In conducting a boundary survey, one of the most important aspects of determining a property line is the acquisition and analysis of evidence. Failure to perform this work is the most common cause of errors in relocating boundaries and oftentimes leads to boundary disputes. Any relevant information such as title reports, unrecorded documents, and communications with neighbors in the possession of the client should be supplied to the surveyor and should be specified in all written contracts. The following steps should be taken when conducting a boundary line survey.

EXAMINATION OF WRITTEN EVIDENCE

Public Records Research: The search of public records shall be sufficient in breadth and depth to identify with reasonable certainty the described location of the client’s boundaries, any gaps and/or overlaps with the adjoiners’ described boundaries, apparent errors in the written descriptions of client's boundaries, perceived or evident rights associated with the property, restrictions upon the use of the property pursuant to any recorded deed, and the intent of the conveyance.

The search of public records should be extended to all known repositories including those documents recorded in the Office of the County Recorder and the Office of the County Surveyor/Engineer which shall include, but not limited to Subdivision Maps, Parcel Maps, Records of Survey, Corner Records, Right of Way Plans, Miscellaneous Maps, and Private Surveys. If working in an incorporated city, City Surveyor and City Engineer’s offices should be researched and should include the acquisition and review of “tie point sheets” and City Engineer/Surveyor field notes, field books, right-of-way maps and miscellaneous surveys. If the survey is adjacent to a state or county highway, research shall include State highway right-of-way maps, monumentation maps, control maps and tie notes. If near a flood control channel, or water district, district right-of-way maps, tie notes and survey notes shall be reviewed. In resurveying sectionized lands, research shall include Township Plats, Rancho Maps and government field notes for Public Land Surveys on file with the County and Bureau of Land Management. Utility companies and railroad right of way maps shall also be reviewed when working near or adjacent to any utility lines. Witnesses who have knowledge of the location of missing corners should also be considered whenever possible.

If no monuments are called for in a deed or if there are questions regarding seniority, a chain of title maybe necessary to determine the time frame the parcel was created. After determining the time of parcel creation it will help narrow the search of private archives to surveyors who may have records from that era.

Private Records Research: The search should also be extended to include privately held survey notes as evidenced by found monumentation or as may be referred to on recorded maps and surveys. Private restrictions and agreements shall also be considered. The search of private
records should ultimately be extended to any and all information indirectly indicated or implied in public and private records, both professional opinion and personal knowledge, that may aid in any way in the correct location of boundaries, and thereupon, explicitly or implicitly become part of the public record. If a public records research identifies a private survey, it should be obtained and reviewed.

FIELD PROCEDURES AND EVALUATION OF FIELD EVIDENCE

Prior to commencing work, it is advisable to contact neighbors and adjacent property owners: When working in sectionized areas or rural areas, it is a good idea to send written correspondence to adjoiners to inform them that you will be working in their area. If you are surveying an aliquot portion of a section, in many instances, you will need to breakdown the entire section. This written communication also provides you an opportunity to meet the spirit of Section 846.5 (a) of the Civil Code of California which grants licensed land surveyors the rights of trespass:

(a) The right of entry upon or to real property to investigate and utilize boundary evidence, and to perform surveys, is a right of persons legally authorized to practice land surveying and it shall be the responsibility of the owner or tenant who owns or controls property to provide reasonable access without undue delay. The right of entry is not contingent upon the provision of prior notice to the owner or tenant. However, the owner or tenant shall be notified of the proposed time of entry where practicable.

In this introductory letter, it is a good idea to explain what you are doing and where you will be working. You should also inquire about any corners or surveys as the adjacent owner(s) may be in possession of an unrecorded survey or know the location of existing or previously existent monuments. This can accomplish numerous things. First and foremost, if there is more available evidence, you will obtain it so that you can consider it. Second, in the event a dispute arises and if one of the neighbors were to produce a conflicting survey or challenge your work at a later date, they may be estopped from producing the document if you can demonstrate that you requested this information and you sought their input early on. Last, but not least, from a business perspective, they may want you to survey their property if you are already subdividing the section. It may be prudent to inquire in your introductory letter if they are interested in having their land surveyed. There is a definite economy in surveying several parcels in the same section.

In the event you obtain information from the neighbor(s) and it is valuable information, you may be obligated to use it. In the very least, you need to analyze it. In the event the neighbor(s) are aware of the previous location of any corners, you can replace it/them using parol testimony as provided for under the Business and Professions Code, to wit:

8760. Every licensed land surveyor or registered civil engineer may administer and certify oaths:

(a) When it becomes necessary to take testimony for the identification or establishment of old, lost or obliterated corners.
(b) When a corner or monument is found in a perishable condition, and it appears desirable that evidence concerning it be perpetuated.

Physical Evidence: The survey should commence with a reconnaissance and location of Called-For Monuments. Sufficient field investigation shall be conducted to establish the existence and the condition of monumentation called for in the written record. Once located, any discrepancies in the location of the physical evidence must be compared to the written evidence and any differences between occupation lines and record boundaries and any problematic use of land indicated by the record evidence shall be noted and analyzed.

Due care shall be taken in the unearthing of called-for physical evidence to preserve it in place and in good condition. Historic or questionable monuments shall be properly identified and shall include detailed information including the type and size of the monument including any and all markings. Uncalled-for or “Non-record Monuments” (monuments other than those called for in the public record) shall be verified by their correlation to found and accepted record monuments, witness monuments, record measurements, accepted lines of occupation or lines of possession, and parol evidence.

Any irregular or undocumented monument should be photographed and identified. If necessary, such as in the consideration or acceptance of public land corners, consider obtaining declarations from the members of the survey crew. The credibility and acceptance of survey monuments should be based in part on their apparent age, their use and acceptance along with the prevalent practice in a given area. Section 8760 (c) provides as follows:

8760. Every licensed land surveyor or registered civil engineer may administer and certify oaths. . . When the importance of the survey makes it desirable, to administer an oath to his assistants for the faithful performance of their duty.

A record of oaths shall be preserved as part of the field notes of the survey and a memorandum of them shall be made on the record of survey filed under this article.

If you encounter lines of occupation that differ from deeded or monumented lines, you should take pictures of the staked line(s) and field measure the lines of occupation. If there is a major encroachment that the client is unaware of it has the potential to create tension between the neighbors, offer to provide a site survey plat depicting the relationship of the encroachment items in relationship to the boundary line.

Upon completion of the survey, file the necessary map or plats in accordance with your duties under the Business and professions code. This will probably be either a Corner Record of a Record of Survey.

* Derived in part from the Manual of Practice for Professional Land Surveyors in the Commonwealth of Pennsylvania as adopted by the Pennsylvania Society of Land Surveyors, seminars by Michael J. Pallamary, PLS, Paul Cuomo, PLS and contributions by Sean Englert, PLS, Casey Lynch, PLS, and Dave Ambler, PLS.