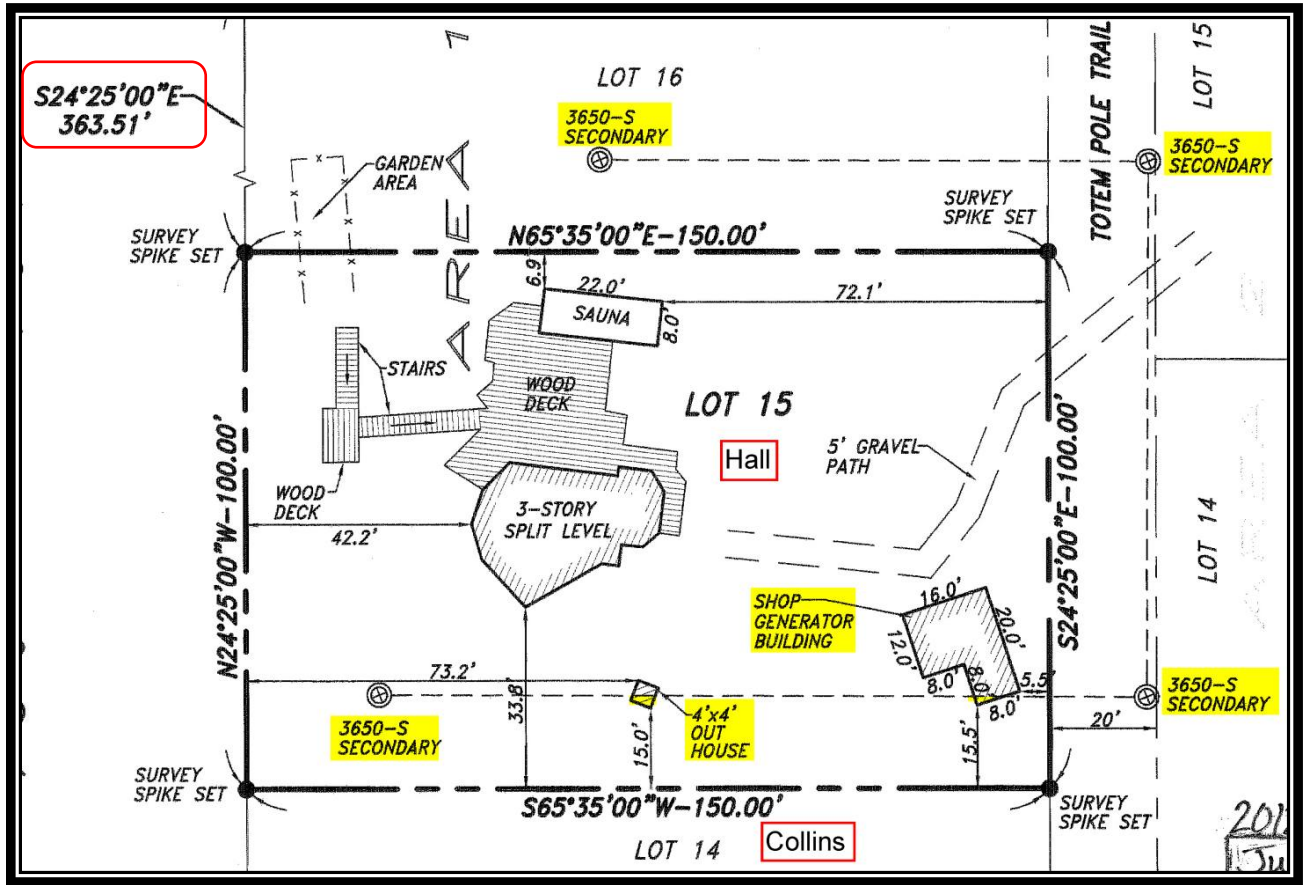


Figure 3 - Plat 2012-32 Excerpt

- Plat 2014-46: The “Collins” plat was previously referenced in footnote 3. On the face of the plat, it also appears to locate Lot 14 using the record dimensions and basis of bearing reflected on Plat 75-11, Colt Island Subdivision. The plat graphically indicates that existing secondary monuments to the north, south and east of Lots 14 and 15 were recovered. The plat provides a topographic survey of improvements and contour elevations within Lot 14. Two structures noted as “shed” and apparently representing the Hall’s outhouse and shop are shown as encroaching onto the Collins’ lot by 1.1 and 1.7 feet respectively. No ties or graphic representations are made to the monuments set by R&M Engineering, Inc. as a part of the “Hall” plat in 2012.

An inspection of the contour lines indicates that southwest corner is located about a third of the way up the bluff near the 25-foot elevation. The mid-point of the west boundary is about half of the way up the bluff near the 28-foot elevation and the northwest corner is in the vicinity of the top of the bluff near the 30-foot elevation. This is important because according to the Colt Island subdivision (Plat 75-11), the west boundary of the lot was designed to coincide with a record meander line for U.S. Survey No. 1755. The record meander line as stated in the preceding discussion for the plat for U.S.S. 1755 was to be “Along line of mean high tide, over stony, sandy, and rocky beach.” Assuming that the bluff has not significantly eroded since the original 1927 survey, this suggests that the “Collins” plat depicts a location for Lot 14 that is further to the

east than was intended. This discrepancy was also noted in the Randal Davis review.

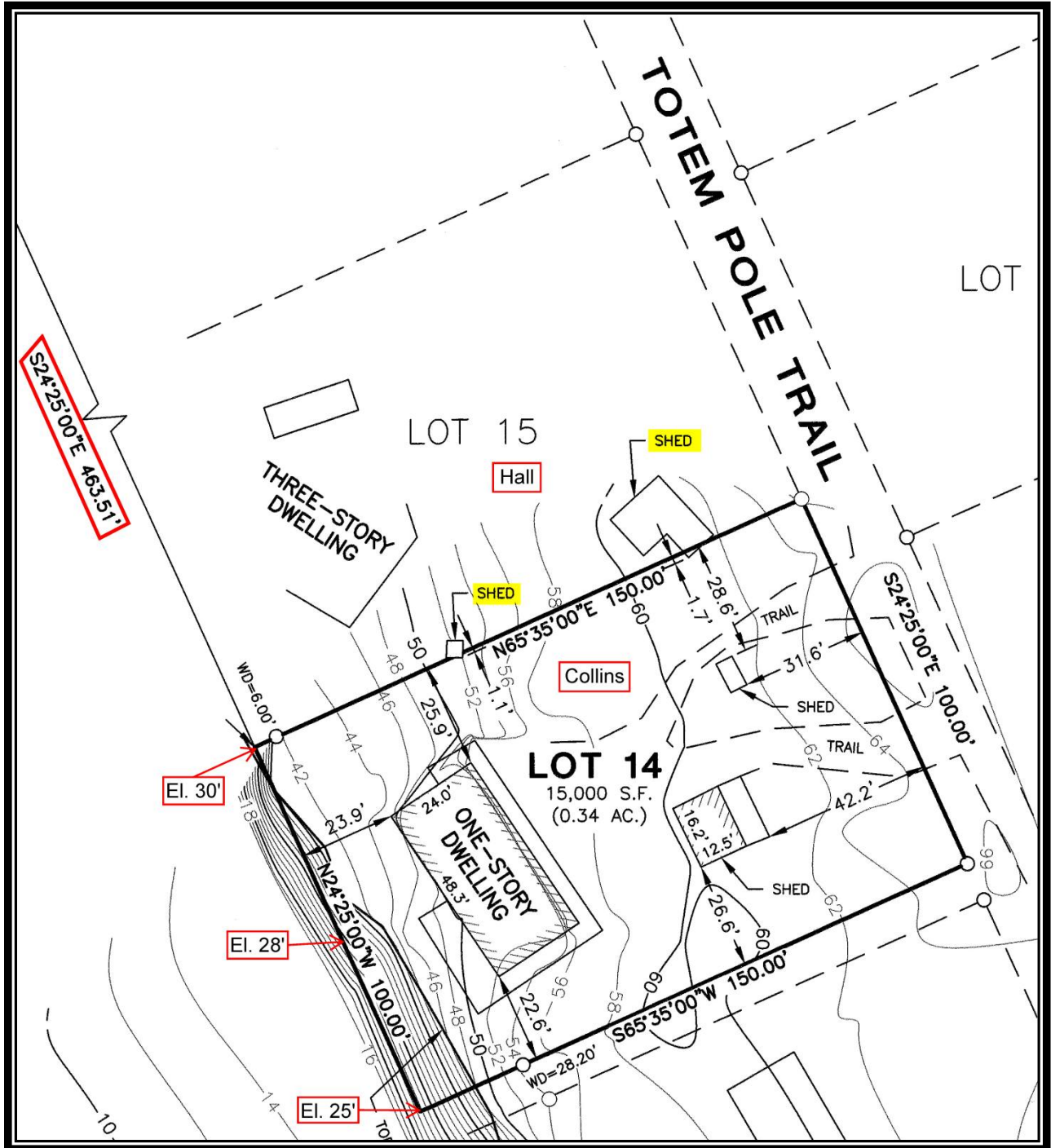


Figure 4 - Plat 2014-46 Excerpt



8. Land Survey Monument Record 2015-005094<sup>11</sup>: Establishment of MC-1, U.S.S. 1755. A land survey monument record<sup>12</sup> is not a plat but documents the establishment or restoration of an important monument. The purpose of this monument record was to establish a 3-inch BC (Brass Cap) concreted into rock for the position of MC-1 of U.S. Survey No. 1755. The document identifies the corner position as being an MC (Meander Corner) for the "Colt Island Alaska" subdivision and includes photographs of the monument and accessories that were set. The sketch included in the monument records indicates that MC-1 was established at the record bearing and distance according to U.S.S. No. 1755 from an "X on rock found on rock face". The "X on rock" was implied to be but not identified as the record WCMC-1 for U.S.S. No. 1755. A photo of the "rock face" attached to the document intended to show the "X" is of poor quality and no markings can be discerned.

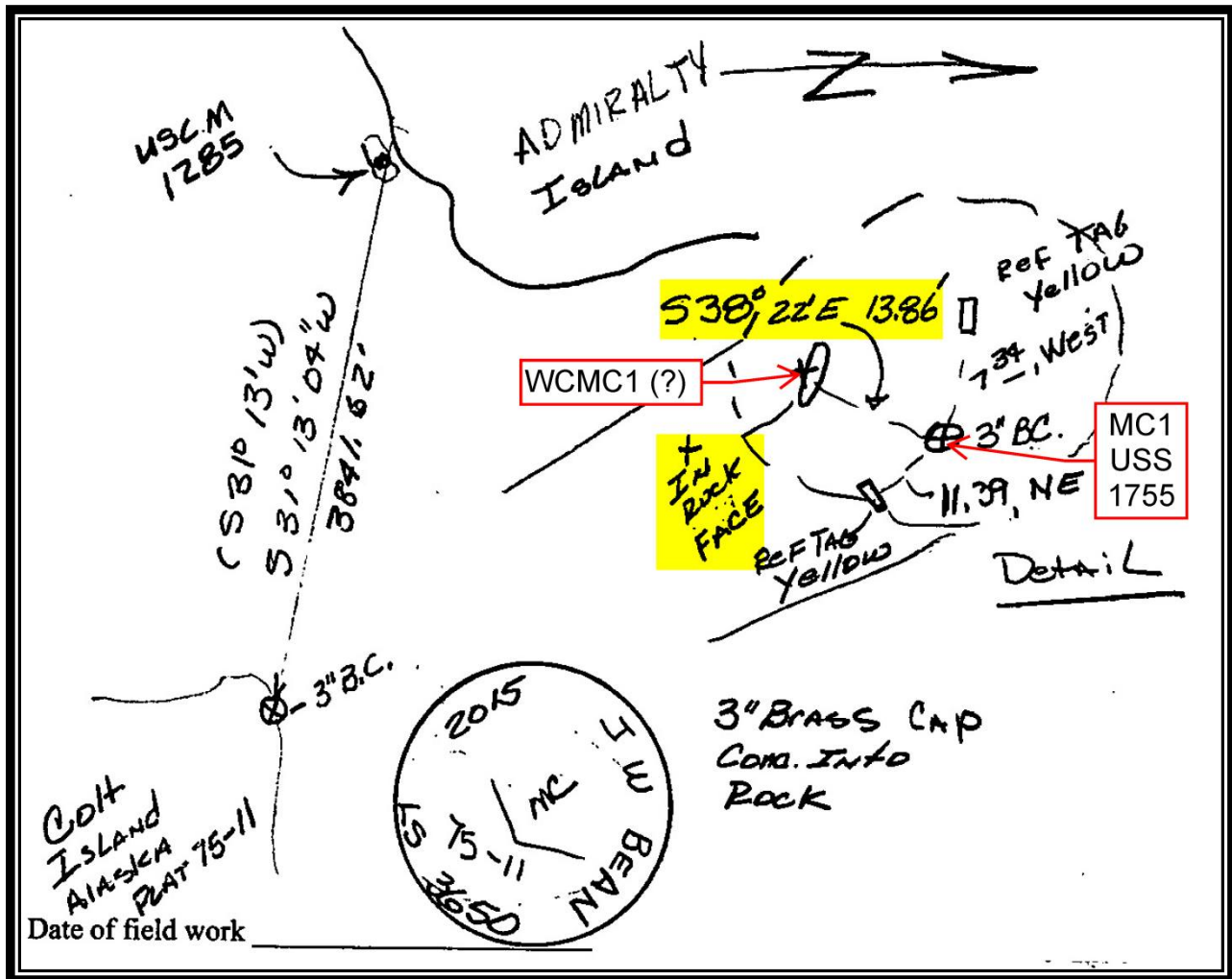


Figure 5 - Monument Record Sketch

<sup>11</sup> This monument record was recorded as document 2015-005094-0 on September 30, 2015, Juneau Recording District by J.W. Bean based on field work performed on 8/17/15.

<sup>12</sup> A.S. 34.65.040 Records of monument.



9. Plat 2015-37<sup>13</sup>: This Record of Survey is an amendment to the "Collins" plat. (2014-46). The size, shape and location of Lot 14 along with the topography and location of improvements in the vicinity of Lot 14 appears to be unchanged from the original "Collins" plat. What has changed are the Basis of Bearing and basis of location references to MC-1 of U.S.S. 1755.

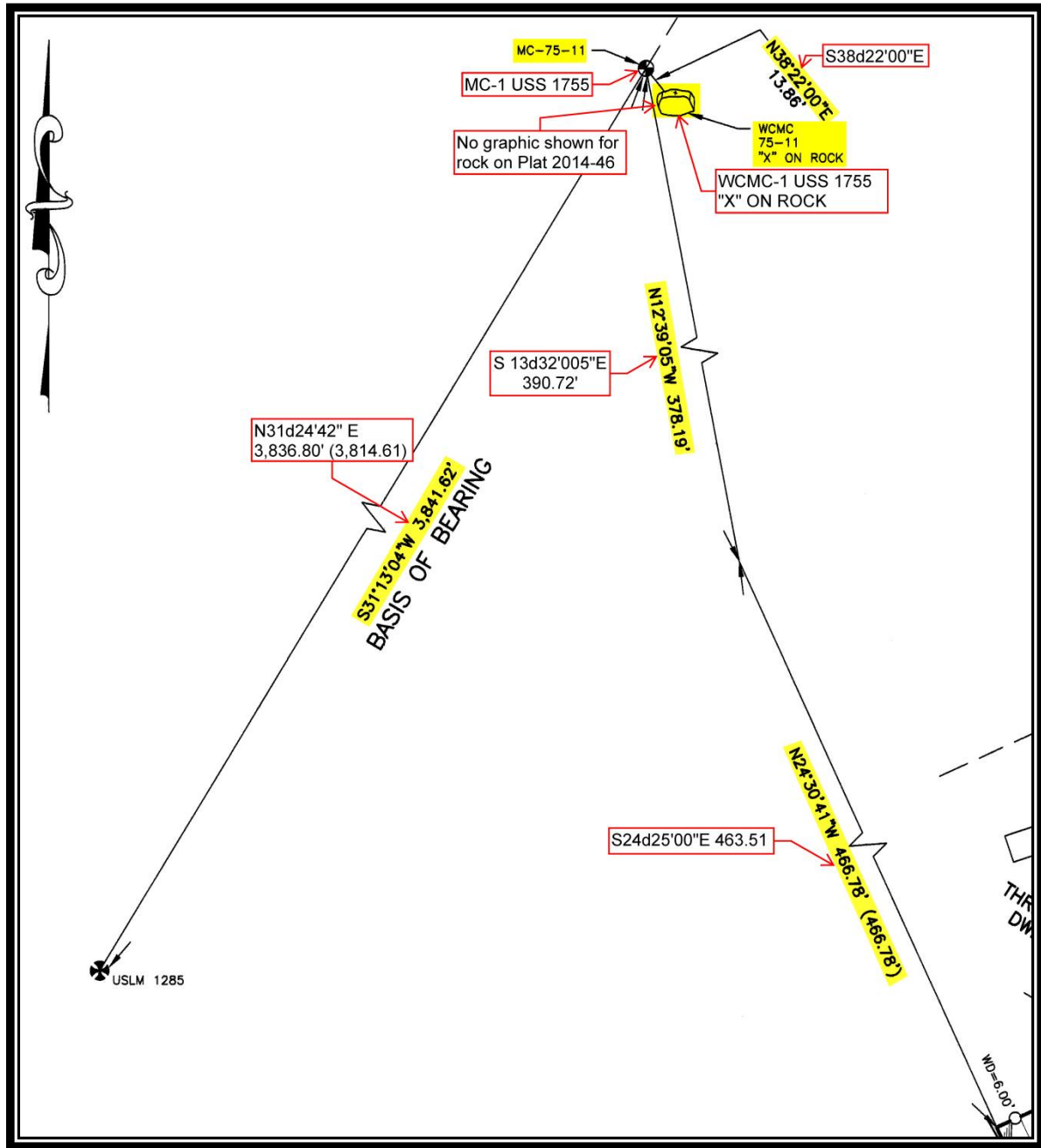


Figure 6 - Plat 2015-37 Excerpt

<sup>13</sup> Plat 2015-37 filed on September 30, 2015, Juneau Recording District by J.W. Bean, PLS.

Figure 6 represents the modifications made to the “Collins” plat (2014-46) by the amended plat 2015-37. The red boxes note the text as shown on the original plat and the highlighted items indicate the amended revisions.

- a. MC-1 and WCMC-1 are no longer referenced to the original U.S.S. 1755. They are referenced to the subsequent Colt Island subdivision plat 75-11. It is presumed that they are intended to represent the same points.
- b. The record tie between WCMC-1 and MC-1 for U.S.S. No. 1755 is  $S38^{\circ}22'E$ , 13.86 feet. The tie is shown correctly on the initial “Collins” plat (2014-46) but the bearing is labeled incorrectly on the amended plat as  $N38^{\circ}22'E$ . This may be a labeling error as the WCMC symbol is shown in the correct quadrant with respect to MC on the amended plat. It is interesting that the sketch for the preceding Monument Record, although crude, also suggests that the WCMC is to the northeast of the MC while being labeled with the correct  $S38^{\circ}22'E$  bearing.
- c. The Basis of Bearing for Plat 2015-37, is now shown as the approximate record bearing of  $S31^{\circ}13'04''W$  (Record for U.S.S. 1755 is  $S31^{\circ}13'W$ ) between MC-1 and USLM 1285. Both the initial “Collins” plat and the “Hall” plat show a computed Basis of Bearing between WCMC-1 and USLM 1285 because those were the only two physically existing monuments.
- d. The distance on the Basis of Bearing shown on the initial “Collins” plat compared to the amended “Collins” plat differs by 4.82 feet because the initial plat used a computed basis of bearing between WCMC-1 and USLM 1285 while the amended plat used a basis of bearing between MC-1 and USLM 1285. The amended “Collins” plat does not provide the record distance along the basis of bearing.
- e. The two ties commencing from MC-1 to the northwest corner of Lot 14 (common with the southwest corner of Lot 15) as shown on the original “Collins” plat (2014-46) were  $S13^{\circ}32'005''E$ , 390.72 feet; then  $S24^{\circ}25'00''E$ , 463.51 feet. They have been revised on the amended “Collins” plat (2015-37) to  $N12^{\circ}39'05''W$ , 378.19 feet; then  $N24^{\circ}30'41''W$ , 466.78 feet.

### Survey Analysis

#### 1. Definitions :

- a. “(2) ‘monument’ means a fixed physical object marking a point on the surface of the earth used to commence or control a survey or to establish a lot corner;”<sup>14</sup>
- b. “(3) ‘plat’ means a map or delineated representation of a tract or parcel of land showing the subdivision of land into lots, blocks, streets, or other divisions;”
- c. “(5) “subdivision” (A) means the division of a tract or parcel of land into two or more lots by the landowner or by the creation of public access, excluding common carrier and public utility access;”

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<sup>14</sup> See A.S. 40.15 Subdivisions and Dedications, Sec. 40.15.900 Definitions for the meaning of “monument”, “plat” and “subdivision”.

- d. Legally Sufficient Description: “A valid deed must designate the land intended to be conveyed with reasonable certainty....a description is sufficient if it contains information permitting identification of the property to the exclusion of all others.”<sup>15</sup>
- e. Point of Beginning (POB): For a survey or description of a parcel of land to be reproducible, the parcel location must begin at a readily identifiable, known point. The Point of Beginning (POB) should be a point on the boundary of the parcel being described and preferably consist of an existing natural or manmade monument.
- f. Point of Commencement (POC): In the absence of an existing monument located on the boundary of the parcel being described, the description may start at an existing natural or manmade monument referred to as the “Point of Commencement”. The description or survey will then proceed by courses of directions and distances to the “Point of Beginning”.
- g. Basis of Bearing (BOB): The orientation of angular relationships of lines in a description or on a map. For a survey or description of a parcel of land to be reproducible, the direction of lines must be related to a known basis such as magnetic north, true north or a line between two fixed monuments. Generally, the “basis of bearing” will be clearly stated on the plat or description that created the parcel or can be derived from associated data.

## 2. Basis of Location for Lots 14 & 15, Area 1, Colt Island Subdivision

The 1928 plat of U.S.S. No. 1755 indicates that a single monument was established to control the location of the survey. To ensure permanency, the surveyor selected the face of a bedrock ledge, a natural monument for the location of the Witness Corner to Meander Corner No. 1 (WCMC-1). To ensure that the monument would be identifiable among a beach full of similar rock faces, the surveyor chiseled out a “cross” and the letters “WC MC1 S1755”.

There is no evidence on the face of the Colt Island subdivision plat that any field survey was performed or the lots monumented. The exterior boundaries of the subdivision are based on the record meanders of U.S.S. No. 1755. Although MC-1 and the monumented WCMC-1 for U.S.S. No. 1755 are not labeled on the subdivision plat, it is clear that WCMC-1 would be the sole basis of control on Colt Island from which the subdivision lots could be located.

The title for Lot 14 vests in Ray and Carol Collins through a quitclaim deed issued by the Internal Revenue Service in 1990<sup>16</sup>. The title for Lot 15 vests in David W. and Margaret R. Hall, Trustees of the D & M Hall Community Property Trust through a warranty deed issued in 2005<sup>17</sup>. The property description in each deed is similar in that they refer to either Lot 14 or 15, Area 1, Colt Island Recreational Development, according to Plat 75-11, U.S. Survey No.1755, Juneau Recording District, First Judicial District. A description by lot and block alone is insufficient to locate the property without reference to the plat that initially created the lot. The reference to

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<sup>15</sup> *Shilts v. Young*, 567 P.2d 769, Alaska – July 22, 1977

<sup>16</sup> Quitclaim Deed recorded in Book 331, Page 671, June 1, 1990, Juneau Recording District.

<sup>17</sup> Statutory Warranty Deed recorded as document 2005-001967-0, March 14, 2005, Juneau Recording District.

the plat essentially makes it a part of the deed.<sup>18</sup>

The “Hall” plat (2012-32) used the record tie according to U.S.S. No. 1755 from WCMC-1 to establish a computed position for MC-1. From MC-1, the “Point of Commencement”, the surveyor locates the northwest corner of Lot 15, the “Point of Beginning” by running the record courses along the exterior subdivision boundary. The plat identifies WCMC-1 as an “X in stone”. With only one physical monument (WCMC-1) controlling the subdivision, there is really no alternative initial procedure. Upon monumenting the corners of Lot 15, the “Hall” plat identifies existing lot corners that conflict with those being set.

The initial “Collins” plat appears to use an identical process to locate Lot 14. The plat identifies WCMC-1 as an “X on rock”. The position of MC-1 (POC) is computed based on the record tie according to U.S.S. No. 1755 and the record courses along the exterior subdivision boundary are run to the northwest corner of Lot 14, the “Point of Beginning”. The “Hall” plat monuments are not identified, however, the monuments for Lot 14 as well as those for several adjoining lots are noted in the legend as “Secondary monument recovered this survey, rebar & cap, JW Bean”. This implies that the monuments had been set by Bean at a previous time and not as a part of the 2014 “Collins” plat. The question at this point is if both surveys used the same basis of location, basis of bearings and the record courses according to the Colt Island subdivision plat, how could the boundaries significantly disagree?

The next two items, the amended “Collins” plat (2015-37) and the Monument Record are reviewed together. Generally, if the establishment of a monument is documented in a Record of Survey, it is not necessary to also file a Monument Record. However, both are recorded on the same date and the Monument record provides information that is not evident on the amended plat such as the reference accessories to the monumented MC-1 and the photograph of WCMC-1. There is no explanation on the plat regarding why courses from the newly monumented MC-1 (POC) to the northwest corner of Lot 14 (POB) now vary so significantly from the record subdivision courses as noted on the “Hall” plat and the initial “Collins” plat.

There are several reasons why the “Hall” and “Collins” plats could be in conflict. They include errors in measurement, errors in computation, a misidentification of the “Point of Commencement” or an error in the “Basis of Bearings” that will be discussed in the following section. Evaluation of errors in measurement and computation would require an independent survey and so are beyond the scope of this assignment. There also would be insufficient data to evaluate a misidentification of the “POC” or WCMC-1 without the review report submitted by Randal Davis, PLS. Davis provides two photographs from his incomplete 2008 survey.

In figure 7, Davis fills the chisel markings on the bedrock with yellow lumber crayon to make the WCMC-1 markings readily visible. Because the Recorder’s office scan of Bean’s WCMC-1 photo for Land Survey Monument Record 2015-005094 was of such poor quality, it is impossible to determine at this point whether it was the same “X in rock” that is shown in the Davis photos.

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<sup>18</sup> Estate of Smith v. Spinelli, 216 P.3d 524, Alaska – September 18, 2009 – “Footnote 12: ‘See 26A C.J.S. Deeds § 226 (2001)(A map, plat, plan, or survey, by virtue of apt reference thereto in a deed, may be treated as part of, and may be construed with, the deed in determining the property conveyed.)’”





Figure 7 - WCMC-1 from Davis Report

3. Basis of Bearings:

To ensure that a survey is reproducible and meet the cited Shilts v. Young requirement that the property be identifiable to the exclusion of all others, the survey must not only commence from a known point, but orientation of directions or “Basis of Bearing” (BOB) must also be known. Generally, a single known point, which is all we have on Colt Island would be insufficient to establish a BOB. A single point might be reasonable if the basis of bearings is referenced to magnetic bearings, astronomical observations or Global Positioning System satellites, but at the time of the original 1927 survey of U.S.S. 1755, these were not options. Establishing true north by solar observations was the common method to orient the directions of a U.S. Survey at the time, however, the field notes for U.S.S. 1755 state: “Owing to continued cloudy and inclement weather conditions it was not possible to obtain an observation for azimuth during the execution of this survey. I therefore deflect angles from the meridian obtained by J. Frank Warner, U.S. Cadastral Engineer, in making U.S. Survey No. 1285...” U.S. Survey No. 1285 was surveyed in 1920 and included the establishment of a U.S. Land Monument (USLM) on the easterly boundary along the shore of Admiralty Island. The USLM 1285 and the position for MC-1 of U.S. Survey No. 1755 are intervisible and to establish a geographic position for MC-1, it would be necessary to measure the distance between the USLM and MC-1. Having no electronic means at the time to measure the distance directly, the U.S.S. 1755 surveyor computed the distance and bearing between the two positions by triangulation.

Figure 8 is a graphic from the Davis report that compares the basis of bearing for each plat reviewed as a part of this report. Note that while the amended “Collins” plat uses the record basis of bearing between MC-1 and USLM 1285, the computed BOB between WCMC-1 and USLM 1285 would be the same for both versions of the “Collins” plats. The basis of bearing tie is between the existing monumented points for U.S.L.M 1285 and WCMC-1 U.S.S. 1755.

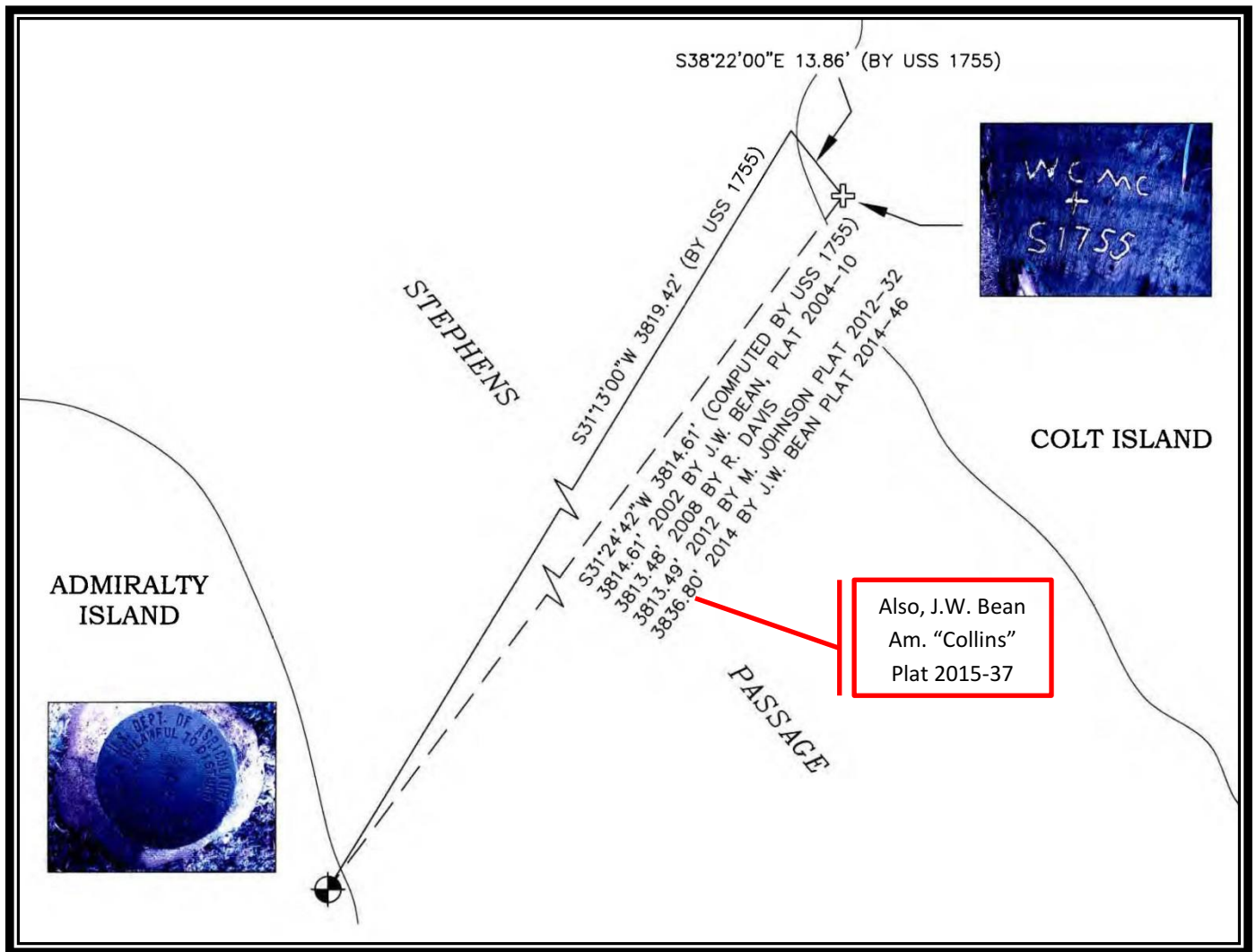


Figure 8 - Graphic from Davis Report w/ Annotations

The basis of bearing for U.S.S. 1755 is S 31°13' W, a distance of 3,819.42 feet between MC-1 and USLM 1285. However, as MC-1 was not monumented as a part of U.S.S. 1755, the following surveys use a computed BOB between WCMC-1 and USLM 1285 of S 31°24'42" W and distance of 3,814.61 feet based on the U.S. Survey record data.

The next survey to use this basis of bearing is Bean's ATS No. 1620 (Plat 2004-10). Plat note 5 states that "Recorded bearings and distances are shown enclosed in parenthesis. Measured bearings and/or distances are shown without parenthesis." Interestingly, plat note 1 then shows the bearing of S 31°24'42" W and distance of 3,814.61 as being both the record and measured bearing and distance. It is expected that the measured and record bearing be the same because the intent was to orient the survey to the record basis of bearing. What is

unusual is that the measured distance between USLM 1285 and WCMC-1 is shown as being exactly the same as the record distance or 3,814.61 feet. While it is not impossible for the 2004 survey to have measured the same distance to the nearest one hundredth of a foot as the triangulated 1927 distance, it is improbable. A more likely explanation is that the distance between USLM 1285 and WCMC-1 was not measured at all for the Plat 2004-10 survey. If the primary purpose for the line between USLM 1285 and WCMC-1 is to provide a basis of bearings, it is not absolutely required that the distance between the two be measured, but it is a good practice.

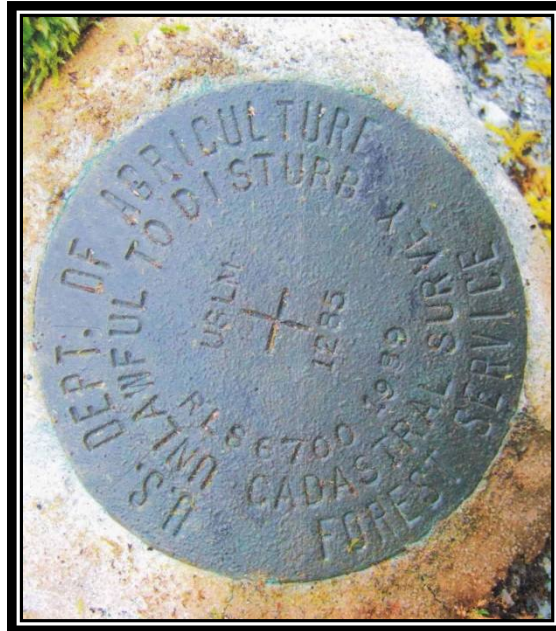


Figure 9 - Photograph of USLM 1285

The reason for measuring between the basis of bearing monuments is to ensure that you are set up on and sighting the correct points. Figure 9 is a photograph taken by Davis of USLM 1285 as a part of his 2008 survey. The markings on the brass cap leave little doubt that this is the USLM 1285<sup>19</sup> that is graphically represented on the plat for ATS No. 1260 (Plat 2004-10) and the “Hall” plat (2012-32). Both the “Collins” plat (2014-46) and the amended Plat 2015-37 identify this monument as “U.S.L.M 3” Brass Monument”.

According to the 2008 Davis survey data, he measured a distance of 3,813.48 feet between USLM 1285 and WCMC-1. The “Hall” plat (2012-32) measured a distance of 3,813.49 feet between the two same points. Measuring a 3,800 foot distance across the water with two separate sets of surveying equipment, different crews and different conditions and having them agree within one hundredth of a foot is notable but within the realm of possibility given the precision of modern electronic surveying equipment. This compares with the record U.S.S. 1785 distance of between USLM 1285 and WCMC of 3,814.61 feet. This is a difference of 1.12 feet from the “Hall” plat distance. The measured “Davis” and “Hall” distances compare remarkably well with the

<sup>19</sup> USLM 1285 was reset in Plat 89-38RS filed on November 9, 1989 in the Juneau Recording district by Greg Scheff & Associates for the Forest Service. The plat indicates that the original chiseled “X” in a granite boulder along with an original bearing tree were recovered. The brass cap was set in the center of the original chiseled “X”.



record (computed) distance given that the record U.S.S. 1785 tie was not made with the benefit of direct electronic measurement but by triangulation with far less precise equipment. As noted in Figure 8, the “Collins” plat and the amended “Collins” plat both reflect a measured distance of 3,836.80 feet between USLM 1285 and WCMC-1. This is a difference of 22.19 feet compared to the record (computed) U.S.S. 1785 distance and a difference of 23.31 feet compared to the “Hall” plat distance. Working within the framework of the evidence we have available including the Bean and Davis photos of WCMC-1 and the disparity of the “Collins” plat measurement between USLM 1285 and WCMC-1 when compared to the measurements of the “Hall” and Davis surveys as well as the record U.S.S. 1755 distance, it is reasonable to suspect that the Bean surveys may not have found the true WCMC-1. Figure 3 graphically indicates that the “Collins” plat established lot lines for Lot 15 that are to the north and east of the “Hall” plat. If the “Collins” plat or prior Bean surveys that were used as a basis for the “Collins” plat commenced at a point that was to the north and east of the actual WCMC-1, the discrepancy in the lot line location would make sense. The Davis photo conclusively identifies the recovered rock face as WCMC-1. The consistency between the Davis, “Hall” plat and record U.S.S. 1755 distances between USLM 1285 and WCMC-1 indicate with high confidence that they are all using the same WCMC-1. In addition, the relationship between the contour lines and the west boundary of Lot 14 as shown in Figure 4 appear to confirm that the “Collins” plat has located Lot 14 to the east of its record location.

**With regard to the discrepancy between the “Hall” and “Collins” plats and based solely on the “Point of Commencement”, “Point of Beginning” and “Basis of Bearing” surveying principles, the “Hall” plat (2012-32) most accurately represents the record location of the boundaries for Lot 15, Area 1 according to the Colt Island subdivision (Plat 75-11).**

#### Boundary Analysis

The preceding section is intended to identify the survey that most correctly located the record lot boundaries. There are many legal doctrines regarding unwritten transfer of title that could result in boundaries that are contrary to those identified in the record subdivision plat or conveyance document. These include adverse possession, acquiescence, unwritten agreement, practical location, and estoppel.

Alaska is a relatively young state with regard to boundary law and there are few Alaska cases to draw upon for guidance. As a result, we often draw upon learned treatises relating to boundary law principles and rely upon case law from other states.

1. Original Lines and Monuments: *“Once a lot, street, or block line within a subdivision is established by the original surveyor and the land is sold in accordance with original plat, the lines originally marked and surveyed are unalterable except by resubdivision.”*<sup>20</sup> *“No subsequent surveyor has the authority to ‘correct’ any errors that are found. To do so would wreak havoc on possession, structures, and other improvements within the subdivisions. Neighborhoods that have enjoyed a long history of peace will be thrown into total disorder.”*<sup>21</sup> *“No rule that has been adopted to accomplish that end is more firmly established than that courses and distances are controlled by marked and fixed monuments.”*<sup>22</sup>

As previously stated, the Colt Island subdivision (Plat 75-11) was a “paper plat”. No survey was performed as a

<sup>20</sup> Section 12.10, Principle 9 - Brown’s Boundary Control and Legal Principles, 7<sup>th</sup> Edition, Robillard & Wilson - 2014

<sup>21</sup> *Ibid.* p. 395

<sup>22</sup> *Ibid.* p. 396 – Quoted from Morris v. Jody, 216 Ky. 593 (1926)



part of the subdivision design and no lots were staked. Under the original lines and monuments principles, had the Colt Island subdivision lots:

- a. been monumented by the original surveyor prior to the recordation of the Colt Island subdivision plat;
- b. been monumented subsequent to plat recordation as a condition of a plat note requiring monumentation by a specific date, if relied upon and accepted by the landowners;
- c. been monumented by the original surveyor soon<sup>23</sup> after recordation of the plat;

the position of the monuments, even if in conflict with the positions according to the subdivision plat would control the location of the lot boundaries.

An original surveyor is one who sets out monuments for the very first time for a common grantor. A subsequent surveyor is obligated to “follow in the footsteps” of the original surveyor and accept the original monuments as conclusive evidence of the lines as originally run. “The monuments set by the original surveyor to show the lines as marked and surveyed express the intent of the subdivider and become the paramount control for resurvey within a recorded subdivision.”<sup>24</sup>

“The Hall property and Collins property boundaries,...were surveyed and monumented by J. W. Bean, Registered Land Surveyor No. 3650 (“Bean”) on or about July, 2009.”<sup>25</sup> Although J. W. Bean was the original surveyor of the Colt Island subdivision, he was no longer the “original” surveyor in the context of controlling original monuments. The monuments he set in 2009 came almost 34 years after the filing of the Colt Island subdivision plat, 19 years after title for Lot 14 vested into the Collins and 15 years after title for Lot 15 vested into the Halls. None of the above stated criteria for controlling original subdivision monuments could be met. Under the original subdivision monumentation rules, the 2009 monuments set by Bean carry no more weight than the monuments set in 2012 for the “Hall” plat (2012-32).

2. **Un-called for Monuments:** “Monuments set after a deed was written do not control a boundary, although they may be used as evidence for possible prescriptive points.”<sup>26</sup> Neither of the deeds vesting title in the Halls or the Collins called for a survey to be performed or monuments to be set as a part of the conveyance. Alaska law provides guidance in interpreting deed descriptions. Norken Corp. v. McGahan states the following: “We have long held that the touchstone of deed interpretation is the intent of the parties...The proper first step in deed construction is to look to the four corners of the document to see if it unambiguously presents the parties’ intent, without resort to the ‘rules of construction’...If the words of the deed taken as a whole are capable of but one reasonable interpretation, a court need go no further.”<sup>27</sup>

There is no ambiguity or conflict in the Collins or Hall deed descriptions as neither makes a conflicting call for a survey or monuments to control the boundaries of the parcels conveyed. The only definition of the properties conveyed by the deeds is based on the reference to the recorded Colt Island subdivision plat. Monuments set subsequent to the conveyance and not called for in the deed description may not control the location of the

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<sup>23</sup> Ibid. p. 364 “If the evidence shows the monuments were placed in the ground soon after the original survey, by the same individual who conducted the original survey, infrequently the courts have been known to accept these as original monuments.”

<sup>24</sup> Ibid. p. 395

<sup>25</sup> Paragraph 10 – Complaint dated July 29<sup>th</sup>, 2014, Collins v. Hall, Case No. 1JU-14-771 CI

<sup>26</sup> Ibid. 21, p. 361.

<sup>27</sup> Norken Corp. v. McGahan, 823 P.2d 622, Alaska, November 15, 1991.

parcel boundaries.

3. Boundary by Acquiescence: There is an argument that the monuments set by Bean in 2009 should control the locations of Lots 14 and 15 even if they are in conflict with the record dimensions according to the Colt Island subdivision plat (Plat 75-11). This argument may be based on one of the several methods of unwritten transfer of title. I start with a consideration of boundary by acquiescence because of a recent case of first impression considered by the Alaska Supreme Court in Lee v. Konrad.<sup>28</sup>

The case relates to a boundary line dispute according to two conflicting surveys, one performed in 1992 (Lee) and one performed in 2008 (Konrad). “Lee ‘ask[s] [this] court to recognize the law of practical location, by whatever name (practical location, boundary by agreement, by acquiescence, or by estoppel),...”<sup>29</sup>

“Boundary by acquiescence is an equitable gap-filling doctrine that may be available where estoppel and adverse possession are unavailable. While the exact requirements of the doctrine vary from state to state, Justice Thomas Cooley of the Michigan Supreme Court aptly summarized the doctrine as follows: ‘The long practical acquiescence of the parties concerned, in supposed boundary lines, should be regarded as such an agreement upon them as to be conclusive even if originally located erroneously.’”<sup>30</sup>

“We agree with the New Hampshire Supreme Court that ‘boundary by acquiescence is grounded upon principals of public policy that preclude a party from setting up or insisting upon a boundary line in opposition to one which has been steadily adhered to.’”<sup>31</sup>

“Accordingly, we hold that a boundary line is established by acquiescence where adjoining landowners (1) whose property is separated by some reasonably marked boundary line (2) mutually recognize and accept that boundary line (3) for seven years or more.”<sup>32</sup>

“For consistency, we adopt the seven-year statutory prescriptive period for adverse possession under color and claim of title, AS 09.45.052(a), as the time period required to establish a boundary by acquiescence. But we note that boundary by acquiescence and adverse possession are fundamentally distinct legal doctrines. Boundary by acquiescence arises from some of the same policy considerations as adverse possession, but rather than creating a means whereby a party can acquire title to land without the other owner’s consent, it allows parties to establish the location of a boundary by consent, but without written agreement.”<sup>33</sup>

Lee v. Konrad established the doctrine of boundary by acquiescence in Alaska and ruled that the boundary between Lee and Konrad had been established under this doctrine.

There are two reasons why this doctrine cannot apply to the Collins v. Hall case. The 2009 monumentation of the lots by Bean may have represented a “reasonably marked boundary line”, however, there is clearly no mutual recognition or acceptance of the line by the parties and even if there were, from July 2009, the date of

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<sup>28</sup> Lee v. Konrad, 337 P.3d 510, Alaska, August 29, 2014

<sup>29</sup> *Ibid.*

<sup>30</sup> *Ibid.*

<sup>31</sup> *Ibid.*

<sup>32</sup> *Ibid.*

<sup>33</sup> *Ibid.*

Bean's monumentation to today, only 6 years and 5 months have passed.

4. Boundary by Adverse Possession: In Alaska, an unwritten transfer of title can be accomplished through the doctrine of adverse possession. The requirements include "The uninterrupted adverse notorious possession of real property under color and claim of title for seven years or more, or the uninterrupted adverse notorious possession of real property for 10 years or more because of a good faith but mistaken belief that the real property lies with the boundaries of adjacent real property owned by the adverse claimant,..."<sup>34</sup>

The "adverse" requirement provides that the use be non-permissive and the claimant act as if they are the owner of the land. The "notorious" requirement holds that the adverse use be reasonably visible to the record owner.

In the context of Collins v. Hall there is the possibility of Collins asserting the boundary location as established by the monuments set by Bean in 2009 or an assertion by the Halls of that portion of Lot 14 according to Bean's monuments that may be occupied by their outhouse and shop building. In the prior section on boundary by acquiescence, I noted that it would not be applicable to this case in part because the Bean monuments had not been in place for the minimum of 7 years as required by the Alaska Supreme Court. In an adverse possession assertion by the Collins to the boundary based on Bean's monuments and without color of title to Lot 15, they would have to meet the requirement of uninterrupted possession for at least 10 years. If a case for adverse possession against Hall's interest cannot be made by Collins, there is no reason to consider an adverse possession assertion by Hall against the Collins property.

Without additional facts upon which to base a claim of adverse possession, it appears that a boundary by adverse possession between the Hall and Collins property cannot be established due to a failure to meet the prescriptive time periods required by the adverse possession statute.

5. Boundary by Estoppel: Boundary by estoppel is designed to prevent fraud and injustice and to protect innocent landowners who reasonably rely on the representations of their neighbors regarding boundary lines. In Alaska the general elements required for the application of the doctrine of equitable estoppel<sup>35</sup> are:
  - a. The assertion of a position by conduct or word;
  - b. Reasonable reliance thereon by another party; and
  - c. Resulting prejudice.

For this doctrine to have any applicability to the Hall/Collins boundary dispute the Halls would have to have initially asserted to Collins that the Bean monuments represented the true boundary between Lot 15 & Lot 14, Collins would have relied upon that assertion to their detriment, and now Hall reverses their assertion causing an adverse impact to Collins. None of these elements appear to be in place in this dispute and so cannot be considered applicable.

**I am unaware of a boundary law doctrine that would support an assertion that the 2009 Bean monuments controlled the location of the boundaries between Lots 14 & 15, Area 1, Colt Island subdivision.**

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<sup>34</sup> A.S. 09.45.052 Adverse Possession

<sup>35</sup> Jamison v. Consolidated Utilities, Inc., 576 P.2d 97, Alaska, March 3, 1978

**The best evidence to support the location of the Lot 14/15 boundaries are the monumented WCMC-1 of U.S. Survey No. 1755, the basis of bearing between WCMC-1 and USMS 1285 according to U.S.S. 1755 and the record bearings and distances from WCMC-1 to the lots according to the Colt Island Subdivision plat (Plat 75-11). These elements are best represented in the "Hall" plat (2012-32).**

As stated in our proposal letter dated November 24, 2015, my opinion was based on the materials provided to me and publically available supplemental information. The lack of an independent survey to confirm the accuracy of the preceding surveys along with the limitations of the provided and publically available information could result in a revised conclusion should additional facts be revealed.

Should you have any further questions regarding this report, please feel free to contact me at any time.

Sincerely,

R&M CONSULTANTS, INC.



John F. Bennett, PLS, SR/WA  
Senior Land Surveyor

JFB:jfb

Attachment: Resume, John F. Bennett, PLS, SR/WA



## John F. Bennett, PLS, SR/WA

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### Professional Achievements

Professional Land Surveyor - State of Alaska - PLS 6278 - March 1984

United States Mineral Surveyor - September 1986

SR/WA - Senior Member/International Right-of-way Association - October 1989

Alaska Society of Professional Land Surveyors – Member since 1976

*1987 Fairbanks Chapter President, 1992-1993 Statewide Secretary, 1995 Statewide President, 1994-1997 Alaska Land Surveying Exam Workshop, 1993-2010 Standards of Practice Committee Chair, 1993-2014 Website Manager, 1999 ASPLS Surveyor of the Year*

International Right-of-way Association – Member since 1986

*1990 Fairbanks Chapter President, 1990 – Fairbanks Chapter Professional of the Year, Certified Instructor: IRWA Engineering and Property Description Courses – since April 1990*

### Formal & Continuing Education

1971-1974 (2 years) - Civil Engineering - University of Alaska, Fairbanks

May 1978 (Graduated) - A.S. Survey Technology – Anchorage Community College

1980-2015: Over 1400 continuing education hours relating to right-of-way and surveying issues.

### Papers & Seminar Presentations

- Alaska Right-of-Way Mapping Case Studies – 4 hr. seminar co-presented at 50<sup>th</sup> annual Alaska Surveying & Mapping Conference, Anchorage, 2/19/15
- Access Law & Issues Affecting Public & Private Lands in Alaska - 8 hr. seminar presented by John F. Bennett PLS, SR/WA, Daniel W. Beardsley, SR/WA - 1992, 2007, 2013, 2014
- Highway Rights of Way In Alaska – authored and presented by John F. Bennett as a part of the above noted *Access Law* seminar. 3/9/93, revised 3/4/13
- Highway Right-of-way Surveys – authored and presented by John F. Bennett, PLS, SR/WA – 31<sup>st</sup> Alaska Surveying & Mapping Conference, Anchorage, 2/8/96.
- Records of Survey: Interpreting the Intent – authored and presented by John F. Bennett, PLS, SR/WA – 32<sup>nd</sup> Alaska Surveying & Mapping Conference, Anchorage, 2/13/97.
- Property Descriptions for Rural Alaska – authored and presented by John F. Bennett, PLS, SR/WA – 8 hour seminar sponsored by IRWA, DOT&PF & University of Alaska
- RS 2477 Trails and Section Line Easements – authored and presented by John F. Bennett, PLS, SR/WA – Access 2003 Seminar, Fairbanks, 3/13/02



- IRWA 101 Principles of Real Estate Acquisition – Engineering – 24-hour course instructed multiple times in Alaska since 1992.
- IRWA 901 Engineering Plan Development & Application 8-hour course instructed multiple times in Alaska and Washington since 1992.
- IRWA 902 Property Descriptions 8-hour course instructed multiple times in Alaska and Washington since 1992.
- IRWA 900 Principles of Real Estate Engineering 16-hour course instructed multiple times in Alaska and Washington since 2001.
- RS 2477 Trails and Section Line Easements – authored and presented by John F. Bennett, PLS, SR/WA – Access 2003 Seminar, Fairbanks, 3/13/02
- RS2477, PLO's & Section Line Easements – a seminar presented by John F. Bennett and Daniel W. Beardsley to the Attorney General's Transportation staff, Anchorage - 12/9/98
- Alaska Society of Professional Land Surveyors – Standards of Practice Manual – 1994 Edition – Editor and Distribution manager.

## Employment History

- 5/2014 – Current      Senior Land Surveyor, R&M Consultants, Inc. I provide right-of-way/title research and analysis for a variety of mapping and civil design projects.
- 7/1999 – 4/30/2014      Chief, Right-of-Way, Alaska Department of Transportation, Northern Region. I supervised the titles & plans, utilities, appraisal, negotiations, relocation, property management, pre-audit and surveying activities for the aviation, highway and public facility programs. I participated in the development of right-of-way related legislation, regulation and policy and advised our HQ staff on land acquisition issues. I have assisted the Attorney General's Office in condemnation and defense of right-of-way litigation and have testified as an expert and provided affidavits in title and survey cases. As a support group section chief to the regional pre-construction group, I managed the delivery and quality control of right-of-way services in a manner that was both timely and compliant with requirements of our funding agencies.
- 10/1986 – 7/1999      Right-of-way Titles & Plans Supervisor, Alaska DOT&PF, Northern Region. I was the professional land surveyor and unit manager responsible for survey specifications and development of title reports, mapping, property descriptions and platting for land acquisition projects.
- 6/1972 – 10/1986      Party Chief/Land Surveyor. During this period I worked for the Highway Department and over a dozen Alaskan engineering/surveying companies performing land and construction surveys in the field and office.

