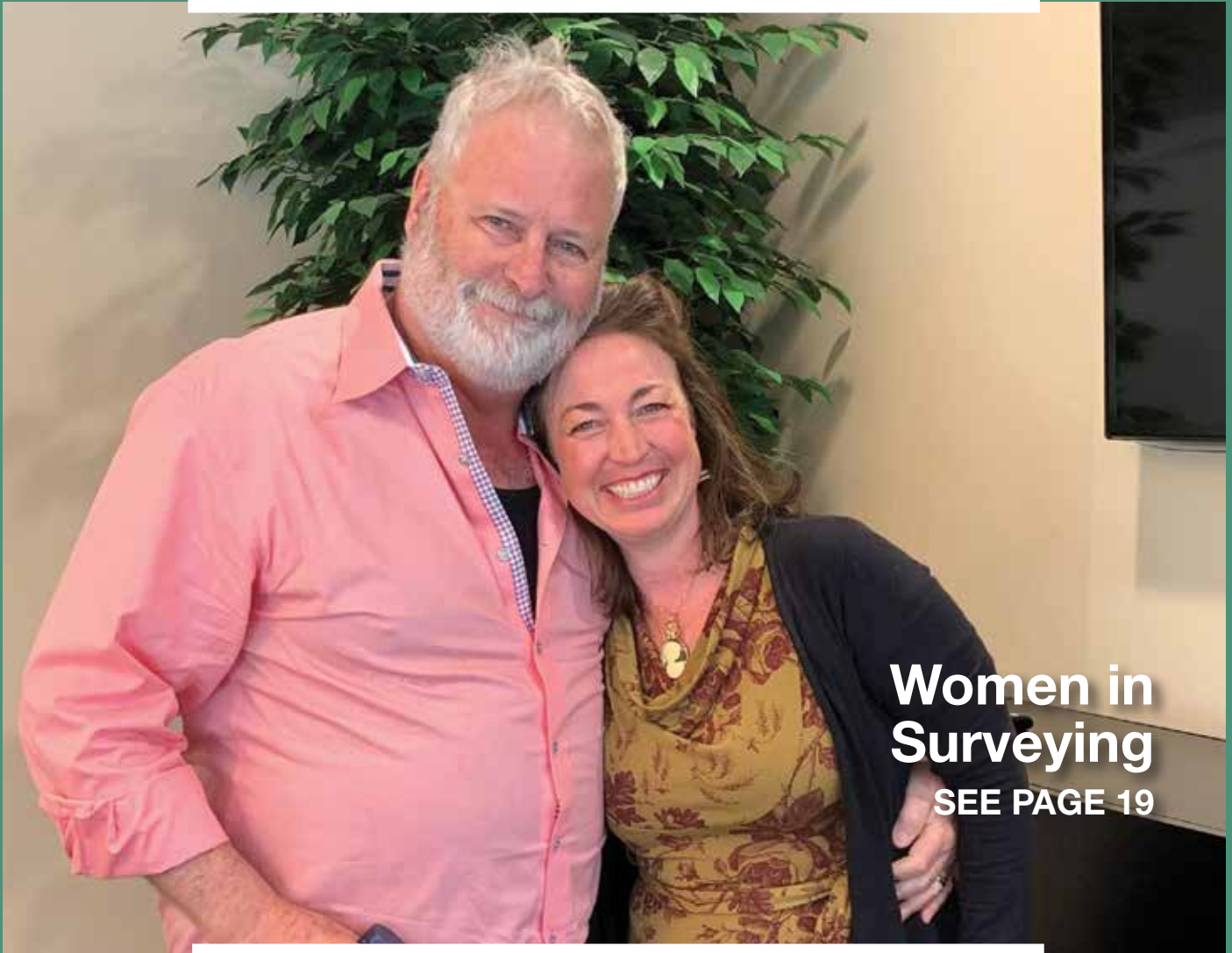


November 2022

# SIDE SHOTS

Professional Land Surveyors of Colorado

Volume 53, Issue 3



**Women in  
Surveying**

**SEE PAGE 19**

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# SIDE SHOTS

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On the Cover: Kayce Keane, PLS with Jason Emery, PLS

*Side Shots is the official publication of the Professional Land Surveyors of Colorado, Inc. and is published quarterly for the betterment of the surveying profession.*

**Ralph Pettit**  
President

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## President's Corner

What fabulous color we enjoyed this fall! I can't remember seeing more vibrant colors in the last 10 years. What makes one year better than another? The weather? Yes. The moisture? Yes. The temperature? Of course. The timing of all of the above? Absolutely! Organizations, especially non-profits like the PLSC, struggle to maintain balance between the requests, seminars, legislative items, etc. all with a volunteer staff. Only when all these asks and people come together with the right energy, numbers and timing do we achieve beautiful, colorful results. I am so very grateful for the directors who have stepped up to volunteer their time and resources to benefit our profession and all its professionals. Thank you!!!



Before we know it, ballots for officers and directors will be arriving in your inboxes. Will you read it? Will you study it? Will you vote? Might you even consider volunteering for one of these positions? Now is the time to consider your options, weigh the cost and contemplate the fulfillment you get from serving and being a part of this excellent organization built to enhance our profession for us all and for our clients. Please contact me at 720-400-3723 if you are interested in throwing your hat in the ring. It has been a delight for me these last two years but alas I will not be running for another term. Family responsibilities are taking me into the next season of life. I will be happy to discuss the duties, time commitments, and tremendous satisfaction I have received from serving.

Finally, we are excited to tell you about the 2023 Rocky Mountain Surveyor's Summit happening February 21-24. I hope you are already planning on attending! It promises to be educational, enlightening and enjoyable. Be on the lookout for additional information and check the website often for details and updates: <https://rockymountainsummit.net>

Thanks,

Ralph Pettit, PLS  
PLSC President

# FROM THE EDITOR

This fall we are wrapping up our “Women in Surveying” series with Kayce Keane’s profile reprinted with permission from NCEES and updated to celebrate the latest news from Kayce’s firm, Boulder Land Consultants. I was really tempted to use her inner-tube shot on the cover, but mention it here so you don’t miss it in the article!

Our next series will feature “Young Surveyors, The Next Generation”, so please nominate your favorite up and coming land surveyor so we can introduce them to all your peers.

Speaking of peers, I believe we all have surveyors we’d like to see more of professionally and personally. Please reach out and invite them to join you at a meeting, or at the conference. One way to include professionals you respect but aren’t in your group of “regulars” is to invite them to speak or to prepare an article for Side Shots. We look forward to hearing from all our regulars and are excited to hear from new contributors.

Of note is the report on membership and dues from our PLSC treasurer, Shaun Lee, PLSC Secretary/Treasurer, is that the number of members we have starting out 2022 exceeds the 2021 membership. We strive to keep providing value to our members as a central concept to all we do in PLSC and hope that resonates with our fellow surveyors.

Please note that the 2023 Rocky Mountain Survey Summit conference registration should be open!  
Laine Landau, Co-Editor

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## 2023 Colorado Land Surveying Refresher Course

The Professional Land Surveyors of Colorado, Inc. and the Central Colorado Professional Surveyors Chapter are offering a comprehensive Land Surveying Refresher Course, a review and self-study plan for those taking the National Council of Examiners for Engineering and Surveying (NCEES) Fundamentals of Surveying (FS) and Principles and Practice of Surveying (PS), and Colorado State Specific (CO) examinations. Each 3-hour class takes place on Wednesday evenings starting promptly at 6:00 P.M. Information and registration is available on the PLSC website: <http://www.plsc.net/>

Session	Date	Focus	Topic
1	Jan. 4	FS	Course Overview, Exam Skills and Testing Basics
2	Jan. 11	FS	Survey Computations I
3	Jan. 18	FS	Survey Computations II
4	Jan. 25	FS	GIS, State Plane, Geodesy
5	Feb. 1	FS	Boundary Law/Legal Terms and Definitions
6	Feb. 8	PS	Public Land Survey System
7	Feb. 15	PS/CO	Colorado Survey Law I
	Feb. 21-24		<b>Rocky Mountain Surveyors Summit (no classes)</b>
8	Mar. 1	PS/CO	Colorado Survey Law II
9	Mar. 8	FS/PS	Ethics/PS&FS Topics
10	Mar. 15	FS/PS	Mock PS and FS Examinations

The fee for the entire course is \$425 or \$75 per individual class. In-person classes will be held at Harris Kocher Smith, 1120 Lincoln St., Denver, CO 80203. Online classes will be broadcast each night, and recordings will be available 1-2 weeks after each class.

Contact Becky Roland, Executive Director, PLSC, 303-551-3266, [broland@plsc.net](mailto:broland@plsc.net) with questions. Visit the NCEES site at <http://ncees.org/exams/> to learn more about the FS and PS examinations.



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# The Paper Pincushion Effect

Earl Henderson, PLS Earl@ZenithLS.com www.ZenithLS.com

The title for this article was chosen with respect to Jeff Lucas and his book, *The Pincushion Effect*. If you're at all well read about the practice of land surveying, you already knew that. I just want to make sure that Jeff gets the credit he deserves and feels the homage with which the title is written.

First, let's define a paper pincushion. A paper pincushion is created when a PLS rejects a found monument as not representing the corner location, but then chooses not to set their own monument at the corner location indicated on their Land Survey Plat (LSP). The LSP has a notation similar to "Found: No. 4 rebar 0.40'S & 0.23' W" at their corner. If the PLS were to set their monument at their determined corner location the result would be an actual pincushion. But in this scenario the pincushion monument is not set and the pincushion exists only on the plat/paper.

Unfortunately, this has become a common practice. We've all seen it and hopefully we're disappointed each time we do. The distances may vary, but the distances don't make any difference. The distances could be measured in hundredths or feet or miles for that matter. The idea is the same no matter the distances, the calculated corner location remains un-monumented while the plat indicates the found monument is not at the calculated corner location.

What the PLS is apparently trying to convey when they create a paper pincushion is that they found a monument near to where they think the corner is located, but that the monument is not at the corner location. The paper pincushion isn't something the public understands and because the corner position is left un-monumented, it is near impossible for the public to benefit. This is a problem. Especially since the PLS is in clear violation of statutes and bylaws should they choose to not set their monument at their determined corner location (see Board Rule 1.6(K) and CRS 38-51-104(1)(a)).

The paper pincushion should be as equally embarrassing as setting a pincushion monument based on the geometry. Furthermore, it represents a fundamental mis-understanding of the basic principles of retracement land surveying.

The decisions we make about where a corner exists are legal interpretations of the evidence we have on hand. The geometry of the deed or plat is evidence of where a corner lies, but is the lowest form of evidence.<sup>1</sup> Retracement surveying is more about boundary

evidence and less about matching measurements to dimensions. The legal description and plat dimensions are more a set of instructions leading to the recovery of evidence on the ground of where the property line was originally surveyed and the corner originally established.

Let's imagine three scenarios that we regularly encounter.

Boundary Problem 1: The monuments found are the original monuments in their original locations. How do we know this? (a) The monuments are called for in the original plat and/or notes. (b) The monuments have a cap on them with the PLS# of the same PLS that stamped the subdivision plat. (c) We've worked in the area a sufficient amount of time to recognize what was used as a standard monument during the era when the original monuments would have been set. (d) We may be making a judgement call. But in this scenario, we have made the decision, regardless of, and possibly independent of the geometry or the measurements, that the monuments found are the original monuments in their original locations. In that case, then by all laws of retracement surveying, the original monument locations define the corner location and contain no error<sup>2</sup>. Applying the geometry via a paper pincushion and claiming that the original monument does not mark the corner location is in violation of basic boundary retracement principles and laws that go back to ancient Sumeria. The fact that our latest measurements don't agree with any prior documented measurements has no bearing on the situation. It's our responsibility to document what we measured as compared to the dimensions of record, but the location of the corner has not changed because the monument is still in the same location. Our measurements may vary from the PLS that set the original monuments last week by  $\pm 0.1'$  or from the PLS that set the monuments 100 years ago with compass and chain by  $\pm 10'$ . But the original monument hasn't moved and it marks the corner<sup>3</sup>. Creating a pincushion of either kind, paper or monumented, in this instance is simply absurd.

Boundary Problem 2: The monuments we're finding are not the original monuments but were set by another PLS during their retracement survey. Now this is why you're getting paid the big bucks. This is the situation where we see most, if not all, the paper pincushions. So let's ask some simple questions.

1. How can I be certain that my measurements are more precise than those used by the prior PLS? The answer is that I can't. Many PLS's in Colorado

think that their measurements are more precise than everyone else's. How else could a paper pincushion be created for a found monument less than 0.10' away from the paper corner<sup>4</sup>. But the simple fact is that likely 50% of the modern monuments we find were set with more precision than each of us is using each day<sup>5</sup>. Although it's important to ask the question about the precision with which yours and other monuments were set, the decision you make about the corner location is not about precision but about accuracy<sup>6</sup>.

2. Was all the evidence taken into consideration? That goes for both the PLS that set the found monument and for us as retracement surveyors. Is it possible that the prior PLS had more or better evidence than we have? Or can we be certain that we have more, or some piece of vital evidence that they did not have? Perhaps a call to that fellow professional is in order to answer these questions rather than making assumptions about our fellow professionals.
3. Was a blunder made by the prior PLS? If so, we better have evidence for that. Is it even possible that we made a blunder?
4. What evidence, other than measurements, do I have to disagree with the prior PLS? This is the big one. Because to me, if the only evidence you have to disagree with a found monument is the geometry compared to your measurements, then you have no evidence at all. In my mind, many PLS's in Colorado appear to be looking for reasons to disagree with the prior PLS rather than agree with them. If that's your default position, I strongly recommend you rethink it. We just don't have the technology to be so precise that we'll all measure the same angles and distances from one day to the next, let alone using different equipment in different years or eras. So they cannot always be wrong and you cannot always be right. If you have substantial evidence to disagree, by all means, disagree. But you'd be wise to show that evidence on the face of your plat and describe it in a Surveyor's Narrative (see below). By disagreeing with the prior PLS you are about to stir the pot in the neighborhood and you should be prepared to defend your position in court, in front of the judge, because there's a very good chance that's where you'll end up. But if you instead choose to agree with the prior PLS because you don't have that substantial evidence, then the neighborhood will likely remain at peace, which is where we all like to be.
5. What other questions am I not asking myself about this situation? This is just a catch all, but each situation is different, so we have to look beyond our check list to envision what else there may be that we should question before disagreeing with a found monument.

6. How does creating a paper pincushion help the client and/or the public? Our quasi-judicial role in boundary determination has to be founded in safeguarding the public and their property. Paper pincushions harm the public who we are supposed to be protecting.

Boundary Problem 3: We've been through every possible consideration and we still disagree with the location of the corner as determined and monumented by a prior retracement PLS. If that's the case, and I've been there, then you have no choice. C.R.S. 38-51-104 describes the requirements to monument corners of property. By definition, the creation of a paper pincushion is a statement that the property corner is not in the location where a monument was found. Therefore, the corner is **required** to be monumented (C.R.S. 38-51-104) when you are retracing the same corner location. Therefore, if you are creating paper pincushions of paper corners on your plats, you are in violation of C.R.S. 38-51-104. You are opening yourself up to discipline by the AES Board, not to mention legal action from your client if they ever figure out what you're up to. You are doing a disservice to your clients, because what they want to know is where, on the ground, is my property corner and you're not showing them that. You are stirring up possible dissension between neighbors that were likely otherwise content with where their mutual property line lies.

I think it's really important here to be reminded that the public doesn't understand what bearings even are. And they certainly don't have a measuring tape divided into tenths. Nor do they understand that a paper pincushion is telling them that their property corner is not where the monument is in the back corner of their yard. The reason for the survey is so they will know where, on the ground, their property corners and lines lie. Your plat is going to get folded up and put in a file somewhere in their home office. But what they really want is to be able to walk out back and point to something in the ground and say, "That's my property corner." not "My property corner is somewhere near here." If you can't point to a monument and say, "Mr. Client, your property corner is right here." then give Mr. Client his money back.

I have been accused of telling other land surveyors in Colorado, during the courses I've taught, that they are "required by law to set a pincushion". I categorically deny that. In fact, during those classes and in this article, I'm trying my best to encourage other PLS's NOT to set pincushions. Those who think otherwise either aren't paying close enough attention, or just simply don't get it. In my opinion, we should be looking for ways to agree with the monuments set by other PLS's rather than looking for ways to disagree with them. But



on rare occasions I do feel like I have a more definitive determination of where the corner lies, based on the evidence I have, than the prior PLS. So yes, I have set pincushion monuments on those rare occasions. But you better believe I was absolutely positive about my determinations. I showed the evidence on my plat. And I described my reasoning in a surveyor's narrative on the plat so that the next retracement PLS could make a completely informed decision about the corner location. In fact, it is now a requirement, based on Board Rule 1.6(E)(4)(a) that if we're setting a monument that purports to represent the same corner as another found monument, we must describe on the plat the reason we did not accept the found monument.

So, in a nutshell, here's the whole breakdown. If you determine the corner to be in a different location than a found monument purporting to be at the same corner.

1. You must monument your corner location with your own monument or you will be in violation of C.R.S. 38-51-104.
2. You cannot document a paper pincushion or you'll be in violation of C.R.S. 38-51-104.
3. You must document your reasoning for not accepting the found monument or you'll be in violation of Board Rule 1.6(E)(4)(a).

Alternatively, you decide that the found monument represents the corner location. Then it's a simple matter of documenting the line directly between the monuments as the property line and documenting on that line the record dimensions as compared to your measured dimensions, i.e. N 90° E 100'(R) N 89°45'27" E 99.43'(M).

A paper pincushion (and paper corner) is a copout. We are professionals paid to make thoughtful, informed and legally defensible decisions about where property corners and property lines lie. A paper pincushion is a way to avoid that decision. But now you know that a paper pincushion is also a violation of State Statutes and Board Rules.

I have to ask, who's the geometrician that came up with this paper pincushion idea in the first place? And why is it that so many PLS's are so uncomfortable setting pincushion monuments but completely comfortable creating paper pincushions and paper corners? It doesn't pass the smell test.

If you are too embarrassed or unsure of the location of a corner that you're not willing to monument that location physically, then you need to rethink your boundary decisions because you obviously don't have the evidence you need to disagree with the prior PLS's found monument.

Put your calculator away and take another look at the evidence.

(With sincere gratitude to my editor. You know who you are.)

<sup>1</sup> Diehl v. Zanger, 39 Mich. 601 (Mich. 1878)-"No rule in real estate law is more inflexible than that monuments control course and distance." And of course we're all familiar with the priority of evidence rules which put courses and distances barely over area.

<sup>2</sup> "You shall not remove your neighbor's landmark, which the men of old have set."-Deuteronomy 19:14. Moving the corner to another location is the same as removing the old landmark.

<sup>3</sup> Original monuments control over dimensions, Whiteman v. Matteson, 446 P2d 904 (Colo. 1968), and Morales v. CAMB, 160 P.3d 373 (Colo. App. 2007)

<sup>4</sup> Now that's another idea. Does the paper pincushion result in a paper corner or an actual corner?

<sup>5</sup> I'm assuming here that half the current surveyors can measure with more precision than me and the other half with less precision than me.

<sup>6</sup> "It is far more important to have faulty measurements on the place where the line truly exists, than <a precise> measurement where the line does not exist at all."-Boundaries and Landmarks, A Practical Manual-A.C. Mulford 1912

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# Schedule

## Tuesday, February 21, 2023

### 8:00am - 11:15am

- Title Grab Bag - **J. Parker, HC Peck & Assoc. (PT)**
- Survey Plan Production - from Field to Electronic Deliverable (DWG) in Autodesk, Civil 3D - **Ken Martinez, ECAD, Inc. (B/ST)**
- Horizontal/Vertical Curves - **Dane Courville, CDOT (TT)**

### 1:15pm-4:30pm

- Rules of the Road - The Beast Outside the Recorder's Office - **James A. Beckwith, ESQ (PT)**
- Survey Plan Production - from Field to Electronic Deliverable (DWG) in Autodesk, Civil 3D - **Ken Martinez, ECAD, Inc. (B/ST)**
- PLSS Breakdown & Single/Double Proportion - **Dane Courville, CDOT (TT)**

## Wednesday, February 22, 2023

### 8:00am - 11:15am

- To Accept or Not to Accept: That is the Question - **Dennis Mouland, Witness Tree Consulting (PT)**
- Bentley Open Roads Designer (ORD) Best Practices - **Bob Mecham and Chris McNulty, EnvisionCAD (B/ST)**
- Using OPUS & OPUS Projects - **Brian Shaw, NGS (TT)**

### 1:15pm-4:30pm

- To Accept or Not to Accept: That is the Question - **Dennis Mouland, Witness Tree Consulting (PT)**
- Bentley Open Roads Designer (ORD) Best Practices - **Bob Mecham and Chris McNulty, EnvisionCAD (B/ST)**
- NSRS Maintenance & Modernization Efforts - **Brian Shaw, NGS (TT)**

## Thursday, February 23, 2023

### 8:00am - 11:15am

- An Update from DORA - **Joyce Young, DORA and Kelly Miller, AES Board (PT)**
- R.F.P. - Request for Personality, Win People, Win Projects - **John Burke, P.E., City of Westminster (B/ST)**
- GIS - **TBD (TT)**

### 1:15pm-4:30pm

- Solve a Boundary Problem - A Hands-on Workshop **(PT)**
- The Inspired Leader - **Ralph Pettit, City and County of Denver (B/ST)**
- Use of Reality Models and Digital Twins in Transportation and Survey Projects - **Mike Barkasi, Bentley Systems, Inc. (TT)**

## Friday, February 24, 2023

### 8:00am - 11:15am

- Ethics for the Professional Surveyor - **Dennis Mouland, Witness Tree Consulting (PT)**
- Carlson Survey Fundamentals - **TBD (B/ST)**
- NSPS Certified Survey Technician (CST) Prep Course- **Steve Parker, CDOT and Brian Dennis, Galloway and Assoc. (TT)**

### 1:15pm-4:30pm

- Thinking Beyond Technology - **Dennis Mouland, Witness Tree Consulting (PT)**
- Carlson Survey Fundamentals - **Jim Reinbold, Carlson (B/ST)**
- CST Prep Course- **Steve Parker, CDOT and Brian Dennis, Galloway and Co. (TT)**

### Plus so much more!

- CFedS Course (only virtual presentation) Monday, February 27, 2023

Professional Track (PT)

Business/Software Track (B/ST)

Technical Track (TT)

# *More than just education*



## THE SUMMIT

### **EXHIBITS AND SPONSORS**

The Rocky Mountain Surveyors Summit is not complete without the support of our vendors.

Exhibitors will be onsite to provide information on the latest products and services that will help you be more efficient in providing land surveying services to your clients.

Our sponsors are key supporters of PLSC and make the Summit one of the top land surveying events in the country.

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### **ADDITIONAL OPPORTUNITIES**

In addition to the Three Education Tracks (Professional, Technical and Business/Software), the Summit will also include:

A Kickoff Networking Event with Young Surveyors Network on Monday, February 20

Exhibitor Hall/Vendor Showcase

Longer Lunch Hours for more networking

Contests and Competitions

Updates on PLSC and the State of the Association

Go to [www.rockymountainsummit.net](http://www.rockymountainsummit.net)  
for complete information.

# Secret Knowledge – Part One: Right of Way Research Weld County

Laine Landau, PLS

This is the first installment in a compilation of what I call “Secret Knowledge”. The goal is to outline where right of way information is kept in each County and set out some guidelines on how to find what you are looking for within that treasure trove.

We are starting with Weld County, not because I am an expert, but because the Weld County Public Works department was graced with a dedicated surveyor whose work made this installment much easier to write. Jackie Barrow produced a document titled “Weld County Petitioned Right-of-Way Research Guide and Tutorial” (the Guide) outlining how to research petitioned rights of way in Weld County which she shared with many of us in draft format. The Guide has been updated and is publicly available on the Weld County website (<https://www.weld.gov/Government/Departments/Public-Works/Right-of-Way-and-Surveying/Right-of-Way>) and was included in a 2022 Rocky Mountain Survey Summit presentation titled “What Makes a County Road?” by Weld County Attorney Bruce T. Barker.

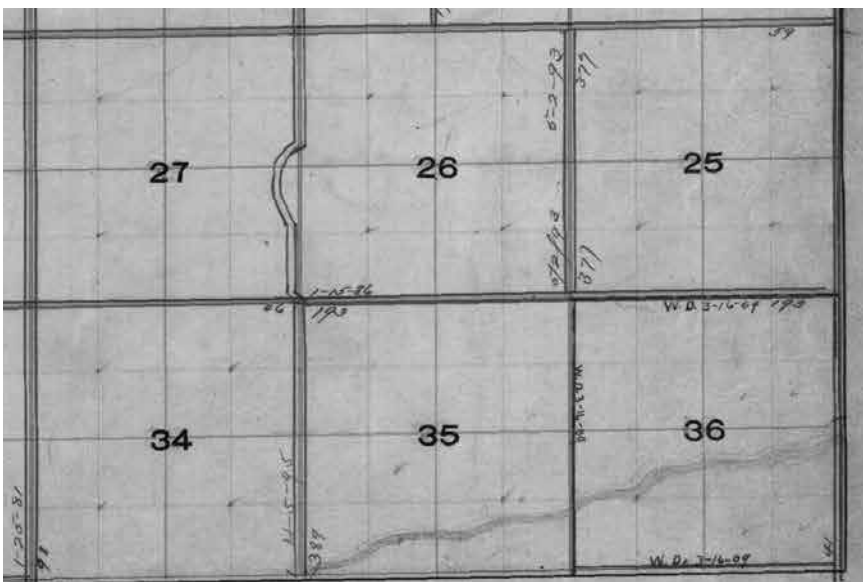
The passage in 1866 of Section 2477 of the Revised Statutes of the United States allowed rights of way to be constructed over public lands. The 1855 Colorado General Assembly granted the County Commissioners the right to declare any Section or Township line in the public domain a public right of way. On October 12, 1889, the Board of County Commissioners of Weld County followed up on this and declared all section and township lines within the public domain in Weld County

to be public highways. This order was recorded at the Weld County Clerk and Records Office in Book 86, Page 273. That action created rights of way 60’ wide, 30’ on each side of the section lines. For many years it was forgotten that those roads were created only over land that was still in the public domain and this citation was used on all County Roads.

Weld County Public Works provides a nice discussion of some examples of land that might not have been in the public domain including railroad sections, school sections, and homesteads on their “Right of Way” web-page. They also have links to the interactive GIS (Geographic Information Systems) Right of Way Map, and a Railroads Sections Map showing railroad ownership by Railroad Acts of the 1860’s and 1870’s. Don’t forget to check the BLM (Bureau of Land Management) website to verify patent dates as some parcels were privately owned prior to 1889.

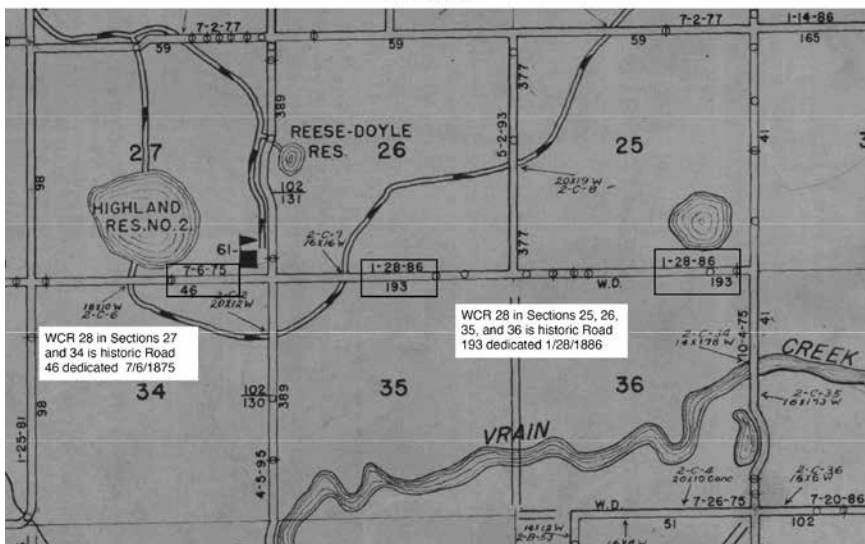
Other County Roads were mostly created by petitions from landowners or a group of land owners. When a petition was accepted the County would appoint “road viewers” who would walk or drive the route and make suggestions about the layout of the road as well as estimate the costs for opening the road. The report was reviewed by the Weld County Board of County Commissioners who would deny or grant that section of road. The record of those actions is found in the County Commissioners Records. To find those records you need to have the historic road number for the portion of the road you are interested in.

Exhibit 1: 1889 Road Book



Weld County kept track of the road numbers on Road Book Maps. The first is dated 1889 (Exhibit 1) and the second is referred to as the 1937/1939 Road Map Book (Exhibit 2). The books are organized by Township and Range and may show landmarks, bridges, and culverts as well as the historic road numbers. One County Road might have several historic road numbers since the entire road may not have been dedicated at one time. These road books are scanned and currently available at <https://gishub.weldgov.com/pages/pdf-maps>. After the current county-wide road number system was implemented, the Public Works Department began indexing the documents for each County Road in Road File Reports (Exhibit 3).

Exhibit 1: 1937 Road Book



The Road File Report lists the current County Road number in the upper right corner, the historic road number shown as 100/historic number at the upper left corner, followed by a list of the then known (notice I did not say all) dedication documents, and where to find them. Copies of some, but not all, the pertinent the documents are attached to the report.

How do you get your hands on the Road File Report? Here is where the secret knowledge comes in: Remember the historic road number you found in the Road Map Books? Under the Commissioners web pages look for the Commissioner Record Search. In the Document Search "File Location" search field you need

Exhibit 3:  
Road File  
Reports

100/193		Co. Rd. 28
-----		
		see County Clerk and Recorder Book 48 page 264
10/12/1885	Petition to open road: Beginning SE corner Sec 27 T 3 R 68; East 2 miles. Viewer's appointed.	see Book 4 page 99
1/15/1886	Viewer's Report accepted. Road declared open.	see Book 4 page 157

to enter the historic road number typically as “rd100/historic number” or “rdf100/historic number”. This will get you the Road File Report. Alternatively, you can turn on the Right of Way layer in the Assessor’s portal map and click on your road and look for a document link. Often this is the fastest way to get the Road File Report.

Once you have a Road File Report, you must understand how to read and use it.

Documents recorded at the Clerk and Recorder are preceded by “County Clerk and Recorder” and have a Book and Page listed. You can search the Clerk and Recorder electronically using the Book Page search fields. Be sure to read the entire document as sometimes the Road Viewer’s Report also includes the Board of County Commissioners approval and grant of right of way, deviation from the road petitioned, changes in road width, and a handwritten Reception Number for a full citation of your survey research.

Book and page citations that are not prefaced with “County Clerk and Recorder” are Commissioner’s Books and are accessed through the Commissioner Record Search. To view those Books, you follow the links as before to the Commissioners Record Search. Clear the search and enter just the road book number under “Book”. Because the books were scanned in groups of about 90 pages you have to find the right clump of files and then search for your page. The Road Viewer’s Reports contain the Commissioner’s action and a cross-reference to the Clerk and Recorder’s information.

To search for more modern road records, you can use the “WCR current road number” (with or without spaces) instead of “rd100/historic number”.

Tidbits that may affect your right of way determination:

School Sections: A 1921 court order decided that roads on school land (typically Section 16 and 36) existing prior to 1921 are public roads.

The 1855 statute was repealed in 1953 so the County road declarations are valid between 1885 and 1953. Weld County, along with El Paso and Mesa Counties, passed resolutions creating section line roads during this time period.

Title Companies have started including right of way granted by Book 86 at page 273 as a title exception. You need to do the research to determine if that is a legitimate citation for the rights of way adjoining the specific parcel you are researching.

Many plats in Weld County cite Book 86 at page 273 but may not have researched the ownership status of the land prior to 1885.

Look at both the 1937 and 1889 Road Book for corrections or additional information. Note the variation in the data presented in Exhibits 1 and 2.

The last page of the Road Viewer’s Report in the Commissioner’s Road Files often contains language indicating that the road was approved and that the instrument was filed for record at a specific book and page. There is often a handwritten 6-digit number that is the Reception number and your key to getting a copy of the recorded copy of the dedication.

Per the presentation by Weld County Attorney Bruce T. Barker, the recorded dedication is the binding document since the Petition and Road Viewer’s Report are not filed in the Clerk and Recorder’s Office, while evidence, may not be considered “constructive notice”. Please refer to City of Lakewood v. Mavromatis, 817 P.2d 90, 95 (Colo. 1991) for other nuances.

Tiffane Johnson, Weld County Right of Way Acquisition Specialist, and the Weld County GIS department has continued to make right of way information more accessible by populating the Weld County Portal with right of way layers and links. This graphical approach is a great supplement to the research methods outlined in the Guide. Tiffane had two specific tips:

1. In Weld County if you have a road along a section line, but no dedication, the County will generally claim a prescriptive right 30’ on each side of the section line.
2. If you follow the links to the Road File Report, be aware that the documents attached to the report are not the entire record. You need to go to the Commissioner’s Books to find the documents.

As with any endeavor, there is not one singular way to research road rights of way in Weld County, so this is not meant to be definitive, but to provide a starting place. Repositories will change, retrieval methods will change, permissions will change, but if we know where the information once was, we will have better luck tracking down where it is when we need it.

# ALTA/NSPS Land Title Survey Considerations

Written by: Kayce D. W. Keane, PLS on behalf of the  
DORA State Board for Architects, Professional Engineers,  
and Professional Land Surveyors

The Survey Quorum of the Department of Regulatory Agencies (DORA) State Board of Licensure for Colorado Architects, Professional Engineers, and Professional Land Surveyors (AES Board) has observed several problems pertaining to surveyors performing ALTA/NSPS Land Title Surveys (ALTA Surveys) in Colorado. We are aware that surveyors come from all over the country to perform quick ‘drive-by’ surveys. While this is certainly legal, we have run across a number of issues with sub-standard work. Below are common shortcomings within these ALTA Surveys that have come before the Survey Quorum warranting this publication. **There are plenty of home-grown surveyors that are falling short too so keep reading!**

Here’s a short list of common deficiencies the AES Board often sees:

- All monuments are required to be found or set on boundary corners per Colorado Revised Statutes section 38-51-104 (1)(a), C.R.S. and AES Board Rules and Regulations Board Bylaws (Bylaws) 1(6) (H). As made clear in Bylaw 1.6(L), ALTA Surveys are regarded as monumented Land Surveys therefore, per CRS 38-51-104(1)(a), you must set all corners not found even if the ALTA/NSPS Land Title Survey Table A Item 1 is not selected by your client.
- Should you determine that a found marker does not represent the corner, you cannot simply call this marker out. You must set your property corner per section 38-51-104(1)(a) C.R.S. at your determined position. Then you are required to document why you rejected the found marker per Bylaw 1.6(E)(4) (a). This Bylaw was created to help mitigate pin and paper cushions. As you all know, this is a real problem in our industry and the hope is that you stop to consider why you are choosing to reject found monumentation.
- Professional Land Surveyors are required to deposit their maps. Per section 38-50-101 C.R.S., you must deposit your survey within twelve months after the date a monument is accepted in the

field or after you set a marker. This means that in almost every circumstance, you’re required to deposit your survey with the proper County Department. Did you set a pin? Did you find a marker that is not in the record? Well, by George, you better deposit that map!

- There is also an erroneous assumption that you are to use the ALTA/NSPS Land Title certification alone. As dictated by the Minimum Standard Detail Requirements (Item 7) for ALTA Surveys, we are to have specific language therein. There is a caveat in that section that references Item 3B of said minimum requirements. This section, titled “Other Requirements and Standards of Practice”, discusses that there may be jurisdictional requirements that apply. This is absolutely the case with your certification on all Colorado ALTA Surveys.

We advise that your certification, while embracing the ALTA/NSPS dictated language, also include (perhaps in a separate paragraph) the state certification requirements as set forth in Bylaw 1.6.(B)(2).

In short, your certification must satisfy the Minimum Standard Detail Requirements of the ALTA Survey as well as the State Bylaw certification requirements to meet your obligations.

The AES Board Members often hear licensees say, “Well the client didn’t want us to set pins” or “My client didn’t want me to record the plat.” The client is not the qualified licensed professional and should not dictate how we operate as professionally. Client direction does not trump the law/requirements and the AES Board does not accept client direction as an excuse to violate the laws and rules. While client requests should be heard, you are obligated to reject their direction when it conflicts with the law. Protect your license by knowing the Bylaws, Statute and ethics around your practice.





# United States Department of the Interior



BUREAU OF LAND MANAGEMENT  
Colorado State Office  
2850 Youngfield Street  
Lakewood, Colorado 80215-7210

In Reply Refer To:  
CO-956  
9650

September 30, 2022

Steven Parker and Laine Landau, Side Shots Co-Editors  
PO Box 441069  
Aurora, Colorado 80044

Dear Mr. Parker and Ms. Landau:

This letter informs you of official BLM cadastral surveys in Colorado that have been accepted from June 1, 2022, through July 18, 2022, officially filed, and are now available in the Public Room, Bureau of Land Management, Colorado State Office, 2850 Youngfield Street, Lakewood, Colorado 80215. The surveys will also be available at <https://gloreCORDS.blm.gov>.

The accepted surveys are listed below by township, range, meridian, group number, type, approval date and number of plats.

<u>Township</u>	<u>Range</u>	<u>Meridian</u>	<u>Group No.</u>	<u>Type</u>	<u>Approved</u>	<u>Plats</u>
T. 18 S.	R. 71 W.	Sixth	1500	Plat Only	06/01/22	1
T. 8 S.	R. 96 W.	Sixth	1746	Plat & Notes	06/01/22	1
T. 9 S.	R. 78 W.	Sixth	1743	Plat Only	06/16/22	3
T. 10 S.	R. 80 W.	Sixth	1739	Plat & Notes	07/18/22	1

As other surveys are completed, I will advise you of their acceptance. You may circulate this letter among the membership of the Professional Land Surveyors of Colorado.

Yours in Service,

**JANET WILKINS** Digitally signed by JANET WILKINS  
Date: 2022.09.30 11:48:38 -06'00'

Janet Wilkins  
Chief Cadastral Surveyor for Colorado

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more info or to register.**

# Uniting a Passion for the Outdoors with a Career in Surveying

**Kayce D. W. Keane, P.L.S.**  
**Survey Director**  
**Boulder Land Consultants**

**Tell us about your background and how you became interested in surveying.**



I grew up in western North Carolina as a mountain girl who loved the outdoors. In high school, I discovered that I excelled in formal and natural science. I am a true composite of my parents: my mother, the nature lover, and my father, the scientist.

In college, I studied hard sciences as that's where my interests were. Once I received my degree, I wasn't sure what career path to take. Lucky for

me, my then new stepfather, Ron Kirkland, was a professional land surveyor. After graduating college and while on my summer hiatus, I visited my family. He suggested that I participate in a surveying project. After spending a day in the field, I blasted him with questions. I just couldn't believe that people were paying us to hike around the woods looking for old monuments while making measurements. I was instantly hooked and landed my first land surveying job in Boone, North Carolina.

I believe that land surveying best suited for those who love the intersection of science and the outdoors.

**Why did you pursue getting your P.S. license? How has it affected your career?**

As soon as I got into surveying, I immediately realized that obtaining my P.L.S. was a high priority. After working in land surveying for a year, I determined that I needed some college courses directly related to land surveying to obtain my license expeditiously. I attended East Tennessee State University and I took 33 hours of surveying courses in a year. Once this was under my belt, I knew that I would likely be able to get my license in any state I wanted, assuming I passed the licensure exams.

Obtaining my license signals to my peers that I am a bonafide and committed surveyor. It has also given me

more opportunity. Signing off on my own work is a point of pride. In my region, I hope to create a long-lasting positive legacy of high quality and comprehensive boundary surveying that my peers (and future surveyors) are happy to incorporate and rely on.

**How are professional surveyors critical to protecting the safety of the public?**

Surveyors perform work regularly that helps protect the safety of the public. Two examples stand out: determining critical elevations on homes for elevation certificates or flood studies, and construction staking. Performing proper calculations in the office and laying them out accurately and precisely in the field can have massive impacts to the stability of the erected improvement (buildings, bridges, etc.).

In addition to protecting the safety of the public, we are poised to serve the public interest in a unique way. Our quasi-judicial role as surveyors allows us an unparalleled opportunity to serve the public in a



distinctive way. No other profession can use legal principles like we can to resolve boundary conflicts.

**You are a member of the Colorado board and therefore a member of NCEES. Can you give us some background into your participation as a member board member?**

I joined the Colorado State Board of Licensure for Architects, Professional Engineers, and Professional Land Surveyors in the summer of 2019. It has been an



excellent opportunity for me to learn more about the licensing procedures, rulemaking processes, NCEES—as well as to see our government in action. It has been an honor to weigh in on important land surveying matters in Colorado. The Colorado board is in a unique position to help address matters by educating licensees and local governments, presenting at conferences and meetings, sending out newsletters and using the rulemaking process to clarify and address professional standards. The purpose of the board is to protect and serve the public, and it is with this in mind that we make decisions and act as a board.

**How do you continue to learn in order to stay on top of the new trends and technologies within your role? What resources have helped you along the way?**

My method of staying on top of new trends and technologies is by volunteering for my surveying community. Being engaged in this way helps support Colorado surveyors, promote professional relationships, and places me in a position to learn about new trends and technologies from my peers.

For example, I am presently the chair of the Rocky Mountain Surveyors Summit. By planning this event, I hear from other leaders in the state about what they think is important. We have discussions on who to bring in to present and what subject matter the team thinks we should be highlighting. It's a neat gateway for me to see what my competitors (and friends) see as important in our field.

During the event, I attend seminars with diverse experts speaking to new hardware and software, updates/upgrades in technologies, address looming datum changes, UAV, and GPS modernization. I am able to engage my local vendors to see what software and hardware updates are being made in my preferred survey brand. Asking questions about substantive changes in the equipment/software can play a big role in workflow, efficiency, and training. I am fortunate to have an excellent network of people I trust. If I want to know more about a particular technology, I can read about it on the internet. However, when you've engaged your surveying community, you can have a deeper dialogue and frank discussion with folks you know and trust. This is something the internet can't provide.

**Tell us about the most memorable moment you had in your career as a licensed surveyor.**

My most memorable moment in this profession was my first day surveying with my stepfather. There was a group of us hiking up this steep hillside in the Appalachian Mountains with our survey gear. Ron was charged with performing a boundary survey for the Forest Service. I had no idea what was going on; I was just there to help carry equipment. About an hour or two into the day, he was staring at this big oak tree. He studied forestry, so I figured he was admiring the nature in front of him. Next thing I know, he takes out his bush axe and cuts a giant blaze into the tree, revealing scribing from over 100 years ago that monumented that

tree as a property corner. As you might imagine, I was completely blown out of the water. This event changed the course of my future in a profound and meaningful way.

### Keane's Experience

Kayce Keane started her career in 2003 on the back of her bachelor of science degree in applied mathematics (concentration in physics with a minor in astronomy). After graduation, she began practicing land surveying in western North Carolina. She then took over 30 hours of coursework from the ABET-accredited surveying and mapping science program at East Tennessee State University (2004-05). This coursework expedited earning a license in North Carolina in the spring of 2007. Upon moving to Boulder, Colorado, she attained her surveying license in Colorado (2009) as well as Wyoming (2012). In 2012, she received a master of science in geographic information science.

Her experience includes working on the Colorado Department of Transportation Right-of-Way plans, mineral surveys, bathymetric surveys, windfarm projects, ALTA/NSPS Land Title Surveys on private commercial and state-owned properties, and boundary surveys large and small.

Since 2008, Keane has served the Colorado land surveying community through the following establishments:

Colorado State Board of Licensure for Architects, Professional Engineers, and Professional Land Surveyors-board officer

National Council of Examiners for Engineers and Surveyors-Colorado delegate and member

Rocky Mountain Surveyors Summit Committee-chair

Professional Land Surveyors of Colorado (PLSC)-former board vice president, former board director, former legislative committee member, and former northern chapter president

GIS in the Rockies-former board director and former committee member

Keane has written a handful of articles for the Colorado Publication 'Side Shots.' She has received awards from PLSC for her dedication to the profession including Surveyor of the Year in 2020. Lastly, she has won several plat contests at the statewide conference for her submitted maps.

Presently, Keane is the director of surveys for Boulder Land Consultants, Inc. a surveying company in Boulder, Colorado.

In her free time, she enjoys skiing, mountain climbing, mountain biking, camping, gardening, and spending time with her incredible family (two beautiful fun little girls and a loving supportive husband).

*Reprinted from the National Council of Examiners for Engineering and Surveying*

## Addendum

### The NCEES Profile came out in 2021. Any news since that was published?

First of all, thank you so much for reissuing this NCEES profile. It was an honor in 2021 when it came out, and you honor me by publishing again!

In April of this year, I purchased Boulder Land Consultants from my former employer, mentor and friend Jason Emery, PLS. As you might imagine, it's a lot to own and operate a business but I am well supported with an amazing team, supportive family and most importantly Jason Emery himself. Jason and I continue to work closely together as we are quite a powerful duo. He provides continued guidance, mentorship and professional critiques which always prove invaluable.

### Can you share with us your involvement with NCEES?

The past two years, I have been the DORA AES Board (Colorado) voting delegate at the NCEES annual business meeting. It has been an honor to be entrusted with this responsibility. This organization is important to the profession of land surveying and engineering so as you might imagine, Colorado representation is critical. In this capacity, I report back to the State Board on NCEES matters and share areas of note with the State Board.

Last year I was nominated to serve on one of NCEES's standing committee - Examination for Professional Surveyors. The opportunity to serve on this committee benefits Colorado Professional Land Surveyors in a number of ways. First, I was made aware of possible



changes coming down the pipe regarding the Principles and Practice Examination (PS). Understanding the importance to the land surveying community of this possible change, I wrote an article this past spring for Side Shots outlining the history and possible next steps. As a committee member, I was able to nominate Colorado PLSs to serve as subject matter experts (SME) on a subcommittees (four Colorado representatives in total) to create blueprints for possible examination materials. As an AES Board Member, I am able to help facilitate discussion with the Colorado State Board as to how the possible adoption of the PS module concepts would affect our state. With this in mind, I worked with Joyce Young, the Program Director of the AES Board, to get a questionnaire out to Colorado stakeholders this past spring. In our state, almost 60 PLSs participated in this important exercise; a good result when compared to other states. Ultimately this means that Colorado has a say in what items should be included in this examination going forward.

I am excited to report that, I have been nominated to serve on this committee for a second year. As an advocate for the public good and land surveyors in general, I'll do what I can to continue to disseminate information to the DORA AES Board and (where possible) the PLS community.

### Have you had any fun projects recently?

Don't we all?!? As Professional Land Surveyors we are often challenged by interesting projects.

One of our clients is an engineering firm that specializes in water resource hydraulic modeling. As their contract surveyors, we are often in rivers collecting bathymetric data. Normally we are in the water in chest waders with our gear; that approach almost always getting the results need.

This past spring, our client required cross sectional data within an active creek. One section was deeper than anticipated, and we were not equipped to enter waters over our heads.

We considered several approaches such as renting a boat with an attached sonar. Not feasible... budget was gone and we only needed twenty-ish shots. The rental fees didn't make sense. Could we delay the project and collect in the fall when water levels were lower? Not an option... the client needed the data that month. With the frigid spring water temperatures and after much debate, we decided the best bet would be to buy a wetsuit, float tube, and long rod, tough it out in the river. Of course, crew members stood by to assist. I thought you would enjoy the included action shot!



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7.31\_GS\_AOLS\_Ad\_Denver



# PLSC Board of Directors

## Meeting Minutes

### September 13, 2022

1. Call to Order: Pettit

Name	Position	Chapter	Attending?
Ralph Pettit	President	Central	x
Brian Dennis	Vice President	Southern	x
Shaun Lee	Secretary/Treasurer	Central	
Becky Roland	Executive Director	n/a	x
Heather Lassner	Director	Northern/TrigStar	x
Brian Bowker	Director	Western	
Ian Cortez	Director	Central	x
Todd Johnston	Director	Southwestern	x
Eric White	Director	Southern	x
Tom Sylvester	Director	Western	x
Scott Thompson	Director	Western, Legislative Co-Chair	
Steve Parker	Ex-Officio	Central	
Todd Beers	Non-Voting	NSPS/WFPS Delegate	
Guests:			
John Hunter		Geo-Coordinator	
Peggy Streicher		GIS in the Rockies	
Robert Boehm		Central Chapter	
David Berglund		Northern Chapter	
Brian Kelly		NW ¼ Chapter	
Brian Shaw		NOAA/NGS	
James Combs		YSN	
Cole Conger		YSN	

2. Determination of Quorum (6 voting): Confirmed

3. Any changes to the Agenda?: Pettit  
 a. Legislative Committee Report Item 8c

4. Approve July 2022 Minutes: Pettit  
 MOTION: To approve the July 2022 Minutes as presented. (IC/TS)  
 Approved unanimously

5. Action Items status from previous meetings
- a. Becky Roland will send amended MOU to NSPS Foundation for acceptance before sending to Ralph Pettit for signature.
    - i. They will vote on at NSPS Fall Meeting in October
  - b. CO Real Estate Journal has invited PLSC to write an article on the difference between ILC and Land Survey Plat
    - i. ST working on article for review - Here is the link to the DORA published article. <https://sites.google.com/state.co.us/architects-surveyors-engineers/ilcs>.

I was originally told this was published in the Real Estate newsletter, but it actually was in the AES newsletter. I am working on a similar article directed at the real estate community for publication in their newsletter.

- c. LTAC – asked PLSC to update webinar
    - i. BD working on this
  - d. Need to select new chairs for 2024 Summit
  - e. Colorado Railroad Museum Project: Lee/Brown
    - i. SL will physically stop by and take boxes back after scanning and try to get an update
  - . Treasurer asked to post monthly statements in a folder for Board access.
  - g. Shaun will send out information on the current ACH costs/system for future Board discussion.
  - h. Shaun was able to sell some of the Aztec equipment on ebay for \$492, which he will transfer to PLSC.
  - i. Becky to send Colorado School Counselor info to PLSC members to recruit volunteers to man the booth.
  - j. Invitation to participate in Western States 2024 Conference
    - i. Get more information for consideration
    - ii. Find out which states have additional conferences
    - iii. Get previous agendas/programs/speakers
  - k. Need to update scholarship application to note payment in areas – Tom Sylvester will work on this and send to Becky to post on website (BR send Word version)
6. Financial Report: Lee/Roland
- a. Budget – only 5 votes (4 approved/1 not approved) and no comments – BR send link with BOD Google Links
7. Side Shots Report: Parker
- a. Send material to [sideshots@plsc.net](mailto:sideshots@plsc.net) – copies Steve, Laine and Becky
  - b. Index to Board/Reminders
  - c. Young Members – send to Side Shots
8. Participate in Cole’s Leadership Style Research
9. Reports
- a. Executive Director: Roland

- i. NSPS Meeting in Tulsa – October 12-15 (Todd Beers and Becky Roland attending)
- ii. WFPS Meeting at Merrick – October 8 (Todd Beers hosting; Becky Roland attending)
- b. Chapter Reports
  - i. NC
    - 1. Meeting tomorrow – tree ID; election recruitment
  - ii. SW
    - 1. Meeting next Tuesday- Wilderness Medic with 8 hour first aid class upcoming; completed GPS on Benchmarks event; Surveyors Rendezvous in December
  - i. SC
    - 1. No report
  - iv. WC
    - 1. Seminar was Set 9 – Beckwith presented in the AM and Scott Thompson/Tom Sylvester in PM; very successful
- c. Legislative Report: Thompson
  - i. New board rule heard last week was that the board would not take action against a licensee that was sanctioned or otherwise punished for marijuana use in another state if that use would have been legal in Colorado.
  - ii. The deprecation (*to withdraw official support for or discourage the use of something in favor of a newer or better alternative*) of the US Survey Foot due to become effective at the end of 2022 and the need to coordinate changing the statute regarding the foot definition along with the state plane coordinate definitions in concert with the eventual rollout of the 2022 Modernization.
  - iii. The Upcoming Sunset review will start September or October 2023 and any revisions need to be completed by September 1, 2024. Expect questionnaires and interviews of stakeholders to determine the need for regulation and/or any appropriate changes to the statutes.
    - 1. Should we consider Survey of members
  - iv. Electronic LSP Acceptance (Pettit) – contact Ralph with info on how your county does it
- 10. NGS Update: Shaw
  - i. Brian Shaw to email report
- 11. WCCC/Scholarship Report: Sylvester
  - a. No scholarship applications at this time
  - b. Five years ago – 5 seats; this year 92 seats
  - c. Could use 17 Bacus books in 4-5 weeks – BR to check inventory for reprint/shipping; is PDF/Digital available?
  - d. Need to produce a new updated/version – TS will reach out to Paul (BR to send contact information)
  - e. Report at next meeting
  - f. Final endowment payment from PLSC will be made this year
    - i. TS to meet with his supervisor to discuss future of the program and how PLSC can support
- 12. RMSS Report (Feb 21-24, 2023): Johnston/Bowker
  - a. ad hoc Committee to review MOU with Chapters/Compensation
    - i. Becky Roland
    - ii. Todd Johnston
    - iii. Ralph Pettit
    - iv. Ian Cortez
  - b. Reviewed schedule
  - c. Ralph will MC the Summit
- 13. New Business
  - a. Invitation to participate in Western States 2024 Conference
    - i. Is MOU flexible? No other meeting clause
    - ii. Vote/input next BoD Meeting
  - b. Rocky Mountain Work Experience Scholarship Pettit
    - i. RP will send proposal to BoD
    - ii. Discuss at next BoD meeting
- 14. Next Meetings
  - a. October 11 – Board Meeting
  - b. Reminder two weeks prior for report
- 15. Adjourn

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# Treasurer's Report on Membership and Dues 2021-2022

Hello PLSC,

As you may know the majority of membership signup comes during the beginning of the year and during the registration process of the RMSS Conference creating the 1st half of the year disbursements. The 2nd half being any additional memberships that come in during the remainder of the year. Chapter membership dues were paid out for 1ST HALF 2021 and there was a delay of the 2nd half of 2021 disbursement. The 2nd half of 2021 is calculated and shown below and will be paid as a separate disbursement to the 2022 1ST HALF also shown below. Two disbursements to your chapter were deposited by mid-August, 2022.

Please see below for the breakdown of membership dues being sent to your chapter. Dues are calculated as # of chapter members X \$20.

## Central

1ST HALF 2021 - 140 = \$2,800 (paid 5/7/2021)  
 2nd HALF 2021 - 188 (2021 total members)  
                           48 = \$960 (2021 members added)  
 1ST HALF 2022 - 210 = \$4,200

## Northern

1ST HALF 2021 - 38 = \$760 (paid 5/7/2021)  
 2ND HALF 2021 - 48  
                           10 = \$200  
 1ST HALF 2022 - 52 = \$1,040

## NW 1/4

1ST HALF 2021 - 17 = \$340 (paid 5/7/2021)  
 2ND HALF 2021 - 20  
                           3 = \$60  
 1ST HALF 2022 - 25 = \$500

## Southern

1ST HALF 2021 - 34 = \$680 (paid 5/7/2021)  
 2ND HALF 2021 - 45  
                           11 = \$220  
 1ST HALF 2022 - 51 = \$1,020

## SW

1ST HALF 2021 - 19 = \$380 (paid 5/7/2021)  
 2ND HALF 2021 - 20  
                           1 = \$20  
 1ST HALF 2022 - 23 = \$460

## Western

1ST HALF 2021 - 38 = \$760 (paid 5/7/2021)  
 2ND HALF 2021 - 45  
                           7 = \$140  
 1ST HALF 2022 - 48 = \$960

Thank you,  
 Shaun Lee, PLSC, Secretary/Treasurer

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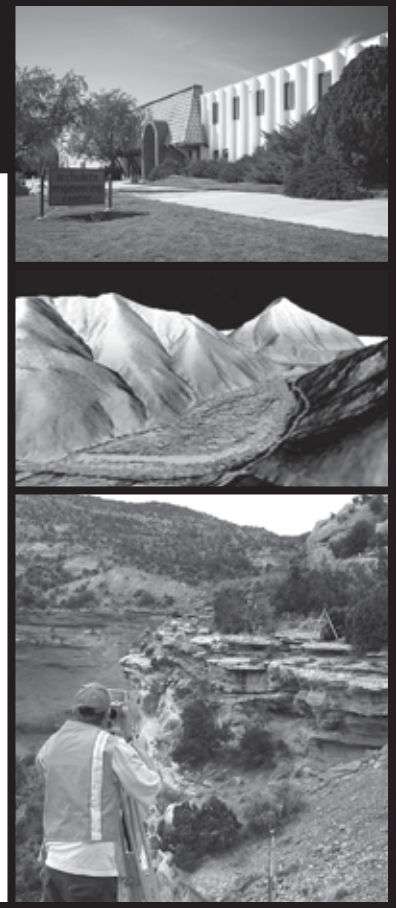
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# Western Federation of Professional Surveyors (WFPS)

The Western Federation of Professional Surveyors (WFPS) held a Board of Directors meeting on June 25, 2022 in South San Francisco, CA.

## HIGHLIGHTS FROM THE WESTERN STATES

**ALASKA (ASPLS) Gary Gervelis** – ASPLS is revising their logo as it has not been updated since 1960. Terms for Officers has been changed to two-year terms. All meetings are now being held virtually which provides better opportunity for members in remote areas. This change has helped to engage more members. ASPLS held a successful virtual conference in conjunction with HLSA and is discussing holding a joint in-person conference in Hawaii in 2023. ASPLS has made their NGS Advisor and Professor from UAA ex-officio members of their Board of Directors. More information about APLS can be found on their website [AlaskaPLS.org](http://AlaskaPLS.org)

**ARIZONA (APLS) Mike Fondren** – Current membership is 308. The Land Surveyor member of the Board of Technical Registration (BTR) has resigned and the position remains vacant. APLS has sent multiple letters to the Governor encouraging him to appoint a replacement and endorsing three specific candidates that have completed the application paperwork. APLS will hold a fall seminar in Tucson at the University of Arizona on October 14<sup>th</sup>. Featured speakers will be Michael Dennis, Lynda Bell, and Brian Fisher. APLS opposed a bill that would have eliminated the requirement for a survey for minor land divisions and the bill was successfully defeated. The 2023 Conference will be held April 20-22 at the Prescott Resort. More information about APLS can be found on their website [AzPLS.org](http://AzPLS.org)

**CALIFORNIA (CLSA) Warren Smith & Kevin Nehring** – CLSA has signed the MOU to join NSPS with 100% membership. California has established a Young Surveyors Network that recently held a campout at the Mt. Diablo Initial Point. CLSA participated in the Western Regional Survey Conference which was a great success. The CLSA-NALS Conference will be held March 25-28, 2023 at the Silver Legacy in Reno, Nevada. More information about CLSA can be found on their website [CaliforniaSurveyors.org](http://CaliforniaSurveyors.org)

**COLORADO (PLSC) Todd Beers** – Current membership is 408. PLSC continues to actively participate in Quality Based Selection (QBS) meetings. PLSC successfully defeated a bill that would have eliminated the requirement for the state specific exam for reciprocity. The legislative committee will be working on language to address the 2022 datum change. PLSC

is working with the Realtors and Land Title Associations to revise real estate closing forms to include a line item for Improvement Location Certificate. Colorado Mesa University/Colorado Community College continues to increase enrollment. GIS in the Rockies will be held September 28-29, 2022. PLSC is working with the NSPS Foundation to establish a scholarship fund. More information about PLSC can be found on their website [PLSC.net](http://PLSC.net)

**HAWAII (HLSA) Cliff Yim** – Current membership is 115. HLSA joint virtual conference with ASPLS was successful and helped to increase HLSA membership. HLSA strongly opposed House Bill 2332 as it granted exemptions for formal subdivision requirements for various easements and public lands. The language was vague and had potential broad overreach. A compromise was reached limiting the exemption to non-agricultural park lands. HLSA is working on outreach with the Hawaii School Counselors Association. More information about HLSA can be found on their website [HLSA.hawaii.org](http://HLSA.hawaii.org)

**MONTANA (MARLS) Russ Kluesner and Dick Smith** – Current membership 420. MARLS 2023 Conference will be held February 15-17 in Great Falls, Montana. MARLS will be hiring a lobbyist for the next legislative session to help track bills that affect the profession. MARLS continues to work on updating their standards of practice and has recently published the 3<sup>rd</sup> edition of the Montana Subdivision and Surveying Laws Digest. More information can be found on their website [MARLS.com](http://MARLS.com)

**NEVADA (NALS) Trent Keenan & Greg Phillips** – Current membership is 292. NALS membership continues to increase. NALS participated in the Western Regional Survey Conference with Arizona, California, Nevada, Utah and WestFed. The conference was held in Las Vegas and was a great success. The 2023 Conference will be held March 25-28 at the Silver Legacy in Reno, Nevada. NALS sponsored the first ever Living Final Point Dedication when Steve Parrish set his own final point at Great Basin College. The NV Young Surveyors will host a campout in the Sierra Nevada Mountains where they will learn polaris and solar observations. Great Basin College continues to see good enrollment numbers and the College of Southern Nevada (CSN) is one step closer to receiving authorization for a new land surveying 4 year degree program. NALS continues to publish, print, and mail four

issues a year of the Nevada Traverse. The last issue of the Traverse focused on public outreach and provided a synopsis of some of the roundtable discussions that were held at the Western Regional Survey Conference. NALS is currently considering potential amendments to NRS 278.5692 & 278.5693 to address boundary line adjustments. NALS will host a fall seminar and golf tournament October 21-22 in Mesquite. More information about NALS can be found on their website [NvLandSurveyors.org](http://NvLandSurveyors.org)

**NEW MEXICO (NMPS)** Allen Grace & Roxanne Nimmer – Current membership is 135. NMPS will be holding their conference in the fall for the first time. The conference will be held October 21-22 at the Isleta Resort and Casino. NMDOT CORS Station RTK network is being extended. The Board of Registration will go through sunset review process in 2023. More information about NMPS can be found on their website [NMPS.org](http://NMPS.org)

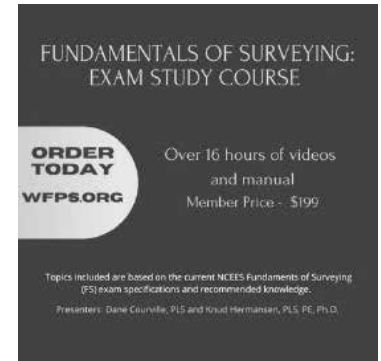
**UTAH (UCLS) Mike Nadeau** – Current membership is 335. UCLS 2023 Conference is being planned for St. George, more details coming soon. SB 184 passed allowing recorders to digitally record and accept electronic plats. Membership dues and Conference registration fees will increase next year to help offset rising costs. UCLS continues to provide outreach through the scouting merit badge program, CST, and Trigstar. A Young Surveyor Network has been established in Utah. More information about UCLS can be found on their website [UCLS.org](http://UCLS.org)

**WASHINGTON (LSAW) Ben Petersen and Amanda Askren** – Current membership is 718. A fall seminar will be held November 4-5 at Renton Technical College and will feature a track for Survey Technicians as well as a CFedS workshop. The 2023 Conference is scheduled for February 15-17 in Spokane, Washington. A Celebration of Life in honor of Jim Coan will be held August 13<sup>th</sup> at Renton Tech. LSAW is interested in sponsoring a team to participate in the NSPS Student Competition. LSAW continues to participate in a lobbying coalition with engineers and architects. LSAW will reintroduce their monument preservation bill next year. All past issues of the Evergreen State Surveyor magazine have been scanned and are now available on the LSAW website. More information about LSAW can be found on their website [LSAW.org](http://LSAW.org)

**WYOMING (PLSW) John Lee** – Current membership is 131. PLSW has authored legislation to address the 2022 datum which removes the date reference. The University of Wyoming continues to offer a minor in land surveying and a land surveying certificate program. Information about PLSW can be found on their website [PLSW.org](http://PLSW.org)

## WFPS FUNDAMENTAL OF SURVEYING (FS) EXAM STUDY COURSE

WFPS is excited to announce the release of the FS Exam Study Course which includes approximately 16 hours of videos and a manual. Topics included are based on the current NCEES Fundamentals of Surveying (FS) exam specifications and recommended knowledge. <https://ncees.org/wp-content/uploads/FS-CBT-specs.pdf> Presenters: Dane Courville, PLS and Knud Hermansen, PLS, PE, Ph.D.



## RIGHT OF ENTRY

Right of entry continues to be a hot topic. Some states still do not have right of entry laws and are interested in learning more from the other western states. Directors distributed right of entry/trespass information from their state. Several states have developed best practice guides and resources for their membership. WFPS will continue to collect information and a directory of resources will be made available to state association members.

## WESTFED EDITOR'S FORUM

WFPS was pleased to host a virtual Editor's Forum in April and June. Editors for each of the WestFed state associations were invited to attend and share information and exchange ideas for building better magazines. The meetings have been well received and all in attendance indicated that it was a great benefit that WestFed can provide to the state associations. The next meeting will be held August 17, 2022. For information, please email the WFPS Executive Office at [admin@wfps.org](mailto:admin@wfps.org)

## CCPS – PLSC

Hello All! I've uploaded the library items from the CCPS website to the Central Chapter area of the PLSC website. I'm hoping to entice our membership with content like this and eventually move it to a members only area under PLSC. This library is not restricted to PLSC members at the moment, but neither is the CCPS website so I didn't see any harm in placing them there for now. If you have thoughts about additional content that would be valuable to share with our membership please let us know. Suggestions we've heard in the past for additional content we could host include survey records, historic maps (like the Hayden Atlas), excel tools, feature code libraries, tips-n-tricks, and workflows.

[https://plsc.net/ccps\\_library.php](https://plsc.net/ccps_library.php)

Regards,  
Robert Boehm, PLS  
President, CCPS

## NORTHERN CHAPTER

The Northern Chapter has been back from our Summer hiatus for two months. Our first meeting in September occurred at City Park in Fort Collins and Celine Lebeau, PLS from Larimer County completed a presentation on tree identification. It was great to see everyone again and Celine did a fantastic job sharing her knowledge with us.

In October, we discussed Chapter business including our upcoming holiday party in which we plan to attend a Colorado Eagle hockey game. We also discussed upcoming events including a drone presentation by Frontier Precision and a geology presentation by Jay Temple from the Colorado Geological Survey. See our website <https://sites.google.com/site/ncplsc/> for event details. All are welcome though RSVPs are recommended so we have enough food.

The Northern Chapter will be holding elections for President, President Elect and two Director positions in December. We anticipate having our ballot finalized by the beginning of November and sent out to the Chapter shortly thereafter.

I hope all is well with everyone and we look forward to an eventful 2023.

Respectfully,  
Dave Berglund, PLS  
President, PLSC Northern Chapter

## NW 1/4 PLSC

Some lengthy interruptions during Covid and the unfortunate passing of our President William Whelan has caused the NW1/4 to not as often as we have in the past. We are starting to get back on track with a meeting on August 17th at the Creekview Café in Hayden, Colorado. Naturally, we toasted Willy and then we commenced. The main topic on the agenda was introduced by one of our younger members, AJ Summers. He chose the topic of the Surveyor's Research disclosure. He had noticed that all the local surveyors had slightly different statements concerning Ownership and Easement Research.

The discussion that ensued mainly centered around how far the surveyor should go in researching ownership and easements. Was the title commitment sufficient, did surveyors as a profession owe it more and what to do if there was no title commitment.

As you can imagine, there was no clear consensus. Some of the differences could be accounted for by the differences between platted, more "urban" type properties versus Aliquot parts or metes in bounds in the more rural County. But even in the City of Steamboat Springs there are many times access or utility easements which came subsequent to the recording of the plat. In the end, it typically comes down to "Standard of Care" as well as the individual's or corporate liability.

An entirely different topic was what to do with our finances. Due to the passing of Willy Whelan, who was our Treasurer as well as President, we are locked out of our account. Our recommendation to all our fellow chapters is to have at least two signatories on every account!

Respectfully submitted,  
Brian T. Kelly  
President, NW 1/4 PLSC

## SCPLS

Tuesday, October 18th, the Southern Chapter members met at the CDOT Cheyenne Mountain Complex (CMC), Colorado Springs, where Nathan Stephenson, a Frontier Precision Applied Geospatial Engineer, presented on UAS best practices and topographic feature extraction using photogrammetry and lidar. Dinner was served, and we briefly addressed some chapter business. In November we are doing something similar with Jim Reinbold who will be joining us from Idaho to present on Carlson's photo capture solution for drone imagery.



# CHAPTER NEWS

Again, that will be held at CMC, November 15 at 6:30pm.

December 9th at the Miramont Castle, in Manitou Springs we will gather for our annual Christmas Dinner and White Elephant Gift Exchange.

Steve Parker  
President, SCLS

## SWC – PLSC

The SWC held an in-person/virtual meeting on September 20 at the La Plata County Fairgrounds. We had a short presentation from Brad Sablosky with Wilderness Medic LLC. Mr. Sablosky provided some details to the Chapter about what kind of training Wilderness Medic, LLC provides and how it relates to the land surveyor. The Chapter decided to pursue a formal six hour class with Wilderness Medic, LLC on Saturday, November 12th. This training will be provided free to SWC members.

After the presentation we proceeded to regular Chapter business. Some highlights to this meeting were:

- Longtime SWC member and retired land surveyor Wayne Lee passed away on August 19<sup>th</sup>. A link to his obituary was shared in the agenda. Those that knew Wayne reflected on his generous character and his commitment to the surveying profession. Condolences go out to his family and friends.
- Treasurer's Report: Account balance is \$10,165.34.
- The Chapter is proceeding to close its existing account with a national bank and move the balance to a local institution, Alpine Bank. Treasurer, Justin Bonnell is working on this action, but there are issues with the Chapter's non-profit/corporation status that need to be worked through. The SWC Officers are working with the State PLSC Executive Director to resolve these issues.
- A deposit of \$5,000 to the SWC is pending for participation in 2022 Rocky Mountain Survey Summit (RMSS).
- The Fort Lewis College Village Aid Project is taking donations for their program. Dr. Don May, PE and Brian Campbell, PE will make a presentation to the SWC at the December regular meeting.
- The "GPS on Benchmarks" event held on July 23<sup>rd</sup> was a great success! Eleven surveyors from the SWC participated in observations of benchmarks in La Plata County and Montezuma County. After the event,

dinner and drinks were provided at the Kennebec Café in Hesperus for participants and their spouses. The SWC needs to make sure that all data is submitted to the NGS by 12/31/2022.

- The "Surveyor Rendezvous" Committee is hard at work looking for a venue to have a December dinner party. Date and time of the event are pending. The SWC will make announcement as soon as plans are finalized.
- Ongoing goals for the SWC are to develop/formalize the bylaws and use the SWC page on PLSC.net to archive important documents, meeting minutes and agendas

Our next meeting is scheduled for December 20<sup>th</sup> at the La Plata County Fairgrounds.

Everyone have a great Fall!

Todd C. Johnston, PLS  
President - SW Chapter PLSC

## WCLS

WCLS had a great Fall Seminar. We greatly appreciated James A. Beckwith, ESQ, and Bradley D. Peterson, P.L.S., Scott Thompson, P.L.S., and Tom Sylvester, P.E. & P.L.S. for their time and educational presentations! WCLS would also like to recognize our Vendors and Sponsors Plaza Repro, Vectors Inc., and Frontier Precision. We had a more than usual turn out this year and look forward to next year's event.

Brian K. Bowker, P.L.S.  
WCLS President

## CALL FOR CONTRIBUTIONS

*Side Shots* is the official magazine of PLSC. If you have an article, information or nomination of a "Young Surveyor" a surveyor who has been in the profession for less than 10 years and has chosen a surveying career to highlight, send your information or recommendation to [sideshots@plsc.net](mailto:sideshots@plsc.net).

# S U S T A I N I N G M E M B E R S

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