



CALIFORNIA SURVEYOR

ISSUE #195
SPRING 2022



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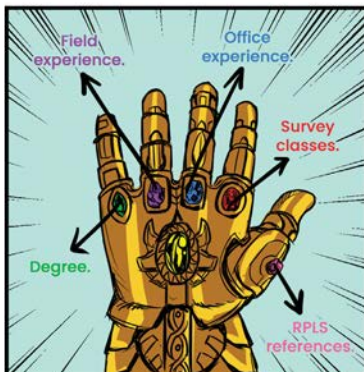
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Central Office

2520 Venture Oaks Way, Suite 150
Sacramento, CA 95833
916-239-4083 • 916-924-7323 fax
clsacaliforniasurveyors.org
www.californiasurveyors.org

California Surveyor Editors

Joseph Waltz – Editor
joeywaltz@gmail.com
Robert McMillan – Associate Editor
robplsca@gmail.com

California Surveyor Designer

John Berkowitz
john@caladmanagement.com

Advertising

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Editorial Material

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Articles, reports, letters, etc., received after the above mentioned date will be considered for the next edition.

Opinions expressed by the editor or individual writers are not necessarily endorsed by the **California Land Surveyors Association** Officers or its Board of Directors. Original articles may be reprinted with due credit given to the source and written notification to the **California Land Surveyors Association**, unless otherwise noted.



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CALIFORNIA SURVEYOR

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The *California Surveyor* is a bi-annual publication of the **California Land Surveyors Association, Inc.** and is published as a service to the land surveying profession of California. It is mailed to all members of the **California Land Surveyors Association, Inc.** The *California Surveyor* is an open forum for all Surveyors, with an editorial policy predicated on the preamble to the Articles of Incorporation of the **California Land Surveyors Association, Inc.** and its stated aims and objectives, which read:

Recognizing that the true merit of a profession is determined by the value of its services to society, the **California Land Surveyors Association** does hereby dedicate itself to the promotion and protection of the profession of land surveying as a social and economic influence vital to the welfare of society, community, and state.

The purpose of this organization is to promote the common good and welfare of its members in their activities in the profession of land surveying, to promote and maintain the highest possible standards of professional ethics and practices, to promote professional uniformity, to promote public faith and dependence in Land Surveyors and their work.



PRESIDENT'S MESSAGE

Warren D. Smith, LS
CLSA 2022 President

As I visited the chapters last year, I was struck by how much this organization depends on the local level. While many issues are common statewide, there is a vested interest in topics which are unique to each region. Many of us attend our chapter meetings regularly and, occasionally, a neighboring one. Then, of course, the annual conference gives us an opportunity to share stories and offer different perspectives.

Since becoming a Director and attending Board meetings, I have become exposed to many more efforts being put forth across a dizzying array of survey-related topics. Upon taking a position on the Executive Committee, the breadth of expertise available to address these themes is astounding. This is done largely through the diligent work of standing committees.

We are now in the process of discussing and deciding whether to become a member of the National Society of Professional Surveyors, and expanding our influence at the national level. There are certainly benefits to aligning ourselves with the activities which NSPS provides, such as its Certified Survey Technician, TrigStar, and CFeds programs, Final Point Markers (of interest to us older surveyors), NSPS/ALTA standards, prototype


proclamations for National Surveyors Day, Day on the Hill, legislative advocacy, and many others. You can visit the NSPS website for more information. Of note, is that individual membership will be included in current CLSA dues, and our state membership will be reviewed and renewed annually.

The advances in technology over my career have been incredible in terms of efficiency. However, our primary task is to retrace those who performed their work with less precise equipment. Seminars at our annual conference cover many aspects of proper boundary retracement principles and methods.

browse different threads. It is a valuable resource for kicking around topics and getting a feel for how thorny issues are dealt with in different areas of the state.

In closing, I would be remiss not to mention monument preservation. While the bulk of monuments are vulnerable to construction activity, there is a subset which are critical to rebuilding efforts after a wildfire event. These are, ironically, disturbed or destroyed as part of those efforts. We are circulating a working paper intended to educate local officials responsible for permitting post-disaster endeavors as to the importance of ensuring the preservation of these valuable survey control marks.

Stay safe and healthy this year! 🍀


Warren D. Smith, LS

“
Please reach out to co-workers and colleagues about the advantages of becoming a member of CLSA. Chief among them is the ability to network with fellow practitioners and stay informed of pending legislation which impacts our profession.
”

Please reach out to co-workers and colleagues about the advantages of becoming a member of CLSA. Chief among them is the ability to network with fellow practitioners and stay informed of pending legislation which impacts our profession. During the course of chapter meetings throughout the year are featured speakers on topics ranging from advances in equipment and software to upgrades in local agencies' ability to provide electronic map review and records research. There are also monthly webinars on diverse subjects.

Another focus of CLSA is the Education Foundation. This provides scholarships for surveying and geomatics students, from which the next generation of land surveyors will come. The scholarship auction at the conference is not only a great cause, but very entertaining as well. Student volunteers parade with old survey equipment and books for the opportunity to “bid up” each item.

If you are not active on the CLSA forum, feel free to visit and





EDITOR'S MESSAGE

Joseph Waltz, PLS
California Surveyor Editor

My work with CLSA has been so challenging and exciting, I enjoy it immensely. I was really sad I missed this year's conference, but from the stories I heard from my co-workers it sounds like y'all had a great time. I'm happy to share some of the pictures that stuck out to me from the various activities.

In addition, in this issue I'm excited to bring back the "Letters

to the Editor" feature, which has been off and on for this magazine for many years. If you, dear reader, write us a letter as a response to an article, I will do my best to print it. You are also welcome to write in an opinion on surveying, mapping, or title issues.

We also have an introduction to the new NSPS Young Surveyor's Network of California, by an extremely talented young woman, Sarah Walker. She is doing great

things, and hopefully they are on their inaugural camping trip right around the time this issue gets to your mailbox. What an excellent organization and my chapter was lucky enough to have Sarah come introduce herself and tell us about this new group of young and future co-workers.

Some more big news in our world is the new law, CA Senate Bill #9. This law effectively eliminates single home residential zoning

in the state, so I asked Michael Pallamary to do a quick review and write-up of this new legal language and reality. The use and application of this new rule-set will highly depend on your local jurisdiction, so in future issues I hope to have more detailed analysis from many of our bigger population centers. 🌐

Stay safe friends. Respectfully,
Joseph "Joey" Waltz, PLS, Editor





LEGISLATIVE REPORT

Michael Belote, Esq.
CLSA Legislative Advocate

CLSA-Sponsored Bill Advances

CLSA is justly proud of the *California Surveyor* magazine. But as a biannual publication, it is not designed for up-to-the minute information. This is especially true in the legislative environment, where the status of bills can change daily, or even hourly. This is why the work of Legislative Chair Ian Wilson, who succeeded the legendary Michael Butcher, is so important.

Every year the California Legislature introduces approximately 2,500 individual bills, covering essentially every possible aspect of our lives. Each bill must be read for potential impacts on surveyors. But the job is actually much bigger than that, as each bill is typically amended perhaps 4-6 times before it passes or dies, and a bill previously of no interest to CLSA can suddenly be amended to matter to the profession. This means that really, some 10,000-15,000 pieces of legislation must be read to spot issues of importance. Talk about a needle in a haystack!

The legislative process also moves very quickly. From a relatively slow start in January of each year, the process picks up speed until it is moving at warp speed in the days and weeks leading up to adjournment in the fall. It literally is a full-time job to keep track of bills coming and going, springing back to life, or being

“gutted and amended” from one issue to a completely different one. Bill tracking services make the job somewhat easier.

As we predicted late last year, for 2022 housing and homelessness has remained a key issue in Sacramento. Last year, with the passage of SB 8, SB 9 and SB 10, much of the focus was on local government approval of development projects, amending the Subdivision Map Act, requiring “ministerial” approval of certain types of development applications, permitting density around transit stations, and the like. This year we are seeing fewer bills dealing with the housing implications of the local planning and approval process, although SB 2653 does allow the state Department of Housing and Community Development to reject the required reports submitted by local governments in meeting the housing elements of their general plans.

Instead, for 2022 the emphasis is more on rent relief and housing assistance programs. The Governor has rolled out a program to provide grants for homeowners behind on mortgage payments and property taxes, and recently proposals were announced for down payment assistance where buyers and the state would literally be partners in housing purchases.

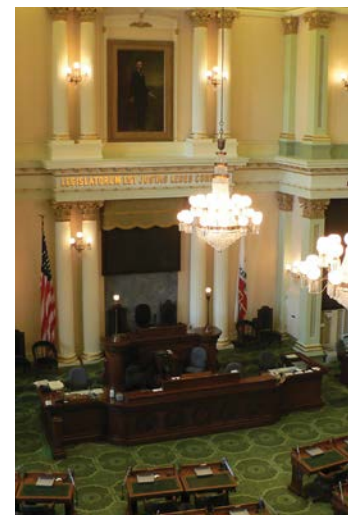
At this point, CLSA is monitoring over 40 bills of interest for the 2022 legislative year. This includes SB 1120, co-sponsored by CLSA and BPELSG. The CLSA contribution is an amendment to Public Resources Code Section 8813.1 to require surveys performed after January 1, 2023 using California Coordinate System of 1983 values to be referenced to and have field-observed statistically independent connections to two or more horizontal reference stations.

The BPELSG suggestions for SB 1120 amend various sections of the land surveying and engineering licensing laws. Some are quite technical, including a new requirement to provide e-mail addresses with license applications and inform the Board of changes to e-mail addresses. Additionally however, the bill would delete language in Section 8729 (e), which has been misinterpreted over the years to permit unlicensed individuals to contract to perform licensed surveying services. The Board believes that this change, and corresponding changes to the engineering law, will prevent confusion and hopefully reduce unlicensed activity.

In even-numbered years including this one, the California Constitution requires the legislature to adjourn by midnight August 31. After that,

Governor Newsom will have the month of September to sign or veto the many hundreds of bills forwarded to his desk. Because this is the second year of the 2021-2022 two-year session, all bills not passed and sent to the Governor are dead, and must be reintroduced in the new 2023-2024 session commencing the first week of December.

CLSA members owe a debt of thanks to Ian Wilson and the members of the Legislative Committee who meet regularly throughout the year to review the bills and suggest proposals to the Board of Directors for sponsorship. This is hard work, the “blocking and tackling” of an effective government relations program. 🌟





CENTRAL OFFICE REPORT



Kim Oreno, CAE
CLSA Executive Director

Greetings!

First, I'd like to thank and welcome the over 90 new members who have joined CLSA for 2022 that were not members last year. Thank you for joining us! We hope that you find this organization a valuable tool for excelling in your profession. You'll get more out of your membership if you get involved. Please join a committee and attend your local CLSA chapter meetings.

Second, I'd like to thank and acknowledge our advertisers for this issue. Publication of this magazine would not be possible without their support.

I encourage you to read their ads and reach out to them when you're in need of their products and services. Please tell them you saw their ad in the *California Surveyor* magazine!

2022 Webinar Schedule:

We've set the dates for webinars for the rest of this year. Please keep in mind that the webinars are free for all CLSA members. The webinars are also recorded and posted in the members only section of the CLSA website so you can access them if you're unable to attend the live broadcast.

JULY 15, 2022

Court Case Review: Pueblo Santa Ana Versus Baca
Presented by Landon Blake, Redefined Horizons

AUGUST 12, 2022

Project Management – Beyond the Basics with Basecamp
Presented by Landon Blake, Redefined Horizons

SEPTEMBER 9, 2022

Mapping the Path for the Future Generation
Presented by Trent Keenan, Diamondback Land Surveying

OCTOBER 14, 2022

Court Case Review: Fripp versus Walters
Presented by Landon Blake, Redefined Horizons

NOVEMBER 11, 2022

Evaluating Boundary Survey Proposals – Getting What You Need and What You Pay For
Presented by Landon Blake, Redefined Horizons

DECEMBER 9, 2022

Court Case Review: San Benito COG Versus Hollister Inn
Presented by Landon Blake, Redefined Horizons

— Welcome New Members! —

- | | | | |
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| Thomas E. Dougherty | Mark Lord | Craig A. Roberts | Cengiz Yagcioglu |
| Andrew Drewek | Jonathan E. Luconi | Todd C. Rockwell | Rosaly Zambrana |

2023 CONFERENCE

I'm pleased to report that the CLSA Board of Directors has approved a joint conference for 2023. We will be joining the Nevada Association of Land Surveyors on March 25-28, 2023 at the Silver Legacy in Reno, Nevada. Please save the dates in your calendar and keep an eye on your inbox for further details.

I'm looking forward to seeing what the second half of 2022 has in store. Thank you for reading this issue of the *California Surveyor*. Your association is here for you. Please feel free to contact CLSA Headquarters with any questions, comments or suggestions. ☺

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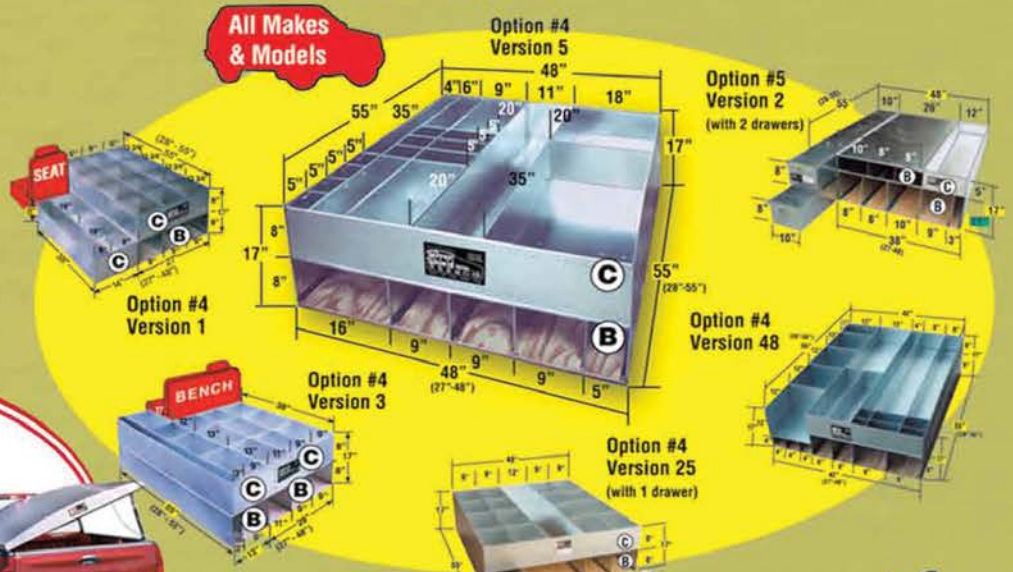


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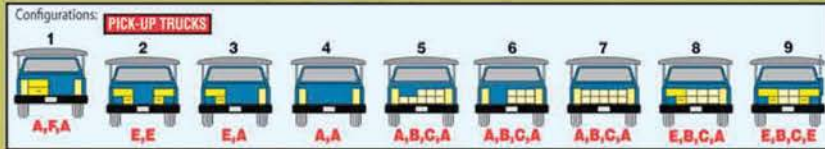
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LETTERS TO THE EDITOR



Joseph Waltz, PLS
California Surveyor Editor

This is your magazine, and the *California Surveyor* editors are excited to welcome your letters and responses. This regular feature, "Letters to the Editor" has been on and off over the years, as now there are so many options to express our opinions in these hyper-connected times. However, there's something special about carefully reviewing an article or write-up and crafting a well-written response. Anyone that has spent time in this industry knows that if you put five land surveyors in a room you can get seven opinions out. We welcome dialog, as our diversity of opinions makes us stronger. We look forward to hearing from you.

— J. Waltz, Editor

Basis of Bearings: A Critical Component of Boundary Surveying

The title of the article "Basis of Bearings, What is it Good For?" in Issue #194 of the *California Surveyor* piqued my interest since determining the basis of bearings of old deeds and surveys can be a challenging aspect of

boundary surveying. Making that determination was not the point of the article, and the article went in a different direction from what I expected. The article ended with the question, "So, what is the point of listing your Basis of Bearings aside from satisfying Sec. 8764?"

My answer to the question is: "To provide the information necessary for future surveyors to retrace your survey."

The author states a valid point that the basis of bearings of a current survey may be arbitrary, but that is a reason for including the basis of bearings, not for failing to do so. When I review a Record of Survey the first three items that I look for are: What did the surveyor find, what did the surveyor hold and how do the bearings of the survey relate to the deed? Far from being "obsolete," basis of bearings is a critical component of boundary surveying.

If the stated basis of bearings is intended to be the same as a deed or previous survey then I want to see how the decision was made to hold the bearings of one or more lines. The next determination to be made is why the other bearings on the map may not agree with the record.

If, on the other hand, the stated basis of bearings is some other

basis, such as a grid bearing, that is not intended to represent a record bearing, the differences between measured bearings and record bearings are important. Are those differences consistent or varying? Why?

The article includes a quotation by George Abbott regarding basis of bearings. The quotation observes that nearly every survey has a different basis of bearings and consequent error. The situation has not changed since Mr. Abbott made the statement and the number of subsequent surveys has only increased. That may be a fact, but is that a problem?

If the measurements of the original GLO surveys were all perfect and all subsequent surveys and deeds perfect, then basis of bearings might not be important. As we all know, that is not the case.

Certainly there may be errors in measurements of previous surveys as well as errors in current surveys. Choosing one line for a basis of bearings to relate to a record deed or survey, then reporting measured and record bearings on other lines may seem like introduction of error. In actuality, it is simply the way to inform future surveyors of your findings. Surveyors know that measurements are not perfect, including their own.

This is nothing new. In essence land surveying is the rational and systematic treatment of errors. The errors may be in legal descriptions, in previous measurements, in current measurements, in map drafting, or more likely, a combination of all of the above.

The author mentions the "two-point tango," where a survey would hold two monuments and call all of the other found monuments "out of position." That is a valid concern, however, that is more a matter of making the proper retracement decision, not a basis of bearings problem.

There are instances where using interior angles from deeds to reset missing corners is appropriate and other instances where this may not be the appropriate method. Maybe record bearings will be better. As Gurdon Wattles said "the contrary may be shown."

A challenge for surveyors is the "adjoiner banger" description, such as "bounded on the north by ... bounded on the east by ... bounded on the south by ... and bounded on the west by..." That type of description is perfect from a title perspective since there are no gaps or overlaps, but the land surveyor will need to retrace four or more deeds, potentially

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The Controversial SB9

By Michael Pallamary, PLS

ber 9...

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ber 9...

Revolution 9
The Beatles

According to Ian Hammond, a noted music analyst, when describing this iconic Beatles song, wrote: “There is chaos: feedback, impromptu screaming, rehearsed overdubs, and more tape loops.” This is a suitable description of SB9, a state statute, affecting single-family residential zones in California that allows for the quadrupling of density on traditional single-family lots, from one to four units when combined with ADU’s without any local discretionary hearing or review, including compliance with the California Environmental Quality Act (CEQA)...”¹

The controversial bill authored by Senate President pro Tempore Toni Atkins, a former member of the San Diego City Council, was approved by Governor Newsom on September 16, 2021. According to *Businesswire*, “Polling on SB 9 and 10 was conducted July 27-29, 2021 through the well-respected pollster, David Binder Research (with a 600-count sample size, online from voter files, recruited by email and text), and reveal some interesting numbers that may not bode well for public – or legislative – support for either bill. Both bills start with strong opposition. 63% oppose SB 9 (48% strongly) and 67% oppose SB 10 (51% strongly). Opposition increases to 71% for SB 9 and 75% for SB 10 after messages and endorsers were shared with voters being polled.”²

SB 10, a sister piece of legislation, would, notwithstanding any local restrictions on adopting zoning ordinances, authorize a local government to adopt an ordinance to zone any parcel for up to 10 units of residential density per parcel, at a height specified in the ordinance, if the parcel is located in a transit-rich area or an urban infill site, as those terms are defined. The bill would prohibit a local government from adopting an ordinance pursuant to these provisions on or after January 1, 2029. The bill would specify that an ordinance adopted under these provisions, and any resolution to amend the jurisdiction’s General Plan, ordinance, or other local regulation adopted to be consistent with that ordinance, is not a project for purposes

continued on page 10



of the California Environmental Quality Act. The bill would prohibit an ordinance adopted under these provisions from superseding a local restriction enacted or approved by a local initiative that designates publicly owned land as open-space land or for park or recreational purposes.³ According to the Legislative Counsel's Digest, in commenting on SB 9:

This bill, among other things, would require a proposed housing development containing no more than 2 residential units within a single-family residential zone to be considered ministerially, without discretionary review or hearing, if the proposed housing development meets certain requirements, including, but not limited to, that the proposed housing development would not require demolition or alteration of housing that is subject to a recorded covenant, ordinance, or law that restricts rents to levels affordable to persons and families of moderate, low, or very low income, that the proposed housing development does not allow for the demolition of more than 25% of the existing exterior structural walls, except as provided, and that the development is not located within a historic district, is not included on the State Historic Resources Inventory, or is not within a site that is legally designated or listed as a city or county landmark or historic property or district....

This bill, among other things, would require a local agency to ministerially approve a parcel map for an urban lot split that meets certain requirements, including, but not limited to, that the urban lot split would not require the demolition or alteration of housing that is subject to a recorded covenant, ordinance, or law that restricts rents to levels affordable to persons and families of moderate, low, or very low income, that the parcel is located within a single-family residential zone, and that the parcel is not located within a historic district, is not included on the State Historic Resources Inventory, or is not within a site that is legally designated or listed as a city or county landmark or historic property or district.

The bill would set forth what a local agency can and cannot require in approving an urban lot split, including, but not limited to, authorizing a local agency to impose objective zoning standards, objective subdivision standards, and objective design standards, as defined, unless those standards would have the effect of physically precluding the construction of 2 units, as defined, on either of the resulting parcels or physically precluding either of the 2 units from being at least 800 square feet in floor area, prohibiting the imposition of setback requirements under certain circumstances, and setting maximum setback requirements under all



other circumstances. The bill would require an applicant to sign an affidavit stating that they intend to occupy one of the housing units as their principal residence for a minimum of 3 years from the date of the approval of the urban lot split, unless the applicant is a community land trust or a qualified nonprofit corporation, as specified. The bill would prohibit a local agency from imposing any additional owner occupancy standards on applicants. By requiring applicants to sign affidavits, thereby expanding the crime of perjury, the bill would impose a state-mandated local program.

Critics of the bill contend adoption was a hasty decision that amongst other things, failed to consider the procedures to be followed in implementing the legislation. According to *Businesswire*:

The two bills, California Senate Bill 9 and California Senate Bill 10, are ostensibly intended to ease the state's housing crisis but in fact are extremely harmful. Many housing justice advocates, city governments and homeowners' associations oppose both pieces of legislation, noting that the bills don't provide affordable housing and homeless housing requirements, will fuel gentrification, and will take away the ability of communities of color and working-class residents to build wealth through homeownership. Instead, it is yet another multi-billion-dollar giveaway to deep-pocketed real estate interests.

As it relates to the subdivision map act, select passages from the adopted bill, amending the Government Code, follows below. For a complete text of the bill, see <https://legiscan.com/CA/text/SB9/2021>.

Section 65852.21:

(a) A proposed housing development containing no more than two residential units within a single-family residential zone shall be considered ministerially, without discretionary review or a hearing....

(5) The proposed housing development does not allow the demolition of more than 25 percent of the existing exterior structural walls, unless the housing development meets at least one of the following conditions:

(6) (b) (1) Notwithstanding any local law and except as provided in paragraph (2), a local agency may impose objective zoning standards, objective subdivision standards, and objective design review standards that do not conflict with this section.

(2) (A) The local agency shall not impose objective zoning standards, objective subdivision standards, and objective design standards that would have the effect of physically precluding the construction of up to two units or that would physically preclude either of the two units from being at least 800 square feet in floor area.

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(B) (i) Notwithstanding subparagraph (A), no setback shall be required for an existing structure or a structure constructed in the same location and to the same dimensions as an existing structure.

(ii) Notwithstanding subparagraph (A), in all other circumstances not described in clause (i), a local agency may require a setback of up to four feet from the side and rear lot lines.

(c) In addition to any conditions established in accordance with subdivision (b), a local agency may require any of the following conditions when considering an application for two residential units as provided for in this section:

(1) Off-street parking of up to one space per unit, except that a local agency shall not impose parking requirements in either of the following instances:

(A) The parcel is located within one-half mile walking distance of either a high-quality transit corridor, as defined in subdivision (b) of Section 21155 of the Public Resources Code, or a major transit stop, as defined in Section 21064.3 of the Public Resources Code.

(B) There is a car share vehicle located within one block of the parcel.

(j) A local agency may adopt an ordinance to implement the provisions of this section. An ordinance adopted to implement this section shall not be considered a project under Division 13 (commencing with Section 21000) of the Public Resources Code.

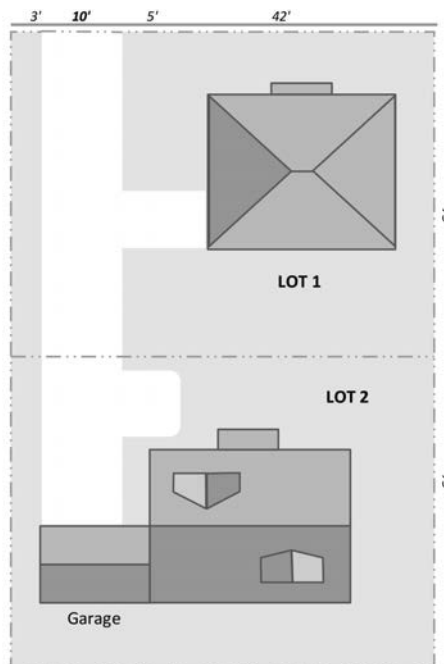
(k) Nothing in this section shall be construed to supersede or in any way alter or lessen the effect or application of the California Coastal Act of 1976 (Division 20 (commencing with Section 30000) of the Public Resources Code), except that the local agency shall not be required to hold public hearings for coastal development permit applications for a housing development pursuant to this section.

Section 66411.7, in part, is added to the Government Code, to read:

(a) Notwithstanding any other provision of this division and any local law, a local agency shall ministerially approve, as set forth in this section, a parcel map for an urban lot split only if the local agency determines that the parcel map for the urban lot split meets all the following requirements:

(1) The parcel map subdivides an existing parcel to create no more than two new parcels of approximately equal lot area provided that one parcel shall not be smaller than 40 percent of the lot area of the original parcel proposed for subdivision.

(2) (A) Except as provided in subparagraph (B), both newly created parcels are no smaller than 1,200 square feet.



(B) A local agency may by ordinance adopt a smaller minimum lot size subject to ministerial approval under this subdivision.

(G) Neither the owner of the parcel being subdivided nor any person acting in concert with the owner has previously subdivided an adjacent parcel using an urban lot split as provided for in this section.

(b) An application for a parcel map for an urban lot split shall be approved in accordance with the following requirements:

(1) A local agency shall approve or deny an application for a parcel map for an urban lot split ministerially without discretionary review.

(2) A local agency shall approve an urban lot split only if it conforms to all applicable objective requirements of the Subdivision Map Act (Division 2 (commencing with Section 66410)), except as otherwise expressly provided in this section.

(3) Notwithstanding Section 66411.1, a local agency shall not impose regulations that require dedications of rights-of-way or the construction of offsite improvements for the parcels being created as a condition of issuing a parcel map for an urban lot split pursuant to this section.

(c) (1) Except as provided in paragraph (2), notwithstanding any local law, a local agency may impose objective zoning standards, objective subdivision standards, and objective design review standards applicable to a parcel created by an urban lot split that do not conflict with this section.

(2) A local agency shall not impose objective zoning standards, objective subdivision standards, and objective design review standards that would have the effect of physically precluding the construction of two units on either of the resulting parcels or that would result in a unit size of less than 800 square feet.

(3) (A) Notwithstanding paragraph (2), no setback shall be required for an existing structure or a structure constructed in the same location and to the same dimensions as an existing structure.

(B) Notwithstanding paragraph (2), in all other circumstances not described in subparagraph (A), a local agency may require a setback of up to four feet from the side and rear lot lines.

(d) Notwithstanding subdivision (a), a local agency may deny an urban lot split if the building official makes a written finding, based upon a preponderance of the evidence, that the proposed housing

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development project would have a specific, adverse impact, as defined and determined in paragraph (2) of subdivision (d) of Section 65589.5, upon public health and safety or the physical environment and for which there is no feasible method to satisfactorily mitigate or avoid the specific, adverse impact.

(e) In addition to any conditions established in accordance with this section, a local agency may require any of the following conditions when considering an application for a parcel map for an urban lot split:

(1) Easements required for the provision of public services and facilities.

(2) A requirement that the parcels have access to, provide access to, or adjoin the public right-of-way.

(3) Off-street parking of up to one space per unit, except that a local agency shall not impose parking requirements in either of the following instances:

(A) The parcel is located within one-half mile walking distance of either a high-quality transit corridor as defined in subdivision (b) of Section 21155 of the Public Resources Code, or a major transit stop as defined in Section 21064.3 of the Public Resources Code.

(B) There is a car share vehicle located within one block of the parcel.

(f) A local agency shall require that the uses allowed on a lot created by this section be limited to residential uses.

(g) (1) A local agency shall require an applicant for an urban lot split to sign an affidavit stating that the applicant intends to occupy one of the housing units as their principal residence for a minimum of three years from the date of the approval of the urban lot split.

Section 66452.6 of the Government Code is amended, in part, to read:

(a) (1) An approved or conditionally approved tentative map shall expire 24

months after its approval or conditional approval, or after any additional period of time as may be prescribed by local ordinance, not to exceed an additional 24 months. However, if the subdivider is required to expend two hundred thirty-six thousand seven hundred ninety dollars (\$236,790) or more to construct, improve, or finance the construction or improvement of public improvements outside the property boundaries of the tentative map, excluding improvements of public rights-of-way that abut the boundary of the property to be subdivided and that are reasonably related to the development of that property, each filing of a final map authorized by Section 66456.1 shall extend the expiration of the approved or conditionally approved tentative map by 48 months from the date of its expiration, as provided in this section, or the date of the previously filed final map, whichever is later. The extensions shall not extend the tentative map more than 10 years from its approval or conditional approval. However, a tentative map on property subject to a development agreement authorized by Article 2.5 (commencing with Section 65864) of Chapter 4 of Division 1 may be extended for the period of time provided for in the agreement, but not beyond the duration of the agreement. The number of phased final maps that may be filed shall be determined by the advisory agency at the time of the approval or conditional approval of the tentative map.

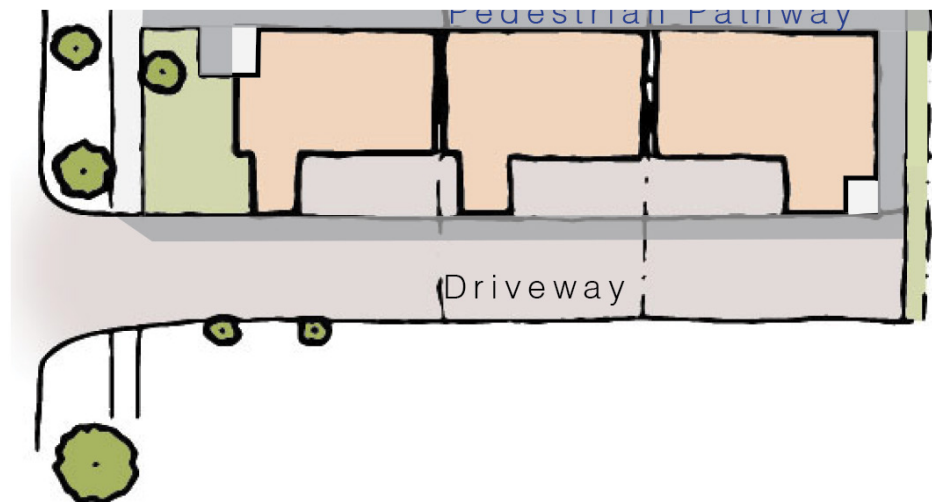
(2) Commencing January 1, 2012, and each calendar year thereafter, the amount of two hundred thirty-six thousand seven hundred ninety dollars (\$236,790) shall be annually increased by operation of law according to the adjustment for inflation set forth in the statewide cost index for class B construction, as determined by the State Allocation Board at its January meeting. The effective date of each annual adjustment shall be March 1. The adjusted amount shall apply to tentative and vesting tentative maps whose applications were received after the effective date of the adjustment.

(3) "Public improvements," as used in this subdivision, include traffic controls, streets, roads, highways, freeways, bridges, overcrossings, street interchanges, flood control or storm drain facilities, sewer facilities, water facilities, and lighting facilities.

(b) (1) The period of time specified in subdivision (a), including any extension thereof granted pursuant to subdivision (e), shall not include any period of time during which a development moratorium, imposed after approval of the tentative map, is in existence. However, the length of the moratorium shall not exceed five years.

(2) The length of time specified in paragraph (1) shall be extended for up to three years, but in no event beyond January 1, 1992,

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during the pendency of any lawsuit in which the subdivider asserts, and the local agency that approved or conditionally approved the tentative map denies, the existence or application of a development moratorium to the tentative map.

(3) Once a development moratorium is terminated, the map shall be valid for the same period of time as was left to run on the map at the time that the moratorium was imposed. However, if the remaining time is less than 120 days, the map shall be valid for 120 days following the termination of the moratorium.

(c) The period of time specified in subdivision (a), including any extension thereof granted pursuant to subdivision (e), shall not include the period of time during which a lawsuit involving the approval or conditional approval of the tentative map is or was pending in a court of competent jurisdiction, if the stay of the time period is approved by the local agency pursuant to this section. After service of the initial petition

or complaint in the lawsuit upon the local agency, the subdivider may apply to the local agency for a stay pursuant to the local agency's adopted procedures. Within 40 days after receiving the application, the local agency shall either stay the time period for up to five years or deny the requested stay. The local agency may, by ordinance, establish procedures for reviewing the requests, including, but not limited to, notice and hearing requirements, appeal procedures, and other administrative requirements.

(d) The expiration of the approved or conditionally approved tentative map shall terminate all proceedings and no final map or parcel map of all or any portion of the real property included within the tentative map shall be filed with the legislative body without first processing a new tentative map. Once a timely filing is made, subsequent actions of the local agency, including, but not limited to, processing, approving, and recording, may lawfully occur after the date of expiration of the tentative map.

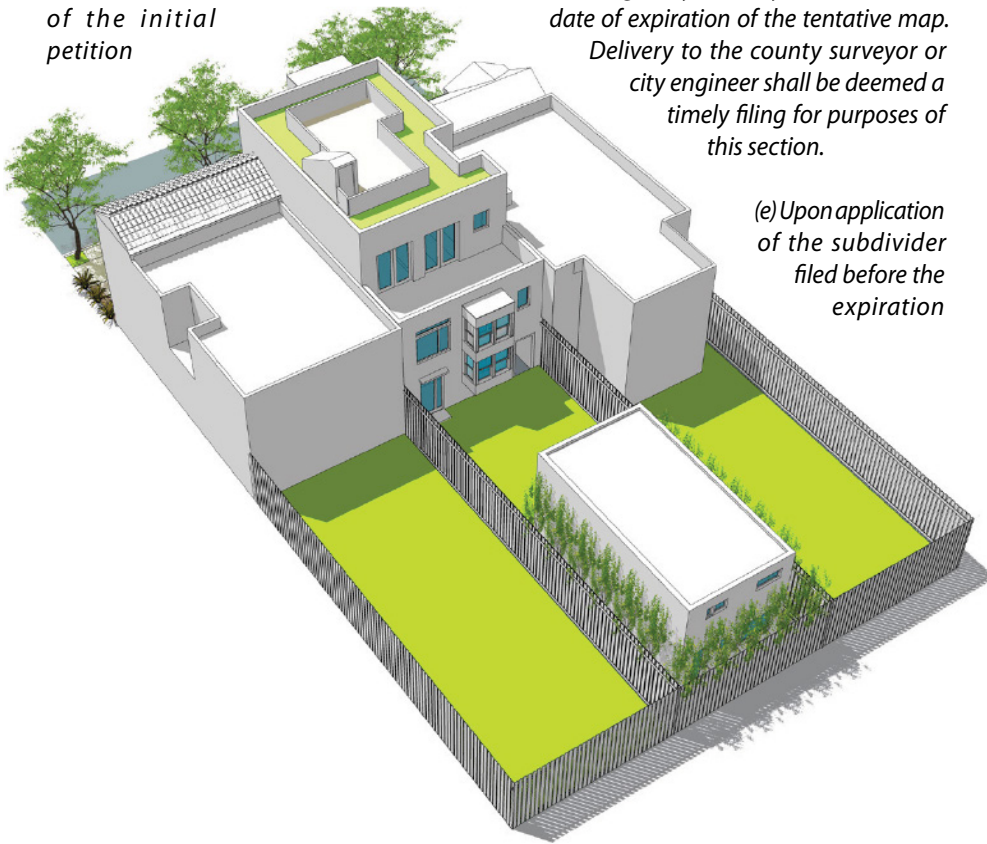
Delivery to the county surveyor or city engineer shall be deemed a timely filing for purposes of this section.

(e) Upon application of the subdivider filed before the expiration

of the approved or conditionally approved tentative map, the time at which the map expires pursuant to subdivision (a) may be extended by the legislative body or by an advisory agency authorized to approve or conditionally approve tentative maps for a period or periods not exceeding a total of six years. The period of extension specified in this subdivision shall be in addition to the period of time provided by subdivision (a). Before the expiration of an approved or conditionally approved tentative map, upon an application by the subdivider to extend that map, the map shall automatically be extended for 60 days or until the application for the extension is approved, conditionally approved, or denied, whichever occurs first. If the advisory agency denies a subdivider's application for an extension, the subdivider may appeal to the legislative body within 15 days after the advisory agency has denied the extension.

(f) For purposes of this section, a development moratorium includes a water or sewer moratorium, or a water and sewer moratorium, as well as other actions of public agencies that regulate land use, development, or the provision of services to the land, including the public agency with the authority to approve or conditionally approve the tentative map, which thereafter prevents, prohibits, or delays the approval of a final or parcel map. A development moratorium shall also be deemed to exist for purposes of this section for any period of time during which a condition imposed by the city or county could not be satisfied because of either of the following:

(1) The condition was one that, by its nature, necessitated action by the city or county, and the city or county either did not take the necessary action or by its own action or inaction was prevented or delayed in taking the necessary action before expiration of the tentative map.



Limiting rear buildings to 20' in height minimizes impacts to neighbors.

One of the problems with the new law involves a lack of uniform standards for design and mapping regulations. How much discretion do local municipalities have given

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that approval is ministerial? How expensive will the building construction be given the complexity of design requirements that are intended to accomplish social objectives? Will surrounding infrastructure support more housing? What of sewer and water capacity. According to an article in the *San Diego Union*.⁴

Because of aging bridges, roads, sewer mains, storm drains and other city projects built in the 1950s and 1960s, the city now estimates its infrastructure backlog to be \$4.12 billion. The number reflects the gap between available funding and expected infrastructure needs over the next five years. The sum has more than doubled over the past three years due to new state mandates, the increasing cost of infrastructure upgrades and more thorough evaluations of the condition of city properties.

These are complex issues that will involve raising taxes and burdening overstrapped cities. And too, given the state of partisan politics, execution will be uneven, contentious, and confusing. In metropolitan areas, where homelessness and demands on housing are highest, implementation will be aggressive. Undoubtedly, urban politicians will take liberty with the planning policies both in review and execution. As a sign of the times, the legislature and its supporters justified the bill's adoption due to the impacts of COVID-19 on housing and homelessness.⁵

In the town of Woodside, one of the wealthiest communities in the country, home to many technology billionaires and investment managers, a community where average home prices exceed five million dollars, the town council adopted an ordinance prohibiting implementation of SB9 on the basis that a loophole in another law exempts mountain lion habitats from the new legislation.⁶ In response, California Attorney General Rob Bonta sent a letter to Woodside town officials, informing them that their effort to declare the town to be a mountain lion habitat was an attempt to avoid complying with the new law. "An entire town cannot be declared habitat for a protected species," Bonta wrote in the letter. "There is no valid basis to claim that the entire town of Woodside is a habitat for mountain lions."⁷ The town council quickly

rescinded its ordinance, opting to acquiesce instead of battling the state.

In Santa Barbara, the city council amended its municipal code, permitting civil engineers to prepare parcel maps.⁸ The modification also assigned approval of the parcel map to the city engineer as opposed to the city surveyor.⁹



27.60.020 Application and Approval.

A. A parcel map for an urban lot split may not be approved except in conjunction with a concurrently submitted application for building permits for two-unit residential development pursuant to Section 30.185.440 or Chapter 28.80, as applicable, and subject to the provisions of Section 27.60.060. Development on the resulting parcels is limited to the residential development approved in the concurrently submitted building permit applications.

B. A parcel map for an urban lot split must be prepared by a registered civil engineer or licensed land surveyor in accordance with Government Code Sections 66444 – 66450 and this Chapter, and submitted for approval to the City Engineer. A fee in an amount established by City Council resolution must be paid concurrently with the submission of the parcel map.

C. The City Engineer is the approval authority for parcel maps under this Chapter. The City Engineer shall approve a parcel map for an urban lot split if the Engineer determines that it meets all of the requirements of this Chapter.

D. The City Engineer shall not approve an urban lot split for a parcel located within a high fire hazard zone unless the resulting parcels are authorized for development pursuant to Chapter 28.80 or Section 30.185.440 of this Code based upon a finding that the development will be constructed accordance with all applicable building and fire safety construction codes and the parcel is located in an area that has been determined to be safe for development as provided in Chapter 28.80 or Section 30.185.440.

Across the state, there appears to be uncertainty about how to process an SB9 project. Permitting civil engineers to prepare and approve subdivision maps raises several problems related to the practice of land surveying. In addition, because there are no discretionary requirements, implementation is ministerial.¹⁰ What this means is surrounding property owners, and community groups have no forum to challenge a project, with one notable exception; the new law does not override subdivisions that are protected and governed by Covenants, Conditions, and Restrictions ("CCRs").

In a letter dated August 30, 2021, Atkins wrote to the Secretary of State, Ms. Erika Contreras, to clarify the bill after lawyers representing the Rancho Santa Fe Homeowner's Association, in San Diego County, expressed concern with the effects of the bill on "The Ranch" and its affluent property owners.^{11 12 13} The letter reads in part:

... I submit this letter to the Senate Journal for the purposes of clarifying the applicability of SB 9's provisions. First, on the issue of common interest developments (CID) and homeowners' associations (HOA). My office has consulted with Legislative Counsel, and SB 9 would not override

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CID or HOA restrictions. Specifically, SB 9 is silent on the issue, meaning the bill contains no provisions that supersede HOA or CID governing documents. As we have seen with other housing legislation, SB 9 would have to contain an explicit and proactive provision to override those rules. This bill does not.

Second, I would like to reiterate some of the bill's protections to ensure that community character is not unduly affected. Most importantly, SB 9 explicitly states that cities and counties may continue to impose objective zoning standards, objective subdivision standards, and objective design standards so long as they still allow two small, 800 square foot dwellings to be built on each lot. For example, objective requirements that lots include horse keeping areas of a specified size could still be imposed, and if a property owner applied for a permit that proposed larger dwellings that would conflict with such a requirement, a local official could deny the project.

It would thus be advisable to look closely at any title documents that may disclose the existence of CCRs or any other restrictions that may prohibit SB 9 implementation.

On the other end of the spectrum, Los Angeles has made significant progress developing an implementation process. Given its political makeup and overwhelming problems with affordable housing and its stepchild, homelessness, it is no surprise. There are 64,000 homeless people in Los Angeles alone; more than were killed in the Vietnam War.¹⁴ The requirements are outlined in a detailed albeit Byzantine handout.¹⁵

The basic submittal requirements include a Preliminary Parcel Map, four 11" x 17" reduced-size copies, and one full-size and one reduced-size copy stamped by the Los Angeles Department of Building and Safety. Also required is a Site Plan superimposed on the proposed Small Lot Map denoting the following:¹⁶

- Any easement(s) outside the building envelopes for vehicular and pedestrian ingress/egress, emergency access, utilities, and infrastructure purposes. These

easements must be either public easements (i.e., for public utility purposes) or private reciprocal easements (i.e., crossing lot lines for vehicular and pedestrian access and/or cross lot surface drainage or common landscape areas).

- Building footprint(s) for proposed structures and lot coverage percentages. Lot Lines. Identify the front, side, and rear lot lines for each internal lot.



- Identify setbacks from adjoining properties and the front, side, and rear yards within the proposed Small Lot Subdivision. Include a setback matrix on the Site Plan. A side yard setback of three feet from adjoining properties is permitted within the Venice Coastal Specific Plan, Ordinance No. 172,897.
- Identify any Driveway Easement(s), including location width, and label it as "COMMON ACCESS." According to the Small Lot Map Standards, the Common Access Driveway must provide a 10-foot width for driveways serving up to four small lot homes and a 16-foot width for driveways serving five or more small lot homes.
- Identify automobile guest parking and bicycle parking in compliance with the Small Lot Map Standards.

- Identify Pedestrian Access walkways from a public street to the subdivision and label them as "COMMON ACCESS WALKWAY." According to the Small Lot Map Standards, the Common Access Walkway must be a minimum of three feet in width and remain unobstructed and open to the sky.
- Identify Open Space Easements for subdivisions of 20 or more units at a ratio of 30 square feet of open space per unit, and label them as "COMMON OPEN SPACE EASEMENT." The Open Space Easement shall be designed in accordance with the Small Lot Map Standards.
- Identify all vehicular back up space consistent with the requirements of the municipal code.
- Identify all trash collection areas.
- All accessory structures shall be shown and cannot be located within a required setback area.
- Elevations and other illustrative information.¹⁷

In San Francisco, the Planning Commission adopted *Objective Design Standards* for all SB-9 projects, noting:¹⁸

Since the Residential Design Guidelines and certain aspects of the Planning Code would not be applicable the following development standards apply to all projects proposing to use SB-9. They are based on historical precedent, accepted and achievable standards already in the Planning Code and Residential Design Guidelines adapted to balance the goals of SB-9 with zoning controls while maintaining a high-quality residential environment.

These regulations lay out a complex siting of buildings that need to be satisfied including:

- *Limit the 3-story volume to 45% rear yard line. A two story pop-out with 5' side setbacks may extend to the 30% rear yard line. Rear yard shall be at un-structured grade to allow for in ground planting.*

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- To ensure reasonable parity between the proposed dwelling units the second unit on the lot may not be less than 800 sq ft.
- Providing unit parity ensures that an extreme disparity between an oversized and undersized unit does not result from SB-9.
- A minimum 25' separation between the primary facades of the two facing structures shall be provided. Architectural projections including balconies and bays into the shared court are allowed per Planning Code Section 136 for front setbacks.
- The rear building height shall be limited to 20'. No roof parapets higher than 6" are allowed. Dormers are not allowed on rear buildings above the 20' height limit.
- When facing a structure in the rear, the street facing building shall set back a minimum of 10' on the upper floor for the full building width.
- New construction must provide a minimum 4' setback from all interior lot lines for structures located at the rear of the property. Corner properties are not required to have a rear or street facing setback. A side setback facing the internal neighbor is required.
- The occupied area of the roof decks and balconies shall be set back 5' from all building edges.
- Landscape may be placed in between edge of roof and occupied roof area.
- Roof decks on the rear structure are not permitted.
- Stair penthouses are not allowed on rear buildings. Stair penthouses on the front building shall be set back 15' from front building wall; shall be limited to a single penthouse* (roof deck occupancy limit for a single means of egress); and shall be limited to the minimum dimensions (width, headroom height) required by the Building Code.
- Use translucent or opaque guardrails.

The submittal requirements will vary from city to city and county to county, and they will be driven by existing zoning regulations, municipal codes, local ordinances, and partisan politics. As the bill does not provide clear direction, it will be up to local municipalities to figure out what to do. It is expected that there will be challenges and modifications to the legislation as time passes. To quote Otto von Bismarck, "Laws are like sausages. It's better not to see them being made." 🍔



Michael Pallamary, PLS

Michael Pallamary, PLS, is a licensed land surveyor. He has been in the surveying profession since 1971 and is the owner of Pallamary & Associates, a La Jolla Based land surveying and land use consultant firm. He is a certified instructor for real property matters resulting in the issuance of MCLE credits for lawyers and other land use professionals.

Endnotes

- 1 <https://focus.senate.ca.gov/sb9>
- 2 <https://www.businesswire.com/portal/site/home/>
- 3 https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=202120220SB10
- 4 <https://www.sandiegouniontribune.com/opinion/editorials/story/2022-02-24/san-diego-infrastructure-roads-bridges-4-billion-backlog>
- 5 <https://focus.senate.ca.gov/sb9>
- 6 Wikipedia.
- 7 <https://www.nbcbayarea.com/news/local/making-it-in-the-bay/woodside-reverses-housing-decision-after-ag-denies-mountain-lion-sanctuary-status/2803141/>
- 8 <https://www.santabarbaraca.gov/civicax/filebank/blobdload.aspx?BlobID=242259>
- 9 Business and Professions Code 8726. Land surveying defined (14) (c) The review, approval, or examination by a governmental entity of documents prepared or performed pursuant to this section shall be done by, or under the direct supervision of, a person authorized to practice land surveying.

- 10 "Ministerial processing" or "ministerial approval" means a process for development approval involving little or no personal judgment by the public official as to the wisdom or manner of carrying out the project. The public official merely ensures that the proposed development meets all the "objective zoning standards," "objective subdivision standards," and "objective design review standards" in effect at the time that the application is submitted to the local government, but uses no special discretion or judgment in reaching a decision. <https://www.hcd.ca.gov/policy-research/docs/sb-35-guidelines-update-final.pdf>
- 11 <https://findhoalaw.com/wp-content/uploads/2021/09/Atikins-SB-9-Letter.pdf>
- 12 https://en.wikipedia.org/wiki/Rancho_Santa_Fe,_California
- 13 <http://ohp.parks.ca.gov/ListedResources/Detail/982>
- 14 <https://laist.com/news/housing-homelessness/understanding-homelessness-city-los-angeles>
- 15 <https://planning.lacity.org/odocument/b3901e7e-b25a-4713-87be-d0c7d46e85eb/SB%209%20Urban%20Lot%20Split%20Specialized%20Requirements.pdf>
- 16 https://planning.lacity.org/ordinances/docs/smalllot/CodeAmendment/Rev_FAQ.pdf
- 17 <https://planning.lacity.org/odocument/f06e11a5-9cd5-4976-94e5-492c319a1b36/Parcel%20Map%204%20or%20Fewer%20Parcels%20-%20Instructions%20and%20Checklist%20for%20Filing%20Preliminary%20Parcel%20Maps.pdf>
- 18 <https://sfplanning.org/resource/senate-bill-9-sb-9-objective-design-standards>



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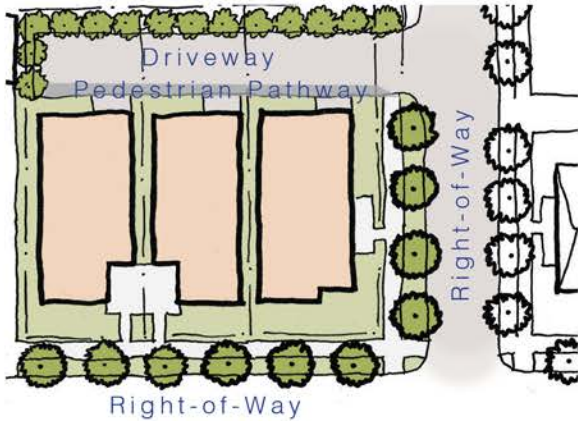
See following pages for excerpts from "Small Lot Design Standards," SB-9 Objective Design Standards," and "Two-Unit Residential Development."

Small Lot Design Standards

ILLUSTRATED GUIDE FOR SMALL LOT DESIGN STANDARDS

A. BUILDING DESIGN

1. DWELLING ORIENTATION: POSSIBLE CONFIGURATIONS

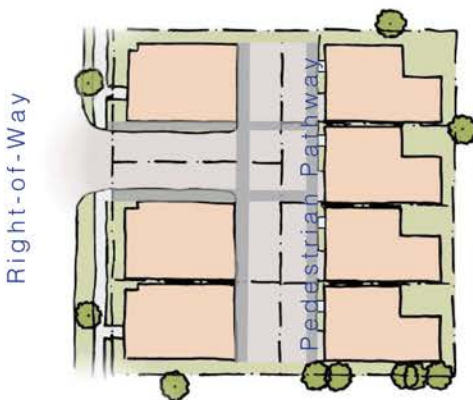


When rear driveways are used:

The right-of-way should give the appearance of an entry. Primary entryways are oriented toward and have direct access to the right-of-way.



When rear T-driveways are used all units should have direct access to the public sidewalk.



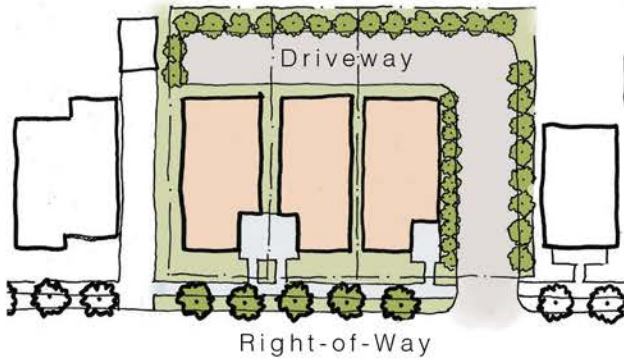
This alternative T-driveway configuration separates rear units from the right-of-way.

The primary entranceways for the rear units have direct access to the pedestrian pathway (as described in section B.1)

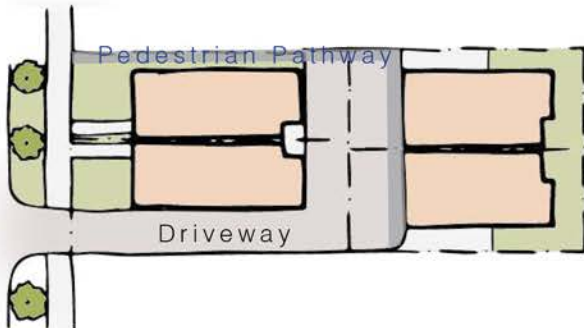
Small Lot Design Standards

A. BUILDING DESIGN

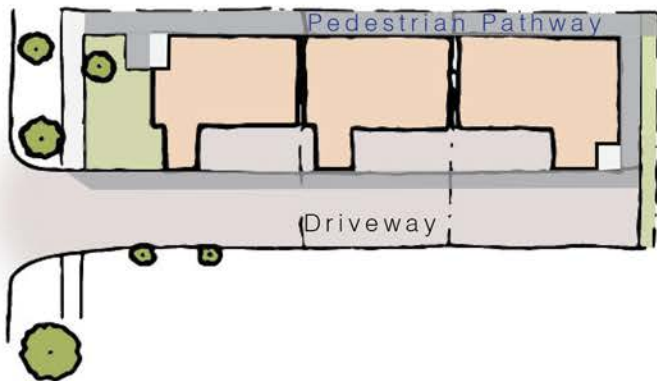
1. DWELLING ORIENTATION: POSSIBLE CONFIGURATIONS (continued)



When rear L-driveways are used, all units front directly onto the public right-of-way.



When an alternate L-driveway is used, all rear units that do not front the right-of way should have access to the pedestrian pathways that connect to the right-of way (as described in Section B.1).



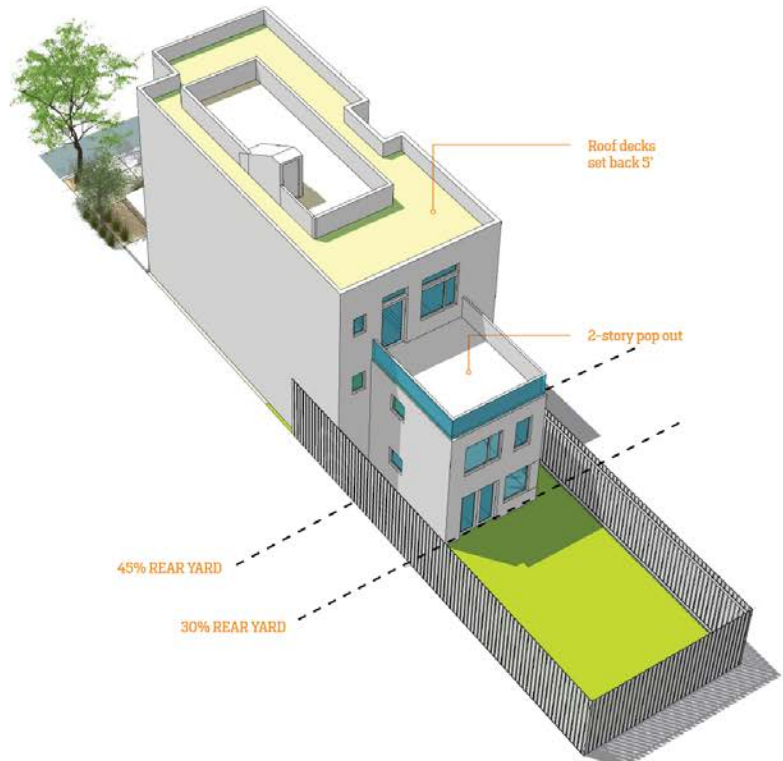
When side access driveways are used, the primary entranceway of the front home should be accessible from the right-of-way or a pedestrian pathway that is directly connected to the right-of-way.

Interior homes should be accessible from both the driveway and a private walkway directly connected to the right-of-way at the front of the homes.

Sl.1**MASSING: SINGLE LOT
SCULPT BUILDING BETWEEN THE 45% AND 30% REAR YARD**

The massing described easily accommodates a building volume that can provide two or three dwelling units with ample open space while maintaining reasonable access to light and mid-block open space to adjacent residents.

- » Limit the 3-story volume to 45% rear yard line. A two story pop-out with 5' side setbacks may extend to the 30% rear yard line. Rear yard shall be at un-structured grade to allow for in ground planting.

**S2.2****LIMIT THE HEIGHT OF THE REAR BUILDING TO 20'**

Limiting the massing of rear buildings preserves light for the open space of the proposed new lots and the adjoining neighbors.

- » The rear building height shall be limited to 20'.
- » No roof parapets higher than 6" are allowed.
- » Dormers are not allowed on rear buildings above the 20' height limit.



Limiting rear buildings to 20' in height minimizes impacts to neighbors.



Bird's eye view illustrating the primary lot split massing standards.



WHAT ARE MY OPTIONS FOR URBAN LOT SPLIT?

Figure A – Lot Access

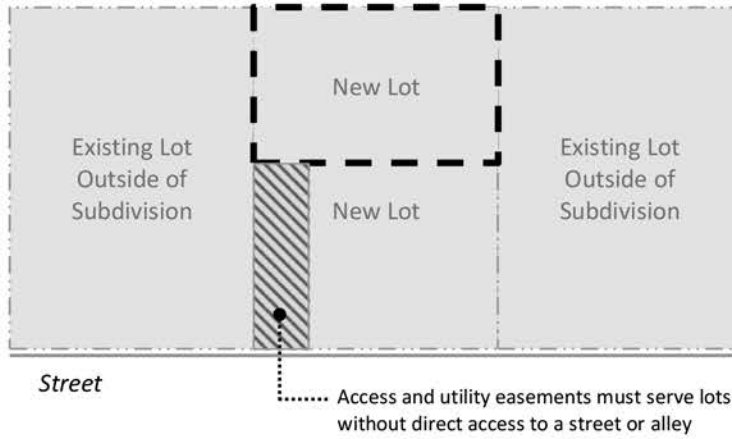


Figure B – One or Two Units

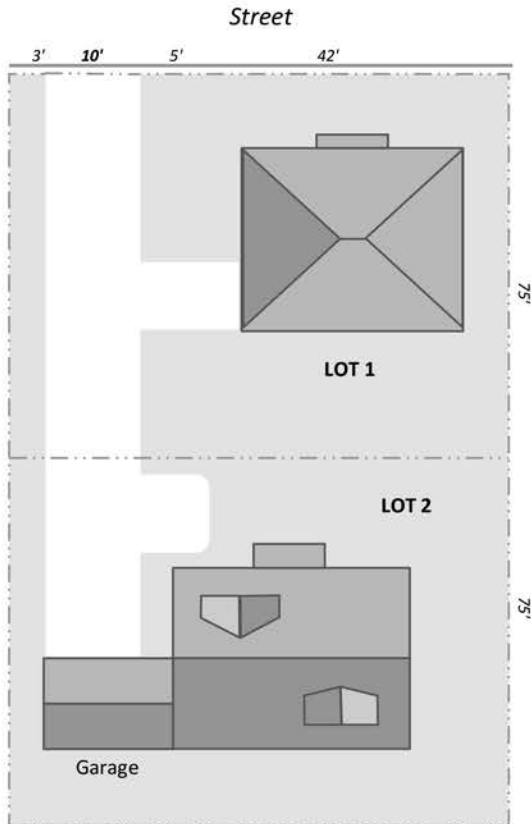


Figure C – Three or More Units

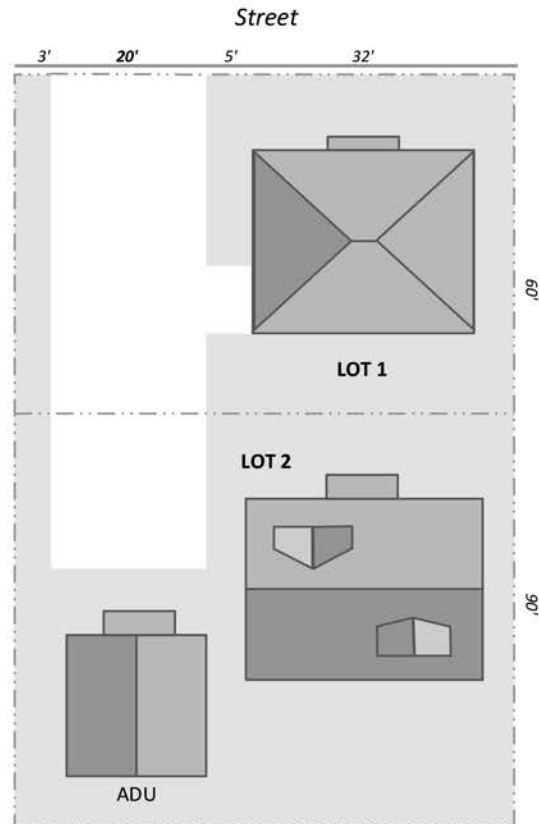


Figure D – Direct Access

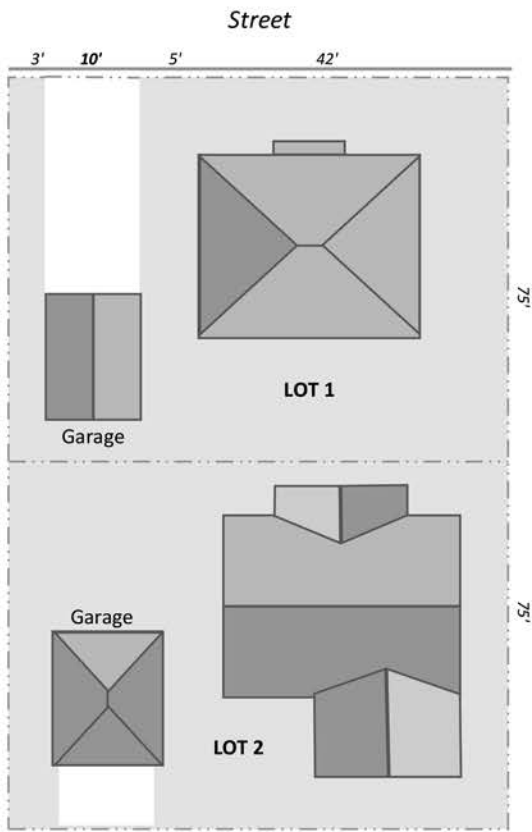


Figure E – Pedestrian Access Only

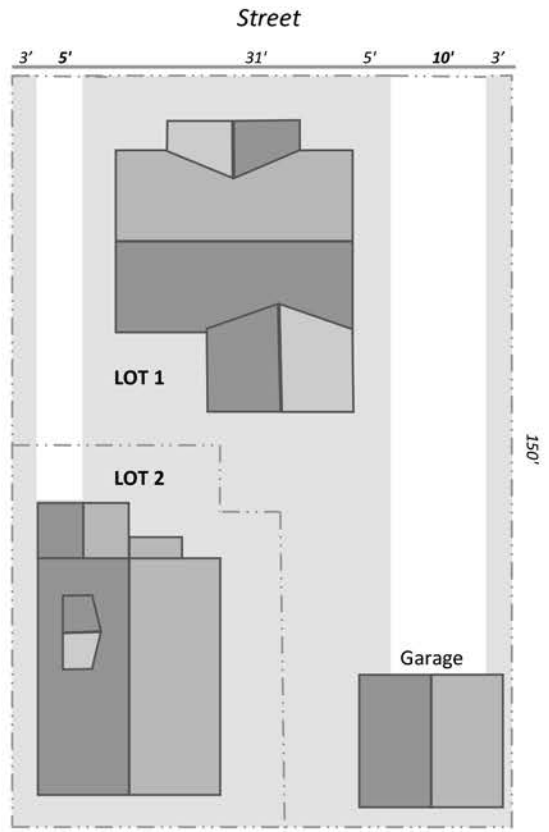
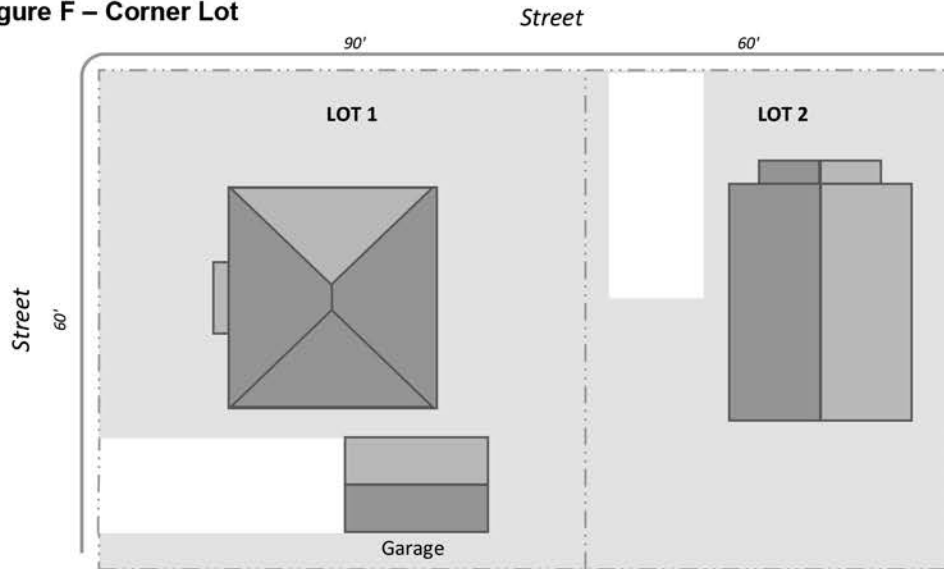


Figure F – Corner Lot



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A Great Day Surveying

By Tim Mack, LSIT

In March 2020, a local licensed land surveyor contacted me requesting my assistance in researching a property survey located in the Southwest quarter of Section 29, Township 27 South, Range 17 East, Mount Diablo Meridian. During my records search, I discovered that there were no records of surveys found for that section of land, but did find a record of survey that had one section corner in common with the section we planned to survey – this being the Northwest corner of Section 31. In that survey, dated 1940, the surveyor found an inscribed 3" X 3" redwood stake within a mound of rocks and set a 2" iron pipe with a brass cap marked for the corner. See Figure 1.

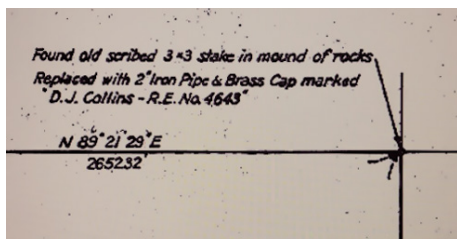


Figure 1
Record of Survey Book 4, Page 105

Based on this absence of information, I met with the Surveyor and communicated that I needed to order the government field notes and maps for Section 29. After receiving and reviewing the original notes, written by J.M. Gore and amended by C.A. Ensign, I familiarized myself with the project and confirmed that our questionable section had had no recorded surveys since 1896 – 124 years ago! To even attempt to retrace such an old survey, we needed some estimate of the coordinates of the Southwest section corner and additionally, at a minimum, the West, North, East, and South ¼ corners. These estimates would allow us to calculate the Center of Section as well as the property to be located and monumentation set.

Further discussions with the Surveyor concluded with the dismal possibility of having no luck finding the corners needed to perform the survey; possibly requiring even more time to expand the search for evidence surviving from 1896. See Figure 2.

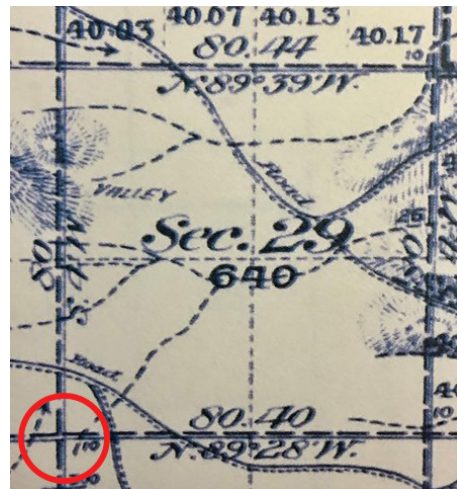


Figure 2
Government Plat
Red indicates corner recovered in 1940 retracement of Section 31

On March 30, we loaded up the truck at 8:00 AM and headed out to meet with the client at 9:00 AM. The Surveyor drove with me in the passenger seat and his son in the back seat. The location of this section had been cattle and sheep country for a long time and the client planned to take us to the property, which included traveling through a cattle gate and down dusty, hilly dirt roads and not a tree in sight. About three miles off the main black-top road we decided to set up the Global Positioning System (GPS) base on top of a hill as the section we were working included flat land and rolling hills. We had calculated initial search positions of the corners needed using Google Earth and a program called Earthpoint. We used these calculated positions to get close enough to

our objective to perform a visual search. The weather was perfect for surveying – blue skies with fluffy white clouds and the temperature around 68 degrees. Because this area can get quite hot in the summertime, 110 degrees plus, we were thankful for the cool March weather.

I suggested to the Surveyor that we look for the iron pipe at the southwest corner (last recovered in 1940) of the section first. We navigated with the GPS rover and drove to where we thought it should be. As we got closer, I could see the pipe sticking up in a mound of stones in front of the truck. We looked around a bit to get a feel for the terrain and measured its position. See Figure 3.



Figure 3
Southwest Section 29 Corner

Then we were off to the West ¼ corner. Navigating again, I saw as we neared, a stone sticking up about 5" from the ground surface with no other stones visible. The field notes stated the marked stone was inscribed with "¼" on the west face and I could see what clearly appeared to be a manmade mark on the stone. We dug down on the west side of the stone, brushed it a bit, and the inscription came to light. We had found an original ¼ corner! We again located its position with the GPS rover. See Figure 4.

continued on page 24

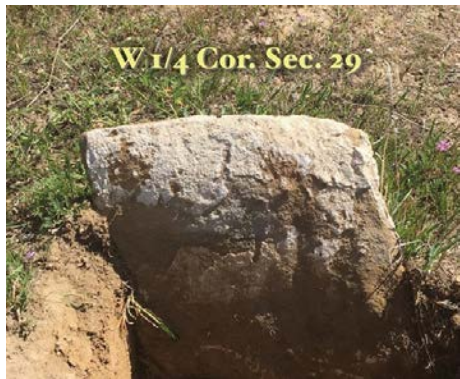


Figure 4

As we continued to navigate to the north ¼ corner, we found several stones scattered about, all near a fence corner, with fences running north and east at the corner point. I quickly spotted the “¼” inscribed on the north side of a stone just as the field notes stated. Locating and documenting the position, we were feeling mighty good about our finds: two government stones and an iron pipe with brass cap! See Figure 5.



Figure 5

At this time, we decided to search for the east ¼ corner. Traveling along the fence line for about ¼ mile, we turned right to cross a ravine. Then navigating again as we neared the position, another stone was set upright with a wooden 4” X 4” post nearby. Examining the stone, we found that it too was inscribed with “¼” on the west face of the stone just as the field notes had described. With no apparent records in the government field notes, the weathered 4” X 4” wood post may have been placed by some unknown later survey. Again, we documented the position with the GPS rover. We were on a roll! See Figure 6.



Figure 6

We then headed to the south ¼ corner. As we rolled into this area, I spotted a worn redwood 3” X 3” post with stones scattered about. The field notes described “a stone,” but we did not see any large, fixed stones. I dug around a little and found a possible stone buried flush with the ground. At this point in time, we measured the 3” X 3” redwood post. But, being not of record, it made me uneasy. We didn’t like what we saw and wondered why a 3” X 3” post not of record seemingly replaced a stone. We thought our luck had run out. See Figure 7.



Figure 7

Not having any better ideas, I suggested we look for the Southeast corner of the section. Upon arriving in the vicinity, what do we see sticking up about 4” from the ground, but another wooden 4” X 4” post, very similar to the one seen previously at the east ¼ corner. No record of this 4” X 4” post existed either, so we looked around more closely for a stone. Just South of the 4” X 4” there appeared to be the tip of a stone sticking out of the ground about 2” above the surface. Seeing a 2” X 4” post sticking up about 9” from the ground, I paced off about a hundred feet to the southwest but could make “no rhyme nor reason” for that

position. By the time I returned to the site, the Surveyor had excavated around the stone. Just under the surface, he found the corner marked “R19E” as per the field notes. We located and documented the position of the stone and the 4” X 4” wooden post, again using RTK GPS. See Figure 8.



Figure 8

Encouraged by our latest discovery, we headed back to the south ¼ corner to look around again. We calculated the position of the 3” X 3” redwood post and found it to be online and almost midway between the brass cap and the 4” X 4” post. With our new calculations, we estimated the stone to lie just south of the 3” X 3” post. So, we searched south of the 3” X 3” where a stone perfectly flush with the ground was located. The stone was set firmly, so I started digging around it to determine its size. Even so, I could find no markings. But stepping back, I noticed something odd - the stone looked as if it had been sheared clean off at ground level. I started to look around for a stone similar in color but didn’t see anything obvious. I did observe several stones scattered around the area. As I continued searching, I noticed a stone lying loose on the ground about 8’ south of the sheared-off stone, but of a different color – lighter, bleached pale with the sun! I rolled the loose stone over and I could vividly see the inscription of “¼” on it. Breathless, I picked it up and placed it on the sheared-off stone. It was a match! We repaired the stone, measured its restored position, and placed a railroad spike 4” down on the north side of this stone. See Figure 9.

continued on page 25



Figure 9

At this point we ended the surveying day, packed up the GPS unit, and headed home. What a day! We were feeling very accomplished after recovering five government stones from 1896 and an iron pipe with a brass cap from 1940!

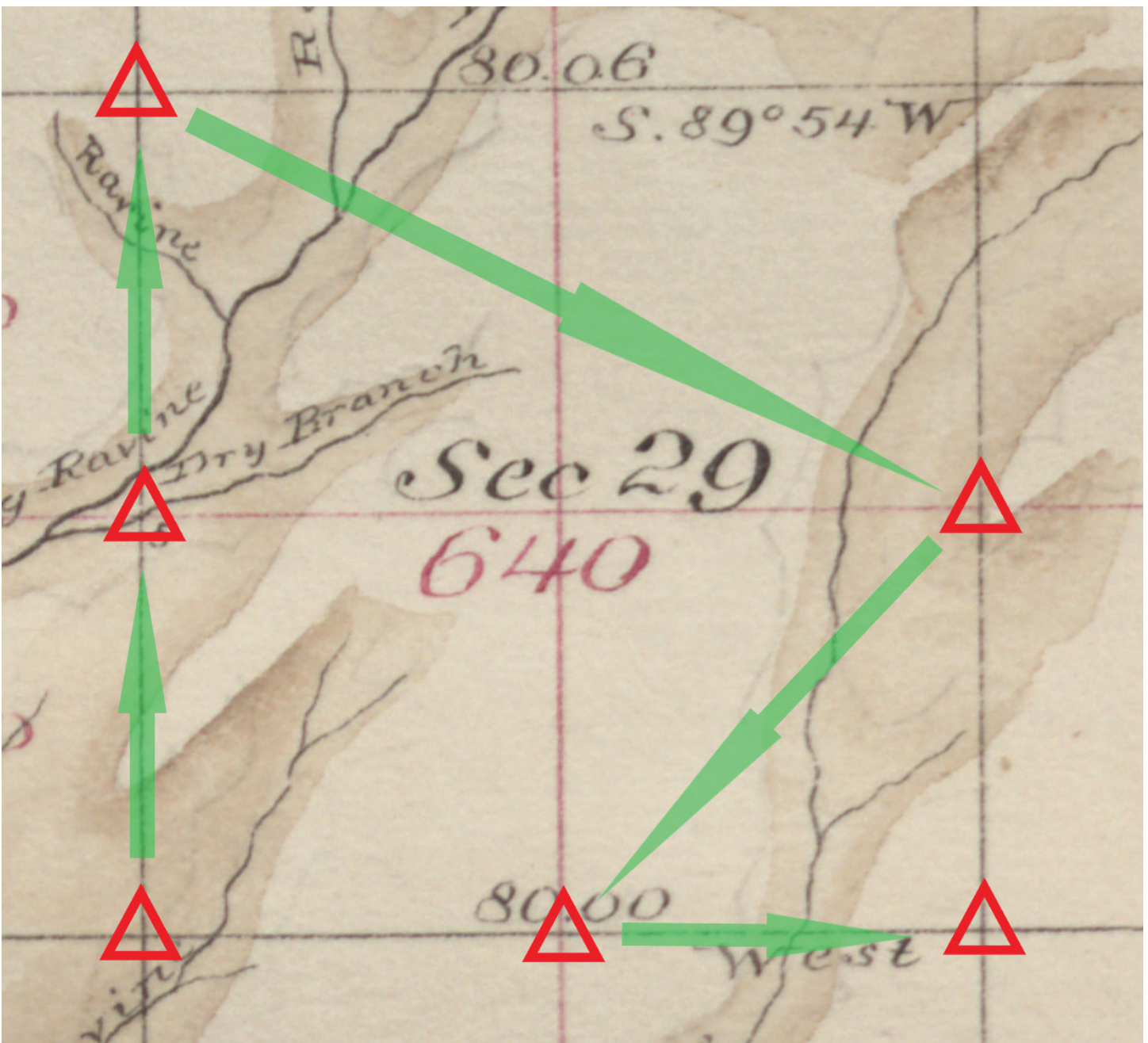
We made it home by 4:00 PM. With the data acquired from our successful surveying day, I calculated the property corner positions to be set by the surveyor in the southwest quarter. As I began drafting the record of survey the next day and the licensed Surveyor went out to set his property corners, I let my mind

wander back to 1896 and marveled again at finding those historic chiseled stones. It truly had been a great day surveying! 📍

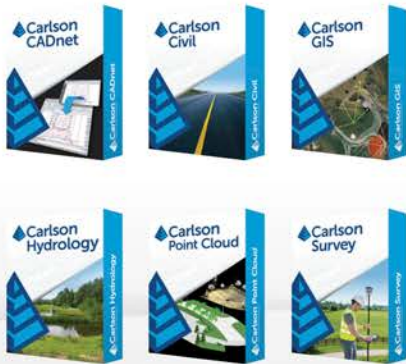


Tim Mack, LSIT
treasures.

Tim Mack started his surveying career in 1973 with a city municipality and after 44 years, retired from private practice in 2017. Does a surveyor ever retire? Boundary remains his passion. He still enjoys searching for those little



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GPS on Benchmarks: Spring 2022 Update

Steven J. Martin

Galen Scott, NGS GPSONBM Team Lead in his March GPS on Benchmarks update, gave a shout out to Philip Melcher and our article in the March issue of *xyHt magazine*: <https://www.xyht.com/gnsslocation-tech/citizen-geodesist/>

"I am pleased to report the release of another great article in *xyHt*, this time by California GPSONBM evangelist Steven J. Martin. Steven's article, "Citizen Geodesist: A GPS on Bench Marks Odyssey," features an interview with Philip Melcher of Provost & Pritchard Consulting Group in Visalia, California, who has submitted more than 650 GPSONBM observations over the past few years. Philip provides an excellent social, historical, and technical context for his GPSONBM enthusiasm and his love of surveying. In addition, the article provides practical guidance on how to go about getting into the GPSONBM game. Here's a big shout out to these

two California surveyors who are both going above and beyond to help us all prepare for the Modernized NSRS to come. Thanks, fellas!"

Recognizing Philip's job well done is a pleasure and a breath of fresh air. There is still much to be done in California and Philip's example should inspire all of us. Several other organizations have stepped up and are contributing to the GPS on Benchmarks program including the County of San Diego, Sacramento County, Los Angeles County, the Central Coast Chapter of CLSA, San Francisco Chapter of CLSA, the City of San Diego, CALTRANS District 11, and others.

NGS extended the deadline for submitting GPS on Benchmark data that will be used to develop the NAVD88 to NAPGD2022 translation to December 31st 2022.

As of this writing, California is at 31% of the goal of 1 observed benchmark in a

10km hexagon where the NGS database indicates benchmarks exist. There are also 2km goals for better definition in urban and mountainous areas and we are at 37% of achieving that goal. It is going to take all of us working together to make the goal.

Wisconsin has already completed 96% of its 10km goals and 100% of the 2km goals. They got on board early and a dedicated effort by their DOT and others made it happen. Much of their success revolves around the DOT survey crews setting up extra GPS receivers on benchmarks on their way to their regular job for the day. This approach may not work in some areas, but it illustrates some creative thinking on how to achieve goals.

How can you build upon the past geodetic surveys in California to prepare for the future?

continued on page 32



BM ID-T1310 looking South



BM ID-N1252 looking East



SD GPS31 RM1



Benchmarks – continued from page 31



BM ID-H_82 looking West



F 308 RESET disk

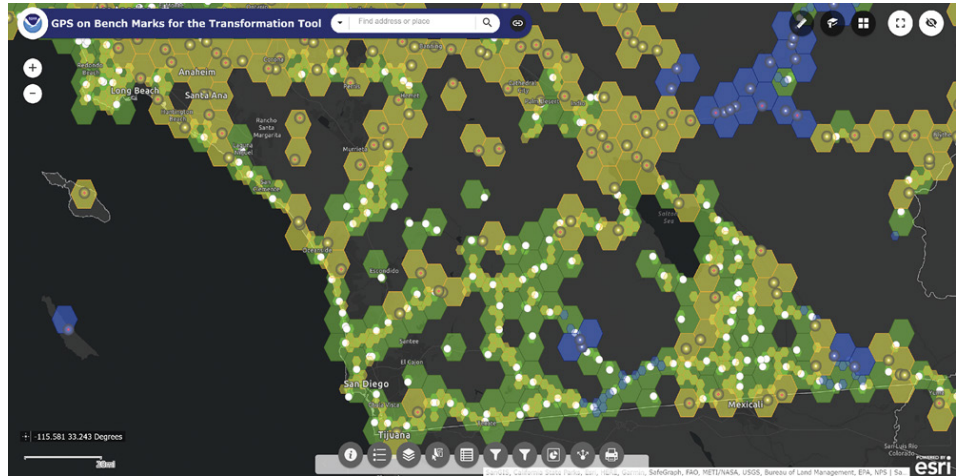
Screen captures of the NGS GPSonBMs web map. Note: Green Hexagons are completed 10km goals. Yellow Hexagons are incomplete Priority A 10km goals and Blue Hexagon are incomplete Priority B goals. White dots are completed BM. Yellow dots are Priority A BMs (2 observations needed), Yellow dot with red center is a Priority A BM with 1 more observation required. Blue dots are Priority B BMs.

View the live map at: <https://geodesy.noaa.gov/GPSonBM/index.shtml>

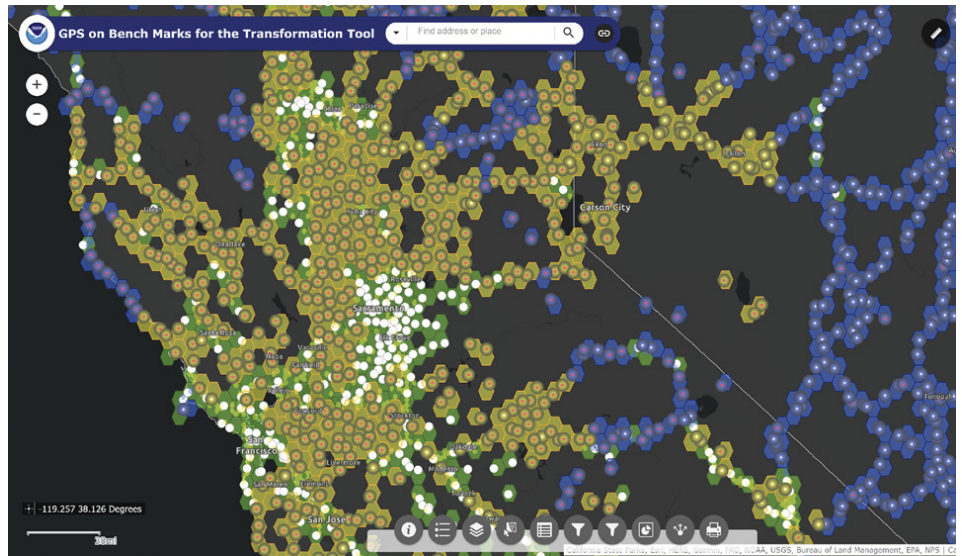


Steven J. Martin

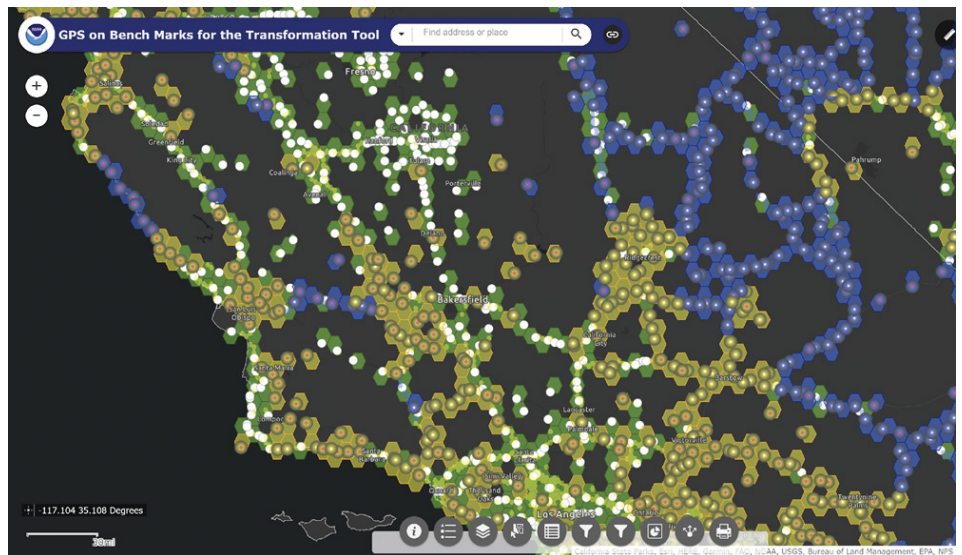
Steven J. Martin retired in 2020 after over 34 years with several utility and public works agencies, including most recently as the Survey Supervisor for the East Bay Municipal Utility District headquartered in Oakland, CA. He was a Director for CLSA for over 15 years, a past Chairman of the CLSA Education Foundation, a past member of the CSRC Executive Committee, and the past CLSA-CSRC Liaison.



NGS GPS on Benchmarks web map showing San Diego County slowly turning green.



Screenshot of the greater Bay Area showing a good participation in Sacramento County and a lot of Priority A BMS with just one more observation outstanding.



Zoomed in to Central California reflecting the work of the Central Coast Chapter of CLSA, Los Angeles County, and Philip Melcher of Provost & Pritchard.



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CA YSN

CALIFORNIA YOUNG SURVEYORS NETWORK

Sarah Walker



We are pleased to announce the establishment of the California Young Surveyors Network (CA YSN). The Young Surveyors Network Committee was created at the CLSA Board of Directors meeting in May of 2021. California is one among the 46 states that have formed a YSN under the guidance from the NSPS Young Surveyors Network. A main focus of the group has been on networking and getting to know more people. This helps to expand our personal network, professional network and continues to entice people to be involved in the movement as we believe this is a strong motivator for many.

You may be asking, what is a “Young Surveyor?” Membership is defined through the NSPS Young Surveyors Network bylaws as individuals of surveying 35 years or younger, or a current student of a Land Surveying/Geomatics program, or within 10 years of graduation from a course of study in land surveying or a related field. Whether you are a field crew chief, CAD technician, LSIT, or PLS- all are welcome; however, our focus is to provide support for those individuals that meet the membership definition.

How did the Young Surveyors movement get started? The NSPS Young Surveyors Network is modeled after the International Federation of Surveyors (FIG) Young Surveyors Network. Our aim is to establish a national network of Young Surveyors within NSPS and its affiliate organizations. The FIG Young Surveyors Network was started by a working group created in 2006 at the Munich FIG Congress. The reason that this working group was started in the first place was to bring more young surveyors

into the network in FIG and because of the age structure within the surveying community. In 2009, the working group was upgraded to a Young Surveyors Network and has been building ever since.

This is an exciting opportunity for young surveyors to collaborate, connect, and support the wonderful profession they are embarking upon. The group is composed of Young Surveyors that have joined together with common goals. These goals define the mission of the California YSN and are as follows:

EDUCATE

Empower young surveyors, together with CLSA and NSPS, to promote and educate the surveying profession and the public.

CONNECT

Empower young surveyors, together with CLSA and NSPS, to create a community where ideas and experiences can be shared to contribute to the advancement of the profession.

INVOLVE

Empower young surveyors, together with CLSA and NSPS, to shape the future of surveying through involvement in professional organizations.

California Young Surveyors Summer Campout

The CA YSN held a summer camping trip on June 17-19th at Mount Diablo State Park. A group campsite was reserved and a private tour of the Mount Diablo base and meridian



Initial Point was held by PLS John Pettley, a member of the Mount Diablo Surveyors Historical Society. This event was free to all Young Surveyors, members of the group simply paid with their presence. We had a blast pitching our tents, enjoying the views, meeting other young surveyors and learning more about Land Surveying as a profession! We are excited to hold our next event.

This was helpful in understanding the footsteps that modern surveyors are following.

We Want You!

We are looking to expand our group! If you, or someone you know is interested, please contact the YSN Coordinator, Sarah Walker by e-mail to info@caysn.org.

Stay Connected to the California Young Surveyors Group!

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Monterey Bay Chapter CLSA Visits the Haselbach Survey Museum

Lynn A. Kovach



Hans Haselbach instructing the crowd in the use of a Radial Arm "Spider" for manual aerial triangulation control

After months of virtual meetings, lockdowns and quarantines, the Monterey Bay Chapter of the CLSA decided it was safe enough to have a non-Zoom meeting outside. In July of 2021, the chapter requested to hold their first meeting in person at the Haselbach Survey Museum in Carmel Valley.

As evidenced by the attendance of over 25 people – members, students from CSUMB, and friends of surveying – this was sufficient incentive to overcome pandemic inertia. A fine time was enjoyed by all who attended. Social distancing was observed. The chapter supplied free pizza and beverages. Raffle prizes were generously donated by Leica Geosystems.



Monterey Bay CLSA Chapter meeting in Carmel Valley in July 2021



Kathy Nitayangkul and Tim Martin



Jeff and his father Stan Nielsen (LS 3233) with Daniel Speziale (Leica Geosystem)

continued on page 36



Wild instrument display



Wild instrument display (another view)

The museum was opened prior to the meeting for everyone to enjoy and ask questions of the proprietor, Hans Haselbach. His many years of experience in the surveying equipment business in the San Francisco Bay area led to the collecting of many types of older instruments and associated surveying paraphernalia. The survey museum specializes in Wild instruments, but there is a wide variety of other brands, some common (Gurley) and some obscure (Stackpole). The collection consists of over 50 instruments with dates of manufacture from 1850 to 2000. There are also hand-painted stadia rods from Cal Berkeley, a mountain transit, early calculators, subtense bars, and many other intriguing items.



Lynn A. Kovach, PLS 5321
Lynn@PolarisLandSurveying.net

Lynn A. Kovach, PLS



Hans Haselbach with Greg Jones, former Santa Cruz County Surveyor

The Chapter was also treated to a quiz to identify certain arcane pieces of older survey equipment, including a Rhodes Arc, a Dip Needle (Aguabox), and a survey spad. So, it was educational as well as entertaining! ☺

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The YouTube Program “The Ten Minute Surveyor” Sponsored by the Orange County Chapter of the California Land Surveyors’ Association



Twenty questions with David Woolley about The Ten Minute Land Surveyor

How did the idea of the Ten Minute Surveyor get started?

Over the years, the Orange County Chapter, a practice-based chapter, has been discussing various methods of attracting people to the California Land Surveyors’ Association. Additionally, the chapter wants to provide value for their members. We have had the channel since 2016, but had never posted any content. The Orange County Executive Committee was brainstorming as to the best ways to reach our members during COVID, provide value for their membership, and access the next generation. One idea led to another, and I decided to build a studio. The timing was driven by the fact that I had committed to speak at the Fresno conference and didn’t realize until the week before that we had to submit recorded programs. As we all know, the Internet is forever, and I didn’t want to end up on an Internet fail video.

Why “The Ten Minute Surveyor”?

Who doesn’t have ten minutes for a video? Based on my own viewing habits, people are only willing to dedicate a limited amount of time to content.

How often are new episodes published?

New episodes are published every other Tuesday. We have recently published two episodes on the same day – episodes 21 and 22 on the lost art of chaining. Most topics are challenging to limit to ten minutes. The result is a topic series.

How are the video topics chosen?

Generally, the content consists of whatever is on my mind on the day I choose to record. For instance, I was walking in downtown Long Beach recently and noticed a surveyor had liberally, quite foolishly, painted on the sidewalk. This prompted Episode 20 “The Paint IQ Test.”

I also keep an ongoing list of topics. Currently, I have planned a series on land surveyor liability, the NSPS Certified Survey Technician program, mapping encroachments, being an expert witness, filing BPELSG complaints, paying prevailing wage, the Local 12 unfunded pension liability and the list goes on.

Where are the videos recorded?

We built a studio in a warehouse across the alley from my office. The space was an empty windowless room sandwiched between another business and warehouse.



Do you have a background in audio and video recording?

Absolutely not [laughing]. In fact, I have never recorded any audio or video and more importantly, *I have never edited any audio or video.* Fortunately, Bryan Mundia, an Orange County Chapter member and current chapter vice-president, worked for Ryan Seacrest at a radio station for several years and set up the studio audio and video in less than one day.

continued on page 38



How much did it cost to build a studio?

Less than \$2,500.

What has been the biggest technical challenge?

Editing. I read somewhere that professional editors budget one hour for every minute of video production. Generally, I can edit a video in less than two hours. I know a professional editor would spot my marginal talent, but I think the casual viewer will appreciate the efforts. The production quality is getting better with each episode.

How did you learn to edit videos?

My nine-year old son casually expressed an interest in video editing. I convinced him to take a kid’s class on video editing – while I watched over his shoulder. It became an eight-week father and son project. The 6:00am Saturday classes were online and taught by a woman in England. The balance of the experience came from watching YouTube videos.

Sidenote, after taking the class we wanted to experiment with recording sound and video outside – beyond our stop motion with green plastic army soldiers. We recorded our road trip to Utah and hiking The Narrows – miking up with remote audio to get quality sound when distanced from the camera

while hiking in ankle-high to waist-deep water that was 34 degrees and flowing at 130 cubic feet per second in early April.



How long does it take to record a video?

Each video is a little different. It usually takes a few takes to get the content. It is easier and quicker to re-record than to edit the video. I am usually in the studio for a couple of hours. The average final video is

approximately 30 minutes long and I strive to cut it to ten minutes.

Hot tip, do not forget to hit the record button [laughing]. Some of my best work was never recorded.

Have you had any feedback on the videos?

Amazingly, I’ve received a couple of positive e-mails a week concerning the videos. Folks usually thank me for the content, offer topic ideas or occasionally, offer some constructive criticism. I welcome the input. I find it interesting which topics generate the most discussion. I was surprised by the feedback on the most recent videos on chaining. Several people from my generation called to reminisce about shared experiences in chaining and retelling stories from yesteryear. Those videos seem to have touched folks in a positive way.

It sounds like you are open to content suggestions, is that correct?

Yes, completely open to topic suggestions. In fact, we will make the studio available to anyone that wants to record their own videos. We will record and edit someone else’s program. We can change the studio background to their liking and provide technical support.

What is next for the Orange County Chapter and their YouTube channel?

We would like to start conducting and recording interviews on Zoom and/or in the studio.

Also, separate from the Ten Minute Surveyor, I am currently assembling a training program that will be a mix of live and recorded video.



Dave D. Woolley

Thank you for the opportunity to discuss the Orange County Chapter’s Ten Minute Surveyor program. Long live the Orange County Chapter. 🍷



Software Tips and Tricks

— part 4

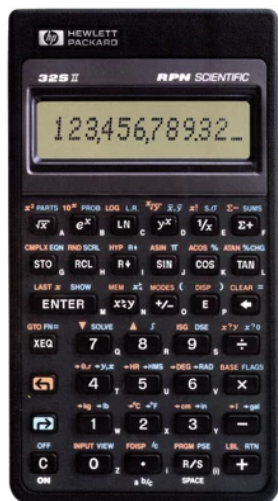
By Joseph Waltz, PLS

CALCULATOR SOFTWARE AND PROGRAMS

This iteration of Software Tips and Tricks is dedicated to all of you students and workers out there considering programming your calculator for one of the licensing tests, including FS, PS, or the state PLS.

DISCLAIMER: CHECK THE CALCULATOR POLICY YOURSELF TO ENSURE YOU CAN STILL USE THESE. ALL BOARD AND NCEES POLICIES ARE SUBJECT TO CHANGE.

First things first. HP is often chosen for this because of its programmability as well as its popularity for engineering and surveying students due to the Reverse Polish Notation (RPN) style of calculation.



RPN is popular in engineering and surveying circles due to its ease of use for long, complex, (often parenthetical) calculations. Instead of carefully inputting braces, brackets, and parentheses while typing in a long equation (of which surveying and engineering classes have many), you can just work "Inside -> Out" and come up with the answer.

They also use the concept of a "Stack," which is sort of a filing system for your inputs. As you push numbers onto the stack, they move up into the memory. Then as you operate on them they "move down" and are ready for your next mathematical operation.

To do RPN: You have to think a bit differently. Instead of seeing an addition problem (2+2) as "two plus two," you must consider: What are the operands, and what is the operator? On a casio or TI calculator you type "2+2=" ... and it returns the result. However HP calculators don't have an equal key. So on an HP calculator with RPN mode enabled, you type: "2, enter, 2, enter, plus." So you enter the operands into the stack then act upon them with an operator.

Same with angular calculations. To get the latitude and departures of a traverse leg, you push the distance shot up into the stack, then act on the angle with sin (or cos), then multiply. Easy as pie. Trust me, it sounds harder than it is. With practice you can do very complex calcs like geodetic

grid to ground or vertical calculator solutions quickly and easily. This saves you time in the tests, as well as simplifies the input to help avoid errors in the calculation.

HP 33s programs by Prof. Melbard:

The HP 33s has been discontinued by HP (2007), so they have gotten pretty expensive as they're "rare" now. However, maybe you have one laying around the office or found a cheap one somewhere. They were fine calculators, and Professor Melbard of Milwaukee Area Technical College has written a very solid series of programs for them totally free for personal use. They are available at: <http://melbard.com/>. I had used them in the past during Survey classes and on my FS test and they helped me tremendously. They do have to be hand-entered, and that takes time. However the act of entering in the programs really opens your eyes to



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Tips and Tricks – continued from page 39

how these things work and helps you understand what's going on under the hood of the program itself. It also shows how you can really use the power of these little machines to do great stuff if you can break a problem down to an algorithm.

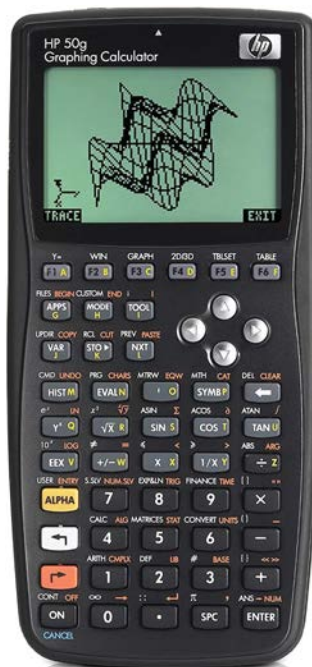
HP 35 programs by Software by D'zign:

Software by D'zign had an excellent series of programs for the HP 35s, the successor to the HP 33s above. There are various companies that will sell you a fully programmed HP35s with the Software by D'zign software installed, but the original book of the programs is still for sale. This company is currently in transition of ownership, and I understand the new owners can be contacted at: dzignsurveyingsolutions@gmail.com for more information. These programs are very, very solid, and probably the most popular for the FS test.

HP 50g Cogo+ by SGSS:

Simple Geospatial Solutions, out of Canada, have a wonderful set of programs for the HP 50g and the HP Prime. From what I recall, the prime may not be allowed on professional exams due to its communication port, but I could be mistaken. I leave that question as an exercise for the reader.

The HP 50g is now out of production but there are still tons floating out there for sale. This is the calculator I have on my desk at work with this "Cogo+" software loaded. I use it to check closure, do quick traverses, and solve hz and vertical curves when I don't feel like firing up a full Civil 3d drawing. It is very well done with a simple interface and full cogo functionality.



HPCalc.org

If you enjoy writing your own programs, or using others', *HPCalc.org* is a great resource to learn how to program the different HP calculators, and a place to download what others have written. If a survey program can be broken down into its mathematical components, it can be programmed into a calculator. And many of the problems have been ironed out before you, so take a look at what's available.

If you are preparing to take a test, I highly suggest using a programmed calculator as it cuts down on the time it takes to do a complex calculation. There are many options out there, so play around with some and see what works best for you! Good luck and happy programming. ☺

Letters – continued from page 7

with a different basis of bearings for each deed. In such case the record of survey will need to have more than a simple statement, it will need a detailed explanation of how the basis of bearings of each deed relates to the basis of bearings of the current survey.

A different situation occurs when a surveyor finds only one corner monument from a deed or previous survey. This is one point control. In that case attempting to determine the basis of bearings for the deed or previous survey is imperative. The problem is, deeds do not normally identify the basis of bearings in the description. Similarly, older surveys often did not identify the basis of bearings. Determining a basis of bearings can be one of the most important and challenging decisions in this situation.

If the goal is to have future surveyors "follow in your footsteps," the filing of a record of survey map that describes your basis of bearings and how that basis relates to the deed or

previous survey is necessary. We all want our surveys to be retraced, don't we?

In closing, reading articles such as "Basis of Bearings, What is it Good For?" in the *California Surveyor* is important in order that land surveyors can evaluate how a surveyor's individual practice relates to the standard of practice for the profession. When I was working my way up the learning curve for land surveying I thought that I could see the top of the slope and when I reached that point I thought "I have this surveying stuff down." Soon I realized that I was only on a plateau and that the next learning curve was just ahead. After working my way up that slope to the top, I was on another plateau and eventually realized that there is no top, only a series of learning curves. Unless a surveyor practices only in an extremely narrow aspect of land surveying, there is always something else to learn. ☺

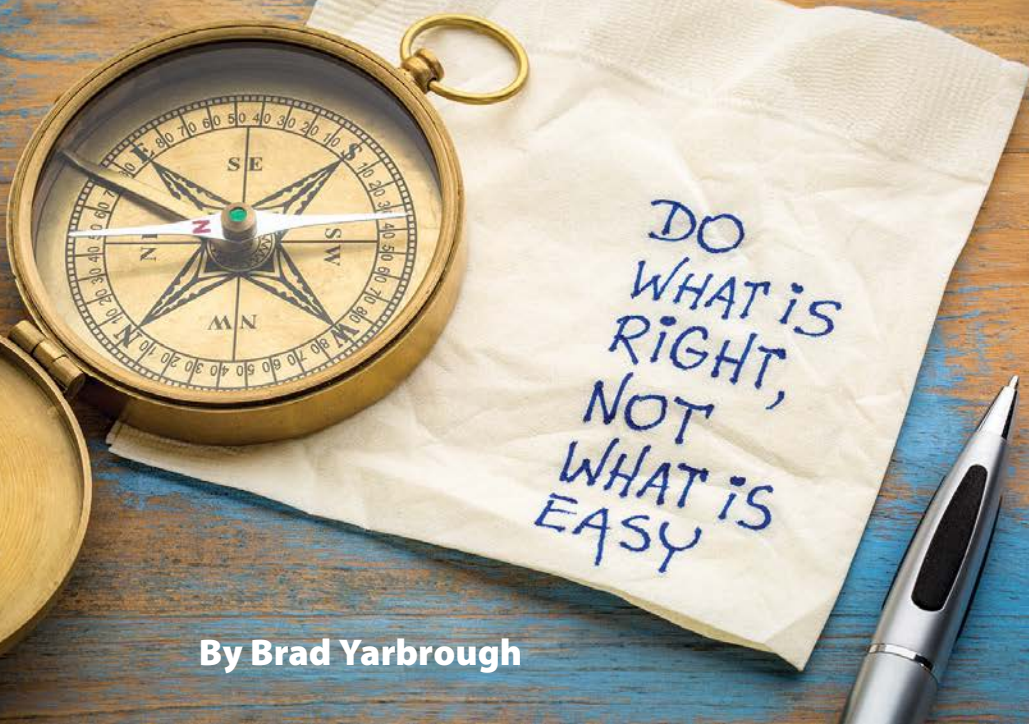
— Michael J. O'Hern LS 4829

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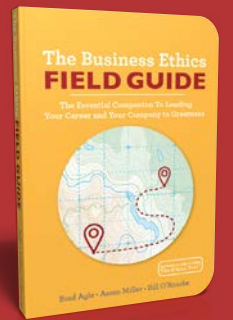
By Brad Yarbrough

The Business Ethics Field Guide - part 5

Challenge 4: Conflict of Interest

This series features 13 articles from Brad Agle, Aaron Miller and Bill O'Rourke, co-authors of *The Business Ethics Field Guide*. Each article focuses on a common work dilemma, while providing real life examples and insightful solutions. For more information, please refer to the cover story in the November/December 2018 issue of *Right of Way*.

Conflicts of interest are the most frequently encountered dilemma in the business world. The response often stated is, "That's just how business is done." While that might be true, it doesn't make it right. Only people with no interests are exempt from conflicts of interest, so it's important to realize that conflicts are inevitable. Additionally, it's also important to recognize when you have a conflict, then deal with it properly and swiftly.



WHAT QUALIFIES AS A CONFLICT OF INTEREST?

Sometimes, even intelligent people don't recognize a conflict. For example, the Corporate Medical Director named Dan, an MD, reported to me. He returned from his honeymoon and told me about two physicians that came to his wedding and each physician brought him a gift of \$2,000. These doctors were friends of Dan, but they were also contracted medical consultants to our company, receiving approximately \$85,000 each per year. I suggested to Dan that he had invited two suppliers to his wedding who each gave him a kickback. Dan insisted that the gifts were out of the goodness of their hearts. It took an hour of discussion for Dan to recognize the conflict and agree to return the money. A note on the wedding invitation would have avoided the problem: "Given our business relationship, gifts would be inappropriate. Hope to see you at the wedding."

A competing interest involving a personal benefit can be most tempting. A position

of influence often comes with opportunities for inappropriate gain but abusing power for your own benefit is the quickest way to ruin your reputation. For example, The Board of Directors of Enron suspended its conflict-of-interest rules to allow their CFO, Andrew Fastow, to establish and operate off-balance-sheet entities at a handsome profit. What were they thinking? Even though the Board and the company auditors said it was okay, we recognize that it was absolutely not okay. As a result, Mr. Fastow went to jail. From this example, we are reminded that Board directors cannot be rubber stamps for management. They must exercise independent judgment.

QUESTIONS TO CONSIDER WHEN A CONFLICT IS RECOGNIZED

Upon realizing that there is a conflict of interest at hand, what are the next steps? Try to focus on the following questions:

Are there clear rules?

As an example, some organizations have clear rules that spouses cannot work in the same department. When that situation arises, transfers are made to meet the mutual needs of the organization and the employee. Another tricky area is dealing with friendships, which are usually good in business. Friendships build rapport, trust and loyalty. However, close relationships also increase the risk of favoritism, backscratching and exclusion of others.

These potential dangers must be faced with openness, honesty and transparency. Gifting is another issue of noteworthy concern because it raises ethical issues. Most governments have a particularly clear rule about giving and receiving gifts: It's not allowed at all. Other companies have a less clear rule: Employees cannot give or receive a gift exceeding nominal value. But then it becomes a matter of deciding what is nominal. This requires an open discussion among supervisors, employees, peers and

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perhaps suppliers or customers. In cases such as this, it's important to clarify the rules in the discussion. Usually, extravagant gifts are easily recognized and shouldn't be given or received.

A good rule with regard to any gift is that if it feels wrong or looks wrong, avoid it. Discussing conflict situations in advance can help to avoid them, especially in cultures where exchanging gifts is the norm. Doing so can prevent embarrassment and may actually be appreciated.

Would your actions cause others to question your motives?

I observed the soon-to-retire President of a business move his corporate headquarters from the Northeast to Charlotte, NC. He explained that Charlotte had a globally connected airport and good weather for its employees. Coincidentally, he and his wife grew up in Charlotte, owned retirement property and had extended family in that area.

His true motives were indeed questioned. Prior to the decision, the President could have used relocation experts to conduct an objective analysis of the likely impact of the move to avoid the appearance of a subjective, selfish decision. You must prevent even the appearance of evil. This can be done through openness, honesty, transparency and by using your moral imagination, which is the ability to think outside the box and envision ways to be ethical and successful.

Who has the right to know the details and will disclosure cure the conflict?

When a conflict arises, transparency is usually appropriate. But who needs to know? The buyer of rubber commodities came to my office when I ran the Procurement Department. He said, "I have a conflict and you need to know about it." He told me his son landed a job with a supplier to our company. Furthermore, the son would be calling on him for business. He wanted me to be aware of the conflict and assured me that I could trust him to handle business with his son above board and objectively.

Was this disclosure good? Yes! Did it resolve the conflict? No! Our company was large enough that I could give this buyer a different responsibility and assign another procurement employee to purchase rubber. Disclosure is always good, but it doesn't always cure the conflict.

Can you remove yourself from the conflict?

It might be prudent for you to recuse yourself from a business transaction when you learn a relative or friend might be involved on the other side. Let others handle the dealings to escape a real conflict or even the optics of a potential conflict.

Can you be freed from your obligation?

In many cases, a party might be willing – or even grateful – to free you from your obligation if you explain why it puts you in an ethically difficult situation.

Is there a way to uphold both of your obligations?

By exercising moral imagination, it may be possible to resolve conflicts of interest and satisfy your obligations to both parties. Often, time is the issue and if a conflicted party can grant you more time to perform, both obligations can be met and sometimes with better outcomes.

COMMON CONFLICT OF INTEREST PITFALLS

First, people often don't notice a conflict of interest. To avoid this pitfall, it's important to develop an ethics consciousness and become familiar with the ethics guidelines that govern your work behavior.

Second, it may be tempting to run or hide from a recognized conflict. However, it's important to realize that eventually these situations will become apparent to others and it's best to face them early rather than allow things to worsen.

Third, there's a tendency to believe that we can be objective even when our self-interest is in play. No matter how pure your intent,

you can't outsmart the bias created by your own perceptions. Even if you could rise above the influences of a conflict, others would not believe you have done so.

Finally, though better to avoid them altogether, train yourself to recognize conflicts of interest and work through each openly, honestly and transparently. It will enhance your reputation for integrity as well as that of your organization. 🌟



Brad Yarbrough

Brad Yarbrough is the Owner and CEO of Pilgrim Land Services, a right of way services company in Oklahoma City. With over 35 years experience in oil and gas, he has clients nationwide and an extensive network of landmen and agents.

13 ETHICAL DILEMMAS

Upcoming articles in this series will take a closer look at each dilemma.

- 1 STANDING UP TO POWER**
Someone in power is asking you to do something unethical.
- 2 MADE A PROMISE**
Conflicting commitments force you to choose.
- 3 INTERVENTION**
You see something wrong. How do you proceed?
- 4 CONFLICTS OF INTEREST**
Multiple roles put you at cross purposes.
- 5 SUSPICIONS WITHOUT ENOUGH EVIDENCE**
You believe something is going on, but you're not sure.
- 6 PLAYING DIRTY**
Achieving justice but by doing something unethical.
- 7 SKIRTING THE RULES**
Bending a rule for a better outcome.
- 8 DISSEMBLANCE**
Misrepresenting the truth for better outcome.
- 9 LOYALTY**
Giving up ethical stance to protect valued relationship.
- 10 SACRIFICING PERSONAL VALUES**
Living ethically might put burden on others.
- 11 UNFAIR ADVANTAGE**
When opportunity exists to wield an unfair upper hand.
- 12 REPAIR**
When you are responsible for a mistake.
- 13 SHOWING MERCY**
You could grant forgiveness, but you don't know if you should.

Cal Poly Pomona Civil Engineering Geospatial Engineering Option

The Cal Poly Pomona Civil Engineering Geospatial Engineering option focuses on the surveying aspect. It is dual ABET accredited for PE and PLS. It covers surveying, land boundary laws, land descriptions, Geographic Information Systems (GIS), Global Navigation Satellite Systems (GNSS), remote sensing, photogrammetry, laser scanning and many other geospatial theories and technologies.

This knowledge is applied when mapping surfaces in land development, construction projects, and in resolving land disputes. Cal Poly Pomona's civil engineering program excels in teaching these valuable skills which aid students in their post graduate jobs. Additionally, our university's Geospatial Engineering option is one of only two ABET accredited bachelor programs across California. Allowing for dual licensure, Cal Poly Pomona's geospatial option opens up many career opportunities and makes a significant impact in the land surveying profession. The ultimate goal of Cal Poly Pomona's civil


engineering program is to prepare students to become licensed Civil Engineers (Professional Engineer) and licensed surveyors (Professional Land Surveyor). It is estimated that one out of 14 engineers in the state of California graduated from Cal Poly Pomona! As we continue our developments in technology, our geospatial engineering option evolves to meet the needs

of future engineers as we work together for the advancement of our society.

If you are interested in supporting our CLSA student chapter, please register for our geomatics conference or volunteer to be a guest speaker for our general meetings. Feel free to contact us at leilanis@cpp.edu or ayng@cpp.edu.



The team which competed in the ASCE UESI Surveying Competition this year.



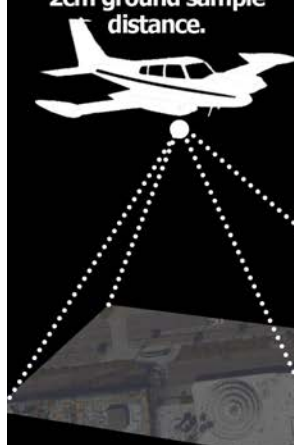
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City of Santa Cruz, CA | Santa Cruz Coastal Rail Trail, Segment 7 - Phase 1

From the Archives



An excerpt from issue #13 of *California Surveyor*, published Spring 1970

EDITOR'S NOTE: This article has been edited to correct spelling and for clarity and length. It may be read in its entirety in our archives, available at: <https://www.californiasurveyors.org/CalSurv.aspx>

Professional Code:

It shall be considered professional and consistent with honorable and dignified professional conduct for any member of the California Land Surveyors Association:

- 1 To devote effort and support programs to raise the professional, ethical and social status of Land Surveying.
- 2 To maintain a campaign for public recognition of professional contribution to the ethical, economical and social well-being of citizens of California and of the United States.
- 3 To accept and maintain standards of professional conduct of the highest order to win the respect and admiration of all citizens.
- 4 To protect the profession of Land Surveying and the public against the unqualified.
- 5 To promote an effective program of exchange, communication and cooperation amongst its professional members.
- 6 To maintain a constant effort of understanding between professionals in government service and private consulting, recognizing the common aims and philosophies and mutual respect of the professional society.
- 7 To promote and stimulate leadership in public service on a community, state and national level.
- 8 To promote and maintain an effective and continuous program of expanding our knowledge of social and technical advances.
- 9 To protect the professional reputation, prospects, and practice of another professional with the same vigor and determination as they would their own.
- 10 To manage their professional ethics with the courage to uphold their integrity over all other considerations.
- 11 To publish thoughtful and subdued public announcements free from ostentatious complimentary or laudatory implications. Professional cards, brochures, posted projects, press releases of worthy news items and project participation notices are acceptable forms of public announcements. 🌱



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