#### BOARD FOR PROFESSIONAL ENGINEERS, LAND SURVEYORS, AND GEOLOGISTS

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# MEETING OF THE TRAFFIC ENGINEER TECHNICAL ADVISORY COMMITTEE OF THE BOARD FOR PROFESSIONAL ENGINEERS, LAND SURVEYORS, AND GEOLOGISTS

# 2535 Capitol Oaks Drive Third Floor Conference Room Sacramento, CA 95833

Tuesday, January 30, 2018, at 1:00 P.M.

#### TRAFFIC ENGINEER TECHNICAL ADVISORY COMMITTEE

	Troy Arseneau, PE; Mahmoud Khodr, PE; Walter Okitsu, PE;
	Jason Pack, PE; and Maurice Palumbo, PE
Board	Dr. Mohammad Qureshi, PE; and Robert Stockton, PE
Liaisons:	
Staff Liaisons:	Richard B. Moore, PLS; and Nancy Eissler

- 1. Roll Call
- 2. Public Comment for Items Not on the Agenda
- 3. Approval of October 29, 2015, Meeting Minutes
- 4. Discussion of the Traffic Engineering Technical Advisory Committee Workplan and Sections 6717, 6731, and 6731.1 of the Professional Engineers Act (Business and Professions Code §§ 6700 6799); and Section 404(qq) of the Board Rules and Regulations Relating to the Practices of Professional Engineering and Professional Land Surveying (California Code of Regulations, Title 16, Division 5, §§ 400-476)
- 5. Adjourn

1. Roll Call

2.	Public Comment for Items Not on the Agenda			

3. Approval of October 29, 2015, Meeting Minutes

# DRAFT MINUTES OF THE TRAFFIC ENGINEERING TECHNICAL ADVISORY COMMITTEE OF THE BOARD FOR PROFESSIONAL ENGINEERS, LAND SURVEYORS, AND GEOLOGISTS

# 2535 Capitol Oaks Drive Third Floor Conference Room Sacramento, CA 95833

Thursday October 29, 2015, at 10:00 A.M.

#### TRAFFIC ENGINEER TECHNICAL ADVISORY COMMITTEE

Members:	Mahmoud Khodr, PE; Maurice Palumbo, PE; Walter Okitsu,
	PE; Jason Pack, PE; and Troy Arseneau, PE
Board	Dr. Mohammad Qureshi, PE
Liaisons:	
Staff Liaisons:	Susan Christ, PE

- 1. Roll Call: All TAC and Liaisons present. Also present Richard B. Moore, PLS, Executive Officer; Nancy Eissler, Assistant Executive Officer; Mike Donelson, P.E., Staff Registrar; and Gary Duke, Board Legal Counsel.
- 2. Public Comment: None
- 3. Discussion of Traffic Engineering Technical Advisory Committee Workplan and Sections 6717, 6731, 6731.1 of the PROFESSIONAL ENGINEERS ACT (Business and Professions Code §§ 6700 6799); and Section 404: (qq) of the Board Rules and Regulations Relating to the Practices of Professional Engineering and Professional Land Surveying; California Code of Regulations, Title 16, Division 5, §§ 400-476

TAC members discussed the differences between civil and traffic engineering as follows. Members agreed to further discuss these issues at the next TAC meeting and may propose that the definition of traffic engineering in regulation be updated to reflect changes in the practice and new technology.

### **Traffic Engineering Work:**

Signal warrant
Signal phasing
Signal timing vehicles and trains
Trail location bike and pedestrian
TEPA
TOAR

Collision assessment countermeasure planning need and location

Traffic forecasting and modeling

Traffic safety audit

Speed Survey traffic calming

ITS need and location

Traffic index calculation

Sight distance need and problem

Parking need and circulation

No parking zone

Capacity analysis micro simulation

Temporary traffic control plans/detour

MOT: maintenance of traffic Traffic sign location/selection

Traffic striping

Parking signage and paint

#### Civil Engineering Work:

Traffic signal foundations, structures, and mounting

Signal poles and foundations

Signal conduit

Signal hardware/equipment

Trail design bike and pedestrian

Crash cushion/guard rails

Traffic calming design

ITS communications

**CCTV CMS fiber optics** 

Sight distance design

Parking design

Railroad crossing design

#### <u>Items to be discussed:</u>

Site plan review

Roundabout design/operation parameters

- 4. Other Business Not Requiring Committee Action: Next meeting will be in early 2016.
- 5. Adjourn at 3:40 p.m.

4. Discussion of the **Traffic Engineering Technical Advisory Committee Workplan** and **Sections 6717, 6731,** and **6731.1** of the Professional Engineers
Act (Business and Professions Code §§ 6700 – 6799); and **Section 404(qq)** of
the Board Rules and Regulations Relating to the Practices of Professional
Engineering and Professional Land Surveying (California Code of Regulations,
Title 16, Division 5, §§ 400-476)

#### WORKPLAN

## TECHNICAL ADVISORY COMMITTEE (TRAFFIC ENGINEERING)

#### Introduction

The Traffic Technical Advisory Committee recognizes its position as an advisory committee to the Board, providing input to the liaison Board members on matters requested by the Board for Professional Engineers, Land Surveyors and Geologists. This input may take the form of assistance to Board staff, direct assistance to the two liaison Board members or recommendations made directly to the Board in the form of motions or recommendations.

## Work plan

- 1. To identify and delineate any overlapping work performed by both civil and traffic engineers.
- 2. To identify solutions to how the overlapping civil and traffic work experience can be applied to the review of applications for licensing of civil engineers.

#### PROFESSIONAL ENGINEERS ACT

(Business and Professions Code §§ 6700 – 6799) Sections 6717, 6731, 6731.1

and

#### **BOARD RULES**

Regulations relating to the Practices of Professional Engineering and Professional Land Surveying California Code of Regulations, Title 16, Division 5, §§ 400-476 Section 404(qq)

#### **Business and Professions Code section 6717.**

The board may, by regulation, define the scope of each branch of professional engineering other than civil, electrical, and mechanical engineering for which registration is provided under this chapter.

#### **Business and Professions Code section 6731.**

Civil engineering embraces the following studies or activities in connection with fixed works for irrigation, drainage, waterpower, water supply, flood control, inland waterways, harbors, municipal improvements, railroads, highways, tunnels, airports and airways, purification of water, sewerage, refuse disposal, foundations, grading, framed and homogeneous structures, buildings, or bridges:

- (a) The economics of, the use and design of, materials of construction and the determination of their physical qualities.
- (b) The supervision of the construction of engineering structures.
- (c) The investigation of the laws, phenomena and forces of nature.
- (d) Appraisals or valuations.
- (e) The preparation or submission of designs, plans and specifications and engineering reports.
- (f) Coordination of the work of professional, technical, or special consultants.
- (g) Creation, preparation, or modification of electronic or computerized data in the performance of the activities described in subdivisions (a) through (f).

Civil engineering also includes city and regional planning insofar as any of the above features are concerned therein.

Civil engineers registered prior to January 1, 1982, shall be authorized to practice all land surveying as defined in Chapter 15 (commencing with Section 8700) of Division 3.

[NOTE: The last registration number issued to a civil engineer registered before January 1, 1982 was 33,965.]

#### **Business and Professions Code Section 6731.1.**

Civil engineering also includes the practice or offer to practice, either in a public or private capacity, all of the following:

- (a) Locates, relocates, establishes, reestablishes, or retraces the alignment or elevation for any of the fixed works embraced within the practice of civil engineering, as described in Section 6731.
- (b) Determines the configuration or contour of the earth's surface or the position of fixed objects above, on, or below the surface of earth by applying the principles of trigonometry or photogrammetry.
- (c) Creates, prepares, or modifies electronic or computerized data in the performance of the activities described in subdivisions (a) and (b).
- (d) Renders a statement regarding the accuracy of maps or measured survey data pursuant to subdivisions (a), (b), and (c).

# Title 16, California Code of Regulations section 404. Definitions. [in pertinent part]

For the purpose of the rules and regulations contained in this chapter, the following terms are defined. No definition contained herein authorizes the practice of engineering as defined in the Professional Engineers Act.

. . .

(qq) "Traffic engineering" is that branch of professional engineering which requires such education and experience as is necessary to understand the science of measuring traffic and travel and the human factors relating to traffic generation and flow; and requires the ability to apply this knowledge to planning, operating, and evaluating streets and highways and their networks, abutting lands and interrelationships with other modes of travel, to provide safe and efficient movement of people and goods. The above definition of traffic engineering shall not be construed to permit the practice of civil, electrical, or mechanical engineering.

. . .

5. Adjourn