

# TSPS 2020 Symposium

**Thursday, February 27**  
**3:00 pm – 7:00 pm | Registration**

**Friday, February 28**  
**7:00 am – 5:00 pm | Registration**

**8:00 am – 12:00 pm**

## **Survey Procedures for Construction Layout**

*Speaker: George Forbis-Stokes, RPLS*

Construction staking and the procedures necessary to be successful are covered extensively in this course. Using real life examples, group interaction, question and answer sessions, facilitated discussions and hands on problem solving activities, attendees experience the process of working through each phase of a construction staking project.

**Session Offered in the Morning or Afternoon (4 CEUs)**

**8:00 am – 12:00 pm**

## **Some Elements of Texas Boundary Surveying**

*Speaker: Michael Hoover, RPLS, LSLs, CFM*

This course will cover an overview of the history and development of the Texas State boundary lines with a focus on the linkage and influence of the history to modern Texas Boundary surveying. In addition there will be an overview and discussion of several key Texas Boundary decisions: *Stafford v. King*; *Turner v. Smith*; *Standefer v. Vaughn*; *Mott v. Boyd*; *Manry v. Robison*. Mr. Hoover will cover three interesting modern day boundary problems to exam and discuss.

**(4 CEUs, includes 4hrs of Ethics/Rules)**

**8:00 am – 12:00 pm**

## **“Hot Topics” in Surveying: A Panel**

*Moderator: Shane Neally, RPLS*

*Panel: Connor Brown, RPLS, PLS; Josh W. Leamons, RPLS, ESQ.; Stan Piper, RPLS, PLS, LSLs; & Heather Sides, RPLS, PLS, CFedS*

This course will be a moderated panel discussion of “Hot Topics” in surveying. It will primarily cover discussions on ethics, standards, boundary surveying and business practices. Other topics of discussion include TSPS standards, technology, oil and gas surveying and history. The moderator, Shane Neally, RPLS, will identify questions concerning the surveying profession and present them to the panel. He will be able to engage the attendees in real-time using a web-based software program. The attendees will be able to ask questions and answer polls via their smartphones.

**(4 CEUs, includes 4hrs of Ethics/Rules)**

**Noon – 1:00 pm | Lunch On Your Own**

**1:00 pm – 5:00 pm**

## **Survey Procedures for Construction Layout**

*Speaker: George Forbis-Stokes, RPLS*

Construction staking and the procedures necessary to be successful are covered extensively in this course. Using real life examples, group interaction, question and answer sessions, facilitated discussions and hands on problem solving activities, attendees experience the process of working through each phase of a construction staking project.

**Repeat of AM session (4 CEUs)**

**1:00 pm – 5:00 pm**

## **Water Boundaries**

*Speakers: Bill O'Hara, RPLS, LSLs & Bill Merten, RPLS, LSLs*

In the course of four hours Mr. O'Hara and Mr. Merten will discuss the many aspects of developing a complete and lawful survey of both Riparian and Littoral boundaries. These points will be discussed as follows:

Riparian Boundaries:

- History of ownership to streams in Texas
- Instructions to the Pioneer Surveyors re: streams
- Definition of Terms
- Case Law – Pertinent landmark cases
- Statutory law
- Gradient Boundary
- Small Bill

Littoral Boundaries:

- Original surveys along the Gulf coast
- Mean High Water or Mean Higher High Water?
- Case law supporting the methodology
- Coastal Boundary Surveys per 33.136 NRC
- Definition of Terms

**(4 CEU's)**

**1:00 pm – 5:00 pm**

## **Professional Ethics**

*Speakers: Shane Neally, RPLS & Connor Brown, RPLS, PLS*

This course will cover the realm of professional ethics for surveyors and engineers as laid out and defined in the “TSPS Canon of Ethics”. Students will explore the impact of ethics on the surveying profession and the world, while studying specific examples of how individual surveyors can positively impact their profession. Routines and rituals that will help keep ethics at the forefront of decision making will be determined and evaluated. Then students will learn how to examine their everyday intentions and execution of thoughts as they apply to or affect their ability to fully engage in ethical and professional behavior with every client and business situation.

**(4 CEUs, includes 4hrs Ethics)**

**1:00 pm – 5:00 pm**

## **Subdivision Plats: Requirements, Best Practices, & Exemptions**

*Speakers: Stan Piper, RPLS, PLS, LSLs & Josh W. Leamons, RPLS, ESQ.*

Mr. Piper and Mr. Leamons, in the course of four hours, will cover and explain the necessary information you will need to develop complete and lawful Subdivision Plats. The points to be covered are:

1. The state law regarding subdivision regulations which dictate what the cities and counties can regulate, and what platting exemptions are available.
2. Review the Extraterritorial Jurisdiction (ETJ) and the affect it has on platting.
3. TBPELS board rules and ethical requirements connected to platting and the depiction of the boundary.
4. Common regulations and requirements of various counties and cities in Texas.
5. Examine plats from around the state and discuss issues.
6. Discuss restrictions & zoning issues.
7. Explain the methods for correcting errors on plats.
8. Review abandonment of easements and roads.
9. Discuss how using the wrong words on a subdivision plat can create title issues. Topics to include Final Plat v. Replat & Amending Plat, and Vacating Plats.

**(4CEUs, includes 4hrs Ethics/Rules)**

**7:30 pm**

## **Meet & Greet - An Evening Full of Fun and Surprises!**

**Hosted by TSPS Chapter 20 - Brazos Valley**

Open to all attendees.

**We are taking this years Symposium back to where it all began, College Station! Make sure to reserve your room today.**

**Texas A&M Hotel & Conference Center**  
**177 Joe Roult Blvd | College Station, TX 77840**  
**Room Rate is \$119 single/\$129 double**  
**includes free self-parking and free wifi.**  
**Reservation deadline is Thursday, February 6.**

**Visit [www.tsps.org/Symposiumhotel](http://www.tsps.org/Symposiumhotel) or call (888)654-4436 to reserve your room!**

## **Thank You Symposium Sponsors:**

**Advanced Geodetic Surveys, Inc.**  
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**TSPS Chapter 4 - East Texas**

**To sponsor the 2020 Symposium, please contact Brenda Null at [BrendaN@tsps.org](mailto:BrendaN@tsps.org) or 512-327-7871.**

# Classes & Events

**Saturday, February 29**  
**7:00 am – 2:00 pm | Registration**

**8:00 am – 5:00 pm**

## **Everyday Use of Texas State Plane Coordinates**

*Speakers: Jim Gillis, RPLS, NSLS, CLS & Jamie Gillis, RPLS, PLS*

Working in a State Plane Coordinate System every day is one thing, but fully understanding its origin, organization, and mathematics is key to maximizing your time, resources and ROI. By the end of this seminar attendees will be able to discuss the origin and purpose of Coordinate Systems in land surveying, list the four relevant surfaces and explain their relationship, identify and associate the mathematical parameters for the five zones, calculate a distance applying the combined scale factor, and demonstrate the benefits of the use of State Plane Coordinates in everyday surveying. Participants will engage in peer interaction, hands-on activities, informative illustrations, and facilitated discussions throughout the seminar to create a comprehensive and useful learning experience of the use and benefits of Texas State Plane Coordinates. Attendees should bring a scientific calculator and be familiar with its operation.

**Attendees MUST attend both AM and PM sessions for CEUs (8 CEUs)**

**8:00 am – 12:00 pm**

## **Leadership and Strategy: A Framework for Success**

*Moderator: Josh W. Leamons, RPLS, ESQ.*

*Panel: TBD*

This course will examine what makes a good leader in the workplace, and will discuss leading different generations in a way that is ethical and provides the desired firm culture necessary for employee retention. In this course we will also examine business strategies that help firms thrive. We will look at long-term and short-term goals and strategic positioning in order to be stand out from the crowd. All topics will be discussed together with rules, best practices, and ethical considerations.

**(4 CEUs, includes 3hrs Ethics)**

**8:00 am – 12:00 pm**

## **Study Group for RPLS Candidates**

*Speaker: Jason Jernigan, RPLS*

Are you pursuing an RPLS license in Texas? Then plan to participate in this study session for RPLS candidates with Jason Jernigan, RPLS. Topics discussed include RPLS exam application procedures and exam format overview, a review of key definitions necessary for success on the legal portion of the exam, and a practicum involving several different boundary analysis scenarios in preparation for the analytical portion of the exam. **It is suggested attendees bring an NCEES-approved scientific calculator and be familiar with its operation.**

**(Paraprofessional - No CEUs)**

**8:00 am – 12:00 pm**

## **Survey Math 101**

*Speaker: James Redmon, RPLS, LSLS*

This course will prepare students for topics covered in the Survey Math 301 and will help prepare them for Level 1 of the NSPS Certified Survey Technician Exam. Basic math computations relating to conventional surveying techniques will be demonstrated and real field survey scenarios will be provided for attendees to solve. By the end of this course attendees will be able to manipulate equations to solve for a missing variable, solve right triangles for the missing elements when given two known elements, and derive angles, distances, and new coordinates from given coordinates.

**(Paraprofessional - No CEUs)**

**8:00 am – 12:00 pm**

## **Survey Math 301**

*Speakers: Aaron Ferguson, RPLS & Heather Sides, RPLS, PLS, CFedS*  
This seminar serves to be beneficial to those reviewing their math skills for levels 1-3 of the CST exam, the SIT exam, or seeking a better understanding of the basic math behind the mechanics of surveying. This course demonstrates intermediate math computations relating to conventional surveying techniques and provides real field survey scenarios for attendees to solve. Topics presented include; ABC's of Trigonometry, Algebraic Manipulation, Law of Sines and the Law of Cosines Formulas. By the end of this seminar attendees will be able to apply the ABC's of Mathematics to use Law of Sines and Law of Cosines to solve for missing elements of oblique triangles.

**(Paraprofessional - No CEUs)**

**Noon – 1:00 pm | Lunch On Your Own**

**1:00 pm – 5:00 pm**

## **Boundary Retracement, Rules & Applications**

*Speakers: Paul Carey, RPLS, LSLS & Stephanie Prosser*

The course is designed to cover fundamental rules, laws and guidelines for land boundary retracement procedures. Using numerous exercises for attendees to practice solving various boundary reconstruction scenarios, key points will be covered:

- Determining seniority of surveys and the retracement of original survey lines.
- Partitions, Simultaneous conveyances, and evaluation of the written instruments.
- Determining Seniority of Tracts & Deeds and the application of Junior/Senior Rights.
- Application of Dignity of Calls, 4 Corners Rule, and Exceptions to the Rules.
- Recognizing Conflicts, Ambiguities & Discrepancies in Boundary Reconstruction.

This course is perfect for technicians, SIT's and Registered Surveyors seeking some broader horizons and exposure to a diversity of boundary problems.

**(4 CEUs)**

**1:00 pm – 5:00 pm**

## **GLO Working Sketch Preparation**

*Speakers: Jason Jernigan, RPLS & Mark Neugebauer, RPLS, LSLS*

Matters related to preparing, compiling, and drafting a working sketch of original land grant surveys derived from the original field notes and record information contained within the archive files/records of the Texas General Land Office (GLO) will be discussed, demonstrated, and practiced. These include but are not limited to GLO format and content standards used to create a working sketch suitable for official filing in the records of the GLO to support a surveyor's position in response to requests for Patents, Corrected Patents, Deeds of Acquittance, or Vacancy Applications. The importance of a working sketch to assist surveyors in performing a boundary retracement survey involving multiple original land grants and/or multiple deeded tracts will be emphasized.

**(4 CEUs)**

**1:00 pm – 5:00 pm**

## **CST Exam Prep Course**

*Speaker: James Redmon, RPLS, LSLS*

This course will prepare students for topics covered in the Survey Math 301 and will help prepare them for Level 1 of the NSPS Certified Survey Technician Exam. Basic math computations relating to conventional surveying techniques will be demonstrated and real field survey scenarios will be provided for attendees to solve. By the end of this course attendees will be able to manipulate equations to solve for a missing variable, solve right triangles for the missing elements when given two known elements, and derive angles, distances, and new coordinates from given coordinates.

**(Paraprofessional - No CEUs)**

**1:00 pm – 5:00 pm**

## **Survey Math 401**

*Speakers: Aaron Ferguson, RPLS & Heather Sides, RPLS, PLS, CFedS*  
This seminar proves to be beneficial to those reviewing their math skills for levels 1-3 of the CST exam, the SIT exam, or seeking a better understanding of the math for horizontal & vertical curves. This course demonstrates math computations relating to the use curve formulas to solve for missing elements of horizontal curves and vertical curves using real field survey scenarios for attendees to solve. It is recommended that attendees have the math skills of Math 301 prior to taking this course.

**(Paraprofessional - No CEUs)**

*Thank you to the following donors for their generous grant.*



# TSPS 2020 Symposium Registration

Register online at [www.tsp.org/symposium](http://www.tsp.org/symposium)  
or mail this form with payment or fax this form with credit card information to:  
TSPS | 2525 Wallingwood Dr., Ste 300 | Austin, TX 78746 | Fax: 512-327-7872  
(No Phone Registrations Accepted)

## Attendee Information

One form per person. Please print.

First Name \_\_\_\_\_ Last Name \_\_\_\_\_  
Badge Name \_\_\_\_\_ Company \_\_\_\_\_  
Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_  
Phone \_\_\_\_\_ Email \_\_\_\_\_ RPLS or PE # \_\_\_\_\_

## Registration Fees (does not include hotel or meals)

Licensed professionals may not register as a paraprofessional attendee.  
Must be a current TSPS member to receive member discount.

		Member		Non-Member	
		By Feb. 5	Feb. 6 & after	By Feb. 5	Feb. 6 & after
<input type="checkbox"/>	RPLS 2 days	\$320	\$420	\$420	\$520
<input type="checkbox"/>	RPLS 1 day	\$210	\$310	\$310	\$410
<input type="checkbox"/>	Paraprofessional 2 days (no CEUs/PDHs)	\$160	\$235	\$210	\$285
<input type="checkbox"/>	Paraprofessional 1 day (no CEUs/PDHs)	\$85	\$160	\$135	\$210



Special Assistance Required? ☐  
Check box

## Cancellation Policy

Refunds minus \$50 administrative fee will be made if faxed or written notice is received by Wednesday, February 19.

## Education Sessions (All class sizes are limited – REGISTER EARLY!)

### Friday, February 28

- ☐ 8:00 am – 12:00 pm Survey Procedures for Construction Layout (4 CEUs) (Session Offered in AM or PM)
- ☐ 8:00 am – 12:00 pm Some Elements of Texas Boundary Surveying (4 CEUs, includes 4hrs of Ethics/Rules)
- ☐ 8:00 am – 12:00 pm “Hot Topics” in Surveying: A Panel (4 CEUs, includes 4 hrs of Ethics/Rules)
- ☐ 1:00 pm – 5:00 pm Survey Procedures for Construction Layout (4 CEUs) (Repeat of AM Session)
- ☐ 1:00 pm – 5:00 pm Water Boundaries (4 CEUs)
- ☐ 1:00 pm – 5:00 pm Professional Ethics (4 CEUs, includes 4hrs of Ethics)
- ☐ 1:00 pm – 5:00 pm Subdivision Plats: Requirements, Best Practices & Exemptions (4 CEUs, includes 4hrs Ethics/Rules)

### Saturday, February 29

- ☐ 8:00 am – 5:00 pm Everyday Use of State Plane Coordinates (8 CEUs)
- ☐ 8:00 am – 12:00 pm Leadership & Strategy: A Framework for Success (4 CEUs, includes 3hrs Ethics)
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- ☐ 1:00 pm – 5:00 pm CST Exam Prep Course (Paraprofessional - No CEUs)
- ☐ 1:00 pm – 5:00 pm Survey Math 401 (Paraprofessional - No CEUs)

## Payment:

☐ Check # \_\_\_\_\_ made payable to TSPS ☐ VISA ☐ MC ☐ AMEX ☐ DISCOVER

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Online Registration closes Friday, February 21, 2020.

Payments made to TSPS are not deductible as charitable contributions, however, they may be deducted as a trade or business expense. Consult your tax advisor.