



November 5, 2008

Ms. Paula Higashi
Commission on State Mandates
980 Ninth Street
Suite 300
Sacramento, CA 95814

RECEIVED

NOV 06 2008

**COMMISSION ON
STATE MANDATES**

Via Hand Delivery

Re: Essential Services Buildings (CSM 02-TC-38)
Sacramento Metropolitan Fire District, Claimant

Dear Ms. Higashi:

Attached please find an original and two copies of response to your request dated April 18, 2008, for information regarding the Essential Services Buildings regulations' effective dates and register numbers.

I appreciate your kind attention to this matter. Should you have any questions, please do not hesitate to contact me. Until then, I remain,

Very truly yours,

Juliana F. Gmur, Esq.

Enc.

Effective Date	History	Effect of Changes
<p>added July 1, 1989 to the 1989 version</p>	<p>Added: §§4-201 through 4-221 and §§4-243 through 4-249</p>	<p><u>4-201</u>: States purpose.</p> <p><u>4-202</u>: Defines scope.</p> <p><u>4-203</u>: Defined how the regulations are to be interpreted.</p> <p><u>4-204</u>: Sets forth the delegation of authority from the State Architect to the Chief Structural Engineer.</p> <p><u>4-205</u>: Sets forth that higher design standards and new or innovative design or construction techniques may be used. Use of such new or innovative approaches will require review and approval.</p> <p><u>4-206</u>: States that plans and specifications shall be submitted to the appropriate enforcement agency (EA) before they are adopted by any agency proposing to build an essential services building (ESB). Prior to converting an existing building into an ESB, application and plans shall be submitted to the appropriate EA.</p> <p><u>4-207</u>: Definitions of act, addition, approved plans and specifications, complying building, enforcement agency, equipment, fire station, maintenance, new essential services building, nonstructural alterations, office of the state architect, owner, plans, police station, project inspector, reconstruction, registered engineer, and specifications.</p> <p><u>4-208</u>: States that an application shall be submitted to the appropriate EA for written approval before the agency may adopt plans and specifications. An architect, structural engineer or civil engineer may act as the agency's agent for the filing of the plans and specs.</p> <p><u>4-209</u>: Sets forth that design responsibilities lie with an architect, structural engineer or civil engineer who may delegate authority to qualified others and/or appoint an alternate. The plans may be divided and apportioned. Signature shall be deemed evidence of responsibility.</p> <p><u>4-210</u>: Sets forth components of applications, plans, specs, design calculations, and site data.</p> <p><u>4-211</u>: Requires observation of construction and inspection by the project inspector. Sets forth requirements for possible special inspection.</p> <p><u>4-212</u>: Requires supervision of construction by EA and that the EA shall direct the filing of documents for changes or modifications as necessary.</p> <p><u>4-213</u>: States procedure for testing building materials.</p> <p><u>4-214</u>: States requirements regarding periodic verified reports to the EA.</p> <p><u>4-215</u>: States content for documents regarding changes.</p> <p><u>4-216</u>: States procedure for final certification of compliance.</p> <p><u>4-217</u>: Lists duties of the architects and registered engineers regarding general responsibility, verified reports and testing program.</p> <p><u>4-218</u>: Lists duties of the mechanical and electrical engineers regarding specific responsibilities and verified reports.</p> <p><u>4-219</u>: Lists duties of the project inspector regarding</p>

Effective Date	History	Effect of Changes
		<p>continuous inspections, relations with the architect or engineers, maintenance of a job file and construction procedure records, and the handling of deviations, verified reports and violations.</p> <p><u>4-220</u>: Lists duties of the contractor regarding general responsibilities, the manner of performance and verified reports.</p> <p><u>4-221</u>: States that the Office of the State Architect shall maintain the project records.</p> <p><u>4-222</u>: States the particulars of the advisory board regarding its general duties, membership, and meetings.</p> <p><u>4-243</u>: States general provisions specific to the ESB owned by local governments. Allows for establishment of local administrative procedures.</p> <p><u>4-244</u>: Sets forth that a building permit may act as an approval of the drawings and specs. Sets forth when written notification to the state is required.</p> <p><u>4-245</u>: States that changes void the approval of the application.</p> <p><u>4-246</u>: States that work may not begin until the enforcing agency has given written approval of the plans and specs. And failure to advise agency of the commencement of work shall void the approval.</p> <p><u>4-247</u>: States manner and components of the notice of start of construction.</p> <p><u>4-248</u>: States that the enforcing agency shall review the qualification of project inspectors.</p> <p><u>4-249</u>: States that verified reports shall be on a form established by the EA. The form must require manual signatures.</p>
1992 version		No changes
May 9, 1994, changes to the 1992 version	Changes to 4-202 and other non-substantive changes throughout.	<u>4-202</u> : Redefines scope by separating enforcement agencies providing that when the local agency is the enforcement agency, the locally adopted editions of the model codes and these administrative regulations apply.
July 1, 1995	No changes	
1998 version	Non-substantive changes throughout	
2001 version	Changes as noted with minor and non-substantive changes throughout	<p><u>4-204</u>: Sets forth the delegation of authority may occur.</p> <p><u>4-205</u>: Added section 12 of Title 24 to designated building standards.</p> <p><u>4-207</u>: Includes definitions of division of the state architect and essential services building. Made changes to definition of project inspector removing reference to their independence</p>

Effective Date	History	Effect of Changes
		<p>and agency.</p> <p><u>4-211</u>: Expands specifics of each type of inspection.</p> <p><u>4-213</u>: Expands specifics of testing and the handling of test reports.</p> <p><u>4-214</u>: Expands requirements regarding periodic verified reports to the EA.</p> <p><u>4-219</u>: Changed documents included in the job file.</p> <p><u>4-245</u>: Removed reference to automatic voidance.</p> <p><u>4-246</u>: Same.</p> <p><u>4-247</u>: Removed declaration of subcontractor's names and addresses.</p> <p><u>4-248</u>: Expands review of project inspectors.</p> <p><u>4-249</u>: Removed contents of form for verified reports.</p>

1989 Version

REVISION RECORD
July 1, 1989

TITLE 24. ADMINISTRATIVE REGULATIONS
PART 1

This revision record contains a correction affecting the above mentioned portion of the California Code of Regulations.

It is suggested that the section number listed below as well as the page number be checked when inserting this material in the 1986 Triennial edition and removing the superseded material. In case of doubt, rely upon the section numbers rather than the page numbers, since the section numbers must run consecutively.

SECTION CHANGES

Chapter 4, Articles 1, 2, 3, adopted

PAGES CHANGED

**Remove
Old Pages**
1-6

**Insert
New Pages**
1-96

(7-1-89)

(7-1-89)

STATE BUILDING CODE
(Part 1, Title 24, C.C.R.)

4-201

Essential Services Buildings
(Effective July 1, 1989)
Article 1

4-201. Purpose.

Essential services buildings constructed pursuant to these rules and regulations shall be designed and constructed to resist gravity forces, to minimize fire hazards and to resist, insofar as practical, the forces generated by winds and major earthquakes of the intensity and severity of the strongest anticipated at the building site without catastrophic collapse, but with some repairable architectural or structural damage. The essential services buildings as designed and constructed shall be capable of providing essential services to the public after a disaster. In addition, the equipment and other accessories which are necessary for the continued functioning of the essential services operation shall be anchored and braced to resist earthquake forces.

Authority: Section 16022, Health and Safety Code.

Reference: Section 16001, Health and Safety Code.

4-202. Scope.

These regulations apply to the administrative procedures concerning the construction, reconstruction, alteration of or addition to any public essential services buildings under the jurisdiction of a city, city and county, county (including special fire districts) or the State of California.

Chapters 23, 24, 25, 26, 27, 28, 29, 30, 32, 37, 47, 54, and 60 of Part 2, Title 24, CCR, as adopted by the Office of the State Architect/Structural Safety Section, designate the structural building regulations which shall apply to any essential services building as defined in Section 16007 of the Health and Safety Code. The term "essential services" building shall include all buildings, structures, appurtenances and related systems or facilities as interpreted in Section 207.

These rules and regulations establish reasonable standards and minimum requirements for the structural integrity of essential services buildings. The design and construction of the electrical, mechanical and plumbing systems in essential services buildings shall conform to the applicable building regulations as adopted by OSA/SSS in Part 3, Part 4 and Part 5, respectively, of Title 24, CCR. The essential services buildings shall be designed and constructed to conform to the regulations adopted by the State Fire Marshal in Title 24, CCR, for the particular occupancy concerned.

If the building standards and regulations adopted by the city, city and county or county agency responsible for building safety are more stringent than those adopted in the applicable sections of Title 24, CCR, then the local building standards and regulations shall govern within its jurisdiction.

Authority: Section 16022, Health and Safety Code.

Reference: Section 16001, Health and Safety Code.

4-203. Interpretation.

No regulation shall be construed to deprive the enforcing agency of its right to exercise the powers conferred upon it by law or limit the enforcing agency in such enforcement as is necessary to secure the safety of construction as required in the Act.

Authority: Section 16022, Health and Safety Code.

Reference: Section 16001, Health and Safety Code.

4-204. Delegation of Authority.

All powers, duties and responsibilities pursuant to carrying out the provisions of the Essential Services Buildings Seismic Safety Act designated in Section 16022 of the Act for the State Architect have been delegated by the State Architect to the Chief Structural Engineer, Office of the State Architect subject to the direction of the State Architect.

Those powers, duties and responsibilities so delegated shall include the observation of the implementation and administration of the Act, the adoption in consultation with local jurisdictions of the regulations necessary for carrying out the provisions of the Act, providing advice and assistance to local jurisdictions in matters concerning the Act or these regulations and acting as an appeals agency relative to the administration of the Act.

Authority: Section 16022, Health and Safety Code.

Reference: Section 14608, Government Code.

4-205. Application of Building Standards.

Building standards are set forth in Parts 2, 3, 4, 5 and 7 of Title 24, CCR, and have been adopted as a basis for the approval of plans and specifications. These regulations shall not be construed to prevent the use of higher design standards nor to restrict the use of new or innovative design or construction techniques.

Where the designer desires to use innovative design or construction techniques not included in these regulations, it shall be necessary to submit for review and approval information including computations, test data and recommendations covering the design in question. The Office of the State Architect or local enforcement agency must be satisfied that the degree of safety achieved is equivalent to that achieved by the standard procedures. The enforcement agency review and approval of the innovative design or construction techniques shall precede the submission of plans and specifications utilizing these techniques.

Authority: Section 16022, Health and Safety Code.

Reference: Section 16001, Health and Safety Code.

4-206. Approval of New Essential Services Buildings.

Plans and specifications shall be submitted to the appropriate enforcement agency for every new owned or leased essential services building before the plans are adopted by the governing board, authority, owner, corporation or other agency proposing to construct any essential services building.

Before any agency may convert an existing building into an essential services building, that agency shall submit an application and plans of the building to the appropriate enforcement agency for approval. The plans shall provide for the reconstruction and alterations necessary for compliance with the requirements of these rules and regulations.

Authority: Section 16022, Health and Safety Code.

Reference: Section 16011, Health and Safety Code.

4-207. Definitions.

The words defined in this section shall have the meaning stated therein throughout the rules and regulations contained in Part 1 (Administrative), Title 24, CCR.

"Act" shall mean the Essential Services Buildings Seismic Safety Act of 1986, Sections 16000-16023, inclusive, of the Health and Safety Code.

"Addition" shall mean an increase in floor area or volume of enclosed space which is physically attached to an existing building by connections which are required for transmitting vertical or horizontal loads between units. The area exemption in Section 16010 of the Act does not apply to additions to essential services buildings when the total area of the existing building and the addition exceeds 2000 square feet. An "addition" which is not required to be physically attached either for its own support or for support of the existing building shall be separated as required by Section 2312 (h), Part 2, Title 24, CCR, and shall be deemed to be the construction of a new essential services building.

"Alteration" shall mean changes within an existing building as defined in Section 2312 (b) of Part 2, Title 24, CCR. Alterations to existing essential services buildings shall conform to the requirements of Title 24, CCR. Major alterations will be per-

mitted provided the structural alteration the area of the exit

"Approved Plan" and change orders ment agency pursuant and which are identical the identification required in Section

"Complying Building" constructed in accordance

"Enforcement Agency" of the State Architect ment agency of an owned or leased

"Equipment" shall or existing owned essential services port, bracing and Section 16010 of Title necessary to the

"Fire Station" : suppression, alarm emergencies.

"Maintenance" replacement in

"New Essential Services Building" : quent to the effect or leased by the ties owned or leased effective date of lation of new or lized for an essential and component and regulations other portions agency to insure cillary buildings be exempt from buildings and fi operation after

"Nonstructural" the safety of the structural element

"Office of the Structural" the Structural department of Compliance for Structural Engineering divisions of the

"Owner" responsible for an essential service containing the ap

(7-1-89)

(7-1-89)

STATE BUILDING CODE
(Part 1, Title 24, C.C.R.)

4-207

mitted provided the entire essential services building as modified, including the structural alterations or additions, conform to the requirements of Title 24, CCR, if the area of the existing building including additions exceeds 2000 square feet.

"Approved Plans and Specifications" shall mean plans, specifications, addenda and change orders which have been duly approved by the appropriate enforcement agency pursuant to Sections 16013 and 16016 of the Health and Safety Code and which are identified by a stamp bearing the name of the enforcement agency, the identification number, the date and the signature of the qualified reviewer as required in Section 16011 of the Act.

"Complying Building" shall mean a building which has been constructed or reconstructed in accordance with these rules and regulations.

"Enforcement Agency" shall mean the Structural Safety Section of the Office of the State Architect for state owned or leased buildings and shall mean the enforcement agency of any city, county or city and county having jurisdiction over locally owned or leased essential services facilities.

"Equipment" shall mean all new or replacement equipment installed in any new or existing owned or leased building which is required for the functioning of the essential services operation. The installation of such equipment shall meet the support, bracing and anchorage requirements of Title 24, CCR. The area exemption in Section 16010 of the Act does not apply to the anchorage or bracing of equipment necessary to the operation of the essential services function.

"Fire Station" shall mean any building that contains the operational facilities, fire suppression, alarm and communications equipment necessary to respond to fire emergencies.

"Maintenance" shall mean and include ordinary upkeep or repair work such as replacement in kind, repainting, replastering and reroofing.

"New Essential Services Building" shall mean any newly erected essential services building or any existing building converted to essential services use subsequent to the effective date of the Act regardless of whether the building is owned or leased by the public agency. Existing buildings housing essential services facilities owned or leased by the State, a city, a county or a county prior to the effective date of the Act are exempt from these regulations except for the installation of new or replacement equipment. When a portion of a building is to be utilized for an essential services operation, the area so utilized and the utilities systems and components servicing the area shall be constructed according to these rules and regulations and shall be separated or protected from damage due to failures of other portions of the structure to the extent determined by the enforcement agency to insure continued functioning after an earthquake or other disaster. Ancillary buildings and facilities related to the essential services building function may be exempt from these regulations if the enforcement agency determines that such buildings and facilities are not necessary to the functioning of the essential services operation after an earthquake or other disaster.

"Nonstructural Alterations" shall mean only such alterations which do not affect the safety of the essential services building and do not change, in any manner, its structural elements.

"Office of the State Architect", or "Office" or the initials "OSA/SSS" shall mean the Structural Safety Section of the Office of the State Architect in the State Department of General Services. Approvals, disapprovals, orders and certificates of compliance for state owned or leased buildings shall be issued directly by the Chief Structural Engineer who shall act for the State Architect in carrying out the provisions of the Act.

"Owner" for the purposes of these regulations shall mean the public agency responsible for the essential services functions performed under its authority within an essential services building. The owner is responsible for applying for and obtaining the approvals and certifications required by these regulations.

"Plans" as used in these regulations shall mean the drawings associated with the project such as, but not limited to, vicinity maps, site plans, foundation plans, floor plans, ceiling plans, roof plans, cross-sections, interior elevations, exterior elevations and details which are used in conjunction with the project specifications and which are necessary to accomplish construction in conformance with the requirements of the Act.

"Police Station" shall mean any building that contains the operational facilities and the alarm and communications equipment necessary to respond to police emergencies. This definition shall include the offices of local police departments, county sheriffs, California State Police and the California Highway Patrol.

"Project Inspector" shall mean any individual duly approved by the enforcement agency as the on-site inspector for a particular project. The project inspector shall be hired by and paid by the owner and he/she shall act as the agent of the owner at the project site under the general direction of the architect or registered engineer in general responsible charge and under the supervision of the enforcement agency. The project inspector shall be independent of the contractor. The project inspector shall be responsible for inspecting all work included in the contract. A special inspector shall be responsible only for inspecting the work for which he/she is approved. (See Section 211 (c) for special inspection.)

"Reconstruction" is the repair of damage to an existing complying essential services building or an alteration of an existing non-complying building to bring it into conformance with the safety standards established by these regulations for essential services buildings.

"Registered Engineer" as used in these regulations shall mean a structural engineer, civil engineer, mechanical engineer or electrical engineer holding a valid certificate under Chapter 7, Division 3, of the California Business and Professions Code.

"Specifications" as used in these regulations shall mean the written document which is used in conjunction with the project plans to establish the job conditions, the quality and quantity of construction materials used in the project and the quality of workmanship required to accomplish the construction in conformance with the provisions of the Act.

Authority: Section 16022, Health and Safety Code.

Reference: Sections 16003, 16011, 16018 and 16019, Health and Safety Code.

4-208. Application for Approval of Drawings and Specifications.

(a) **General.** Before adopting plans and specifications, the agency responsible for the essential services function shall submit an application to the appropriate enforcing agency for written approval of said plans and specifications except where the new construction is a Type V or Type II N one-story structure which contains 2000 square feet or less of floor area and is not located in a special studies zone as defined in Section 2622 of the Public Resources Code.

(b) An architect, structural engineer or civil engineer may act as the agent for the essential services agency when filing the application for approval of plans and specifications.

An architect or registered engineer who is a contracting party or who has any employment relationship with any entity which may be a contracting party for the construction of the essential services building shall not perform the functions prescribed by Section 16015 of the Health and Safety Code or be delegated responsibility for any portion of the work.

Authority: Section 16022, Health and Safety Code.

Reference: Sections 16010, 16011 & 16015, Health and Safety Code.

4-209. De

(a) Gener there : sponsi cept th

tion fo said pl sponsi volvin A proj by a b tions a that p: the pa

(b) Deleg gineer tion o gineer be de work,

(c) Evide tered idenc there: specif

(d) Alter: gener altern: provi are q

Authority: Reference

4-210. Pl

(a) Gene quire tural agenc

(b) Plans vices dicat and t and s inclu cept Subn rect, spon: chec

(c) Speci the v and s are b and c

(7-1-89)

4-209. Designation of Responsibilities.

(a) **General Responsible Charge.** For every essential services building project there shall be an architect, structural engineer or civil engineer in general responsible charge of plans, specifications and observation of construction, except that where plans, specifications and observation of the work of construction for alterations or repairs do not involve architectural or structural changes, said plans, specifications and observation of construction may be under the responsible charge of a registered mechanical or electrical engineer for work involving only those branches of engineering.

A project may be divided into parts, provided that each part is clearly defined by a building or similar distinct unit. The part, so defined, shall include all portions and utility systems or facilities necessary to the complete functioning of that part. Separate assignments of general responsible charge may be made for the parts.

(b) **Delegation of Responsibility.** The architect, structural engineer or civil engineer in general responsible charge may delegate responsibility for any portion of the work to, or may employ, or retain other architects, structural engineers or civil engineers. Registered mechanical and electrical engineers may be delegated responsibility for the mechanical and electrical portions of the work, respectively.

(c) **Evidence of Responsibility.** The manual signature of the architect or registered engineer on a plan, specification, or other document shall be deemed evidence that full responsibility is assumed by the signator for the work shown thereon, including also those portions of the accompanying computations, specifications or plans which pertain to such work.

(d) **Alternates.** The applicant, or the architect or registered engineer having general or delegated responsibility, may name one or more persons to act as alternate(s) for the design and/or observations of the work of construction provided such persons are architects or registered engineers who themselves are qualified under these regulations to assume the responsibility assigned.

Authority: Section 16022, Health and Safety Code.

Reference: Sections 16011, 16012, & 16015, Health and Safety Code.

4-210. Plans, Specifications, Computations and Other Data.

(a) **General.** When an application is filed, it shall be accompanied by the required number of complete sets of the plans and specifications, the full structural design calculations, site data and a fee as established by the enforcement agency.

(b) **Plans.** Plans shall show the use or occupancy of all parts of the essential services buildings and shall give such other information as may be required to indicate the nature of the work proposed and to show compliance with the Act and these regulations. The drawings shall be legible and sufficiently detailed and cross-referenced to show clearly the pertinent features of the construction, and shall have sufficient dimensions to be readily interpreted. Where a project includes several buildings, the plans for each shall be drawn independently except that details common to all need not be repeated.

Submitted plans and specifications, which are obviously incomplete or incorrect, shall be returned to the architect or registered engineer in general responsible charge with a request for compliance with these regulations before checking is begun or resumed by the enforcement agency.

(c) **Specifications.** Specifications shall completely set forth the requirements for the various types of materials that will enter into the permanent construction and shall describe the methods not covered in the technical regulations which are to be used to obtain the required quality of the work shown on the plans and described in the specifications.

(d) **Design Computations.** Computations, stress diagrams and other pertinent data shall accompany the plans and specifications and shall be sufficiently complete so that calculations for individual structural members can be readily interpreted. The computations shall be prefaced by a statement clearly and concisely outlining the basis for the structural design and indicating the manner in which the proposed essential services building will resist vertical loads and horizontal forces. The computations shall be sufficiently complete to establish that the structure will resist the loads and forces prescribed in Part 2, Title 24, CCR. Assumed safe bearing pressures on soils and specified strengths of concrete shall be given in the computations and noted on the plans. Where unusual conditions occur, such additional data as are pertinent to the work shall be submitted.

(e) **Site Data.** Site data for all essential services buildings covered by these regulations shall include a soil investigation report providing information on subsurface site work and laboratory testing, an evaluation of site soil conditions, a recommendation for the type of foundation to be used and an allowable design value for the soil bearing capacity.

For all essential services building sites not exempted from the provisions of the Act, a geologic and earthquake hazard report including an evaluation of both known and potentially active local and regional fault systems, slope stability, liquefaction potential and other hazards shall be prepared by competent persons and submitted with the application, plans and specifications.

All or parts of the geologic and earthquake hazard investigation and report may be waived by the enforcement agency when in the judgment of the enforcement agency those requirements are unnecessary and would not be beneficial to public safety.

(f) **Signatures Required.** All plans and specifications submitted for approval shall bear the manual signature of the architect or professional engineer in general responsible charge of design. When responsibility for a portion of the work has been delegated, the plans and specifications covering that portion of design shall also bear the manual signature of the responsible registered engineer or architect.

Authority: Section 16022, Health and Safety Code.

Reference: Sections 16009, 16011, 16012, 16013, & 16014, Health and Safety Code.

4-211. Observation and Inspection of Construction.

(a) **Observation by Architect or Registered Engineer.** The Act provides that the observation of the work of construction, reconstruction, alteration or addition shall be under the general responsible charge of an architect, structural engineer, civil engineer or, under certain conditions, a registered mechanical or electrical engineer for work involving only those branches of engineering.

A civil engineer qualified in soil engineering shall provide the observation for placement of fills and shall submit a verified report attesting to the compliance of the engineered fill.

(b) **Inspection by Project Inspector.** The owner must provide for and require competent, adequate and continuous inspection by a project inspector approved by the enforcement agency. The project inspector so approved shall cooperate with the architect or registered engineer in general responsible charge of the observation of the work of construction to insure compliance with the approved drawings and specifications. The project inspector shall request interpretations and clarifications of the approved contract drawings and specifications when necessary from the responsible architect or registered engineer. Code interpretations received by the project inspector which cause deviations from the approved drawings and specifications shall be referred to the responsible architect or registered engineer for preparation of change orders to cover the required work.

For ev
knowl
work c
may r
cial i
projec
Section

No v
specto
had at
similar
knowl
and sp
The cc

(c) **Specia.**
enforc
inated
concre
high st
chanic

The
special
the wc

The
bilty c
The er
shop fa

after a
listed e
ods of
Spec
tion 21

Authority:

Reference:

4-212. Sup

During t
essential se
make such
enforceme
building ar
of the final
necessary t
istered eng
covering su
ment agen

Authority:

Reference:

4-213. Te

(a) **Gener**
and sp
of mat
chitect
enforc
special

(7-1-89)

(7-1-89)

STATE BUILDING CODE
(Part 1, Title 24, C.C.R.)

4-212

For every project there shall be a project inspector who shall have personal knowledge as defined in Section 16021 of the Health and Safety Code of all work done on the project or its parts. On large projects adequate inspection may require the employment of assistant inspectors. The employment of special inspectors or assistant inspectors shall not be construed as relieving the project inspector of his/her duties and responsibilities under Section 16021 and Sections 214 and 219 of these regulations.

No work shall be carried out except under the inspection of the project inspector approved by the enforcement agency. The project inspector shall have had at least three years equivalent experience in construction work of a type similar to that for which he/she is proposed as inspector, shall have a thorough knowledge of building materials, and shall be able to read and interpret plans and specifications.

The cost of project inspection shall be paid for by the owner.

- (c) **Special Inspection.** Special inspection by inspectors specially approved by the enforcement agency may be required on all masonry construction, glued laminated lumber fabrication, wood framing using timber connectors, ready mixed concrete batching, gunite, prestressed concrete, important steel fabrication, high strength steel bolt installations, welding, pile driving, electrical and mechanical work.

The project inspector may be used for special inspections if he/she has been specially approved for such purposes and if he/she has the time available for the work.

The detailed inspection of all work covered by this section is the responsibility of the project inspector when special inspection is not provided. The enforcement agency may also require special inspection for any other shop fabrication procedures that preclude the complete inspection of the work after assembly. It may require special inspection at the site in addition to those listed above if found necessary because of the special use of material or methods of construction.

Special inspectors shall submit verified progress reports as required by Section 214, for the special work covered.

Authority: Sections 16017, 16022, Health and Safety Code.

Reference: Sections 16015, 16017, 16020 and 16021, Health and Safety Code.

4-212. Supervision of Construction by the Enforcement Agency.

During the construction, reconstruction, repair, alteration or addition to any essential services building, the enforcement agency as provided in the Act, shall make such site visits and observations as in its judgement is necessary or proper for enforcement of the Act and the protection of the safety of the occupants of the building and the public. If at any time as the work progresses, prior to the issuance of the final certification of compliance, it is found that modifications or changes are necessary to secure safety, the enforcement agency shall direct the architect or registered engineer in general responsible charge to prepare and submit documents covering such modifications or changes for the review and approval of the enforcement agency.

Authority: Section 16022, Health and Safety Code.

Reference: Sections 16001, 16009 and 16020, Health and Safety Code.

4-213. Tests.

- (a) **General.** Tests of materials are required as set forth in the approved plans and specifications and in Part 2, Title 24, CCR. Other materials or combination of materials may require additional tests. Where job conditions warrant the architect or registered engineer may waive certain tests with the approval of the enforcement agency. A list of all required tests of materials and of all required special inspections shall be prepared and submitted by the architect, structural

engineer or civil engineer in general responsible charge of the project at the time the plans and specifications are stamped for identification by the enforcement agency.

- (b) **Test Sampling.** Test samples or specimens of material for testing may be taken by the architect or registered engineer, his representative, the project inspector, or a representative of the testing agency. In no case shall the contractor, his employee or a vendor select the sample.
- (c) **Test Reports.** One copy each of all test reports shall be forwarded to the enforcement agency, the architect, the registered engineer and the project inspector by the testing agency. Such reports shall include all tests made, regardless of whether such tests indicate that the material is satisfactory or unsatisfactory. Records of special sampling operations as required shall also be reported. The reports shall show that the material or materials were sampled and tested in accordance with the requirements of these regulations and with the approved specifications. In the case of masonry or concrete, test reports shall show the specified design strength. They shall also state definitely whether or not the material or materials tested comply with the requirements.
- (d) **Verification of Test Reports.** Each testing agency shall submit to the enforcement agency a verified report, in duplicate, covering all of the tests which were required to be performed each time that work on the project is suspended, covering the tests up to that time, and at the completion of the project, covering all of the tests.
The verified report shall contain all the information included in the sample Laboratory Verified Report (see Appendix).

Authority: Section 16022, Health and Safety Code.

Reference: Sections 16009, 16020 and 16021, Health and Safety Code.

4-214. Verified Reports.

Sections 16020 and 16021 of the Act require that from time to time as the work progresses, the architect or registered engineer in charge of observation of construction of the work, each architect or registered engineer delegated responsibility for a portion of the work, the project inspector and the contractor shall each make a duly verified report to the enforcement agency upon a prescribed form or forms, showing that of his or her own personal knowledge the work during the period covered by the report has been performed and materials have been used and installed in every material respect in compliance with the duly approved plans and specifications, and setting forth such detailed statement of fact as shall be required. For a definition of personal knowledge refer to Sections 16020 and 16021 of the Act. See Articles 2 and 3 for the reporting requirements for state and local enforcement agencies, respectively.

Authority: Sections 16020, 16021 and 16022, Health and Safety Code.

Reference: Sections 16020 and 16021, Health and Safety Code.

4-215. Changes in the Approved Drawings and Specifications.

- (a) **General.** All work shall be executed in accordance with the approved plans and specifications except where documents authorizing changes have been submitted by the responsible architect or registered engineer to the enforcement agency for review and approval. These documents shall describe the authorized changes, show the increase or decrease in the contract cost involved and shall contain the signatures of the responsible architect or registered engineer and the owner and shall bear the approval stamp of the enforcement agency.

Authority: Section 16022, Health and Safety Code.

Reference: Sections 16011, 16013 and 16015, Health and Safety Code.

4-216. Fin

The certification agency requires the Health and Safety Code and with the enforcement agency shall be required to obtain a statement that the project has been through 16021 certificate of completion.

Local enforcement agency:

Authority: :

Reference: :

4-217. Du

- (a) **General.** to the materials and submitted. The ability to be verified.

- (b) **General.** response for approval of a testing company change owner cause to comply with inspections a The

- (c) **Verification.** for contact every submit The responsible project have b

- (d) **Testing.** charge needs ing agency position provec

Authority:

Reference:

(7-1-89)

(7-1-89)

STATE BUILDING CODE
(Part 1, Title 24, C.C.R.)

4-216

4-216. Final Certification of Compliance.

The certification of compliance for the essential services building by the enforcement agency will be issued when the work has been completed in accordance with the requirements as to safety of design and construction with Sections 16000-16023 of the Health and Safety Code (Essential Services Buildings Seismic Safety Act) and with the requirements of these regulations. The certification of compliance will be evidenced by a letter or a certificate of occupancy each of which shall contain a statement that the building design and review and the work of construction have been completed in accordance with the requirements of Sections 16000 through 16023 of the Health and Safety Code and of Part 1, Title 24, CCR. The certificate of compliance will be directed to the owner of the essential services building.

Local enforcement agencies shall forward one copy of the certification of compliance to the OSA/SSS Headquarters Office in Sacramento.

Authority: Section 16022, Health and Safety Code.

Reference: Sections 16009 and 16022, Health and Safety Code.

4-217. Duties of the Architect and Registered Engineers.

- (a) **General.** The architect or registered engineer is responsible to the owner and to the enforcement agency to see that the completed work conforms in every material respect to these regulations and the approved plans and specifications. He or she may, if so authorized, act as agent for the owner in completing and submitting the application to the enforcement agency.

The architect or registered engineer, in no way, is relieved of any responsibility by the activities of the enforcement agency in the performance of its duties.

- (b) **General Responsible Charge.** The architect or registered engineer in general responsible charge shall advise the owner in regard to filing of the application for approval of plans, the selection of a project inspector and the selection of a testing laboratory. He or she shall prepare the plans, specifications, design computations and other data and shall prepare documents authorizing changes in the approved drawings and specifications when so directed by the owner or as required by conditions on the project. He or she shall make, or cause to be made, the corrections required on the various documents to comply with the requirements of these regulations and shall provide the project inspector and testing agency with a complete set of stamped plans, specifications and documents authorizing changes.

The enforcement agency directs all technical correspondence to the architect or registered engineer in general responsible charge of the project.

- (c) **Verified Reports.** All architects and registered engineers having responsibility for observation of the work of construction shall maintain such personal contact with the project as is necessary to assure themselves of compliance in every material respect with the approved plans and specifications and shall submit verified reports to the enforcement agency as required in Section 214. The architect or registered engineer in general responsible charge shall be responsible for the timely submittal of the required verified reports from the project inspector, the contractor and the other architects and engineers who have been delegated responsibility for a portion of the project.

- (d) **Testing Program.** The architect or registered engineer in general responsible charge shall establish the extent of the testing of materials consistent with the needs of the particular project and shall issue specific instructions to the testing agency. He or she shall also notify the enforcement agency as to the disposition of materials noted on laboratory reports as not conforming to the approved plans and specifications.

Authority: Section 16022, Health and Safety Code.

Reference: Sections 16015 and 16020, Health and Safety Code.

4-218. Duties of the Mechanical and Electrical Engineers.

The architect, structural engineer or civil engineer in general responsible charge retains overall responsibility for the mechanical and electrical portions of the work when the design responsibility for that work has been delegated and the plans have been prepared by registered mechanical and electrical engineers.

Where plans, specifications, and estimates for alterations or repairs do not involve architectural or structural changes, said plans, specifications and estimates may be prepared and the work of construction observed by a registered mechanical or electrical engineer who shall be in general responsible charge.

The mechanical or electrical engineer shall fulfill the duties outlined in Section 217 when assuming general responsible charge and shall submit verified reports as required in Section 214. When accepting delegated responsibility, he or she shall comply with the requirements of Sections 209 and 210 insofar as these may relate to the work delegated to him or her.

Authority: Section 16022, Health and Safety Code.

Reference: Section 16015, Health and Safety Code.

4-219. Duties of the Project Inspector.

(a) General. The project inspector as an agent for the owner shall act under the general direction of the architect or registered engineer and under the supervision of the enforcement agency.

(b) Duties. The general duties of the project inspector in fulfilling his or her responsibilities are as follows:

(1) Continuous Inspection Requirements. He or she must have actual personal knowledge obtained by his or her personal and continuous inspection of the work of construction in all stages of its progress that the requirements of the approved plans and specifications are being executed.

Continuous inspection means complete inspection of every part of the work. Work, such as concrete work or brick work which can be inspected only as it is placed, shall require the constant presence of the project inspector. Other types of work which can be completely inspected after the work is installed may be carried on while the project inspector is not present. In any case, the project inspector must personally inspect every part of the work. In no case shall the project inspector have or assume any duties which will prevent him or her from providing continuous inspection.

The project inspector may obtain personal knowledge of the work of construction, either on-site or off-site, from the inspections performed by special inspectors or assistant inspectors and from the reporting of others on testing and inspection of materials and workmanship for compliance with the plans, specifications and applicable standards. The exercise of reasonable diligence to obtain the facts shall be required.

(2) Relations with the Architect or Engineer. The project inspector shall work under the general direction of the architect or registered engineer. All inconsistencies or seeming errors in the plans and specifications shall be reported promptly to the architect or registered engineer for his/her interpretation and instructions. In no case shall the instructions of the architect or registered engineer be construed to cause work to be done which is not in conformity with the approved plans, specifications and documents authorizing changes.

(3) Job File. The project inspector shall keep a file of approved plans and specifications (including all approved documents authorizing changes) on the job at all times, and shall immediately return any unapproved documents to the architect or registered engineer for proper action.

(4) Construction Procedure Records. The project inspector shall keep a record of certain phases of construction procedures including, but not limited to the following:

(A) Concrete pouring operations. The records show the time and date of plac-

ir
th
(B) W
er
(C) P
d
b
b
(5) Devial
any de
media
Copies
isterec
Faili
ations
contra
contra
and re
(6) Verifi
agency
(c) Violati
notify
ments
report
engine
lation

Authority:
Reference:

4-220. Du

(a) Respon
by his
theref
ivities
ment :

(b) Perfor
plans :
time. I
cordar
rect th

All i
specifi
isterec
tion. I
to the
ever, s
to cau:
specifi

The
projec
(c) Verifie
agency

If w
contra
tor reg

Authority:

(7-1-89)

(7-1-89)

STATE BUILDING CODE
(Part 1, Title 24, C.C.R.)

4-220

ing concrete and the time and date of removal of forms in each portion of the structure.

(B) Welding operations. The record shall include identification marks of welders, lists of defective welds, manner of correction of defects, etc.

(C) Penetration under the last ten (10) blows for each pile when piles are driven for foundations. All such records of construction procedures shall be kept on the job until the completion of the work. These records shall be made a part of the permanent records of the owner.

(5) Deviations. The project inspector shall notify the contractor, in writing, of any deviations from the approved plans and specifications which are not immediately corrected by the contractor when brought to his or her attention. Copies of such notice shall be forwarded immediately to the architect or registered engineer and to the enforcement agency.

Failure on the part of the project inspector to notify the contractor of deviations from the approved plans and specifications shall in no way relieve the contractor of any responsibility to complete the work covered by his or her contract in accordance with the approved plans and specifications and all laws and regulations.

(6) Verified Reports. The project inspector shall submit to the enforcement agency verified reports as required in Section 214.

(c) Violations. Failure, refusal or neglect on the part of the project inspector to notify the contractor of any work which does not comply with the requirements of the approved plans and specifications, or failure, refusal or neglect to report immediately, in writing any such violation to the architect or registered engineer, to the owner and to the enforcement agency shall constitute a violation of the Act and shall be cause for the enforcement agency to take action.

Authority: Section 16022, Health and Safety Code.

Reference: Sections 16017 and 16021, Health and Safety Code.

4-220. Duties of the Contractor.

(a) Responsibilities. It is the duty of the contractor to complete the work covered by his or her contract in accordance with the approved plans and specifications therefor. The contractor in no way is relieved of any responsibility by the activities of the architect, registered engineer, project inspector or the enforcement agency in the performance of their duties.

(b) Performance of the Work. The contractor shall study carefully the approved plans and specifications and shall plan his schedule of operations well ahead of time. If at any time it is discovered the work is being done which is not in accordance with the approved plans and specifications, the contractor shall correct the work immediately.

All inconsistencies or items which appear to be in error in the plans and specifications shall be promptly called to the attention of the architect or registered engineer, through the project inspector, for interpretation or correction. Local conditions which may affect the structure shall likewise be brought to the architect's or registered engineer's attention at once. In no case, however, shall the instruction of the architect or registered engineer be construed to cause work to be done which is not in conformity with the approved plans, specifications and change orders.

The contractor shall not carry on work except with the knowledge of the project inspector.

(c) Verified Reports. The contractor shall make and submit to the enforcement agency from time to time, verified reports as required in Section 214.

If work on the building is being done by independent contractors, having contracts with the owner, verified reports shall be submitted by each contractor regardless of the type of work involved.

Authority: Section 16022, Health and Safety Code.

Reference: Section 16021, Health and Safety Code.

4-221. Records.

The Office of the State Architect/Structural Safety Section shall maintain a record of the approved plans, specifications, addenda, change orders and letters of certification for the state owned or leased essential services buildings which have been certified as complying with the provisions of the Act. This record shall be kept in the Essential Services Buildings Central File at the OSA/SSS Headquarters Office in Sacramento. The Office shall also maintain a record of the letters of compliance for essential services buildings built under the jurisdiction of local enforcement agencies which have been submitted to the Office by those agencies.

Authority: Section 16022, Health and Safety Code.

Reference: Section 16022, Health and Safety Code.

4-222. Advisory Board.

- (a) **General.** The State Architect may appoint an advisory board whose duty it is to serve in an advisory capacity to the OSA/SSS in connection with administrative matters and with reference to regulations and requirements pertaining to the administration of the Act. This board shall also act as a board of review to which appeal can be made by owners, architects, engineers or other interested parties in case of disagreement with the interpretation by the local enforcement agencies and/or local appeals board of the Essential Services Seismic Safety Act or the regulations adopted pursuant thereto. For state agencies, the Advisory Board shall act as an appeals board for disagreements with the rulings, decisions, interpretations or acts of the Office of the State Architect/Structural Safety Section.
- (b) **Membership.** The said board shall consist of 9 members appointed by the State Architect and four ex-officio members who are: State Architect, the Chief Structural Engineer, the State Fire Marshal, the Executive Director of the Building Standards Commission and the Chairman of the Seismic Safety Commission. The ex-officio board members may appoint alternates to serve on the board as their representatives. Of the appointive members, one shall be an architect, one shall be a structural engineer, one shall be a civil engineer, one shall be a mechanical engineer or an electrical engineer, one shall be a representative of the League of California Cities, one shall be a representative of the County Supervisors Association, one shall be a representative of the California Building Officials, one shall be a representative of the California Fire Chiefs Association and one shall be a representative of the law enforcement agencies. The appointive members shall serve at the pleasure of the State Architect. The State Architect will select appointive members from nominations solicited from the California Council, American Institute of Architects, the Structural Engineers Association of California, the Consulting Engineers Association of California, the California Building Officials, the League of California Cities, the County Supervisors Association, the California Peace Officers Association and from the California Fire Chiefs Association. He or she may also appoint as many ex-officio members as he or she may desire. Ex-officio members are not entitled to vote in board actions.
- (c) **Meetings.** The board shall elect its own chairperson and vice chairperson and shall convene upon the call of the chairperson or the State Architect whenever it may be necessary in his or her judgment for the board to meet. The board shall adopt such rules of procedure as are necessary to enable it to perform the obligations delegated to it. The chairperson of the board shall at his or her discretion or upon the instruction of the board designate subcommittees to study and report back to the board on any technical subject or matter for which an independent study is desired or regarding appeals which are made to the board from interpretations of the enforcement agencies. The board members

will be
shall re

Authority: :

Reference:

4-223. Gen

The prov
owned or le
essential se

Authority:

Reference:

4-224. App

(a) The re
letter s
when t

(b) The ag
plicatio
Office
each e
cation:
proval

(c) The ap
essenti
engine
or regi
the wo
inform

Authority:

Reference:

4-225. De

In additi
following p

(a) Deleg
gineer
pervisi
serve t
when
pants
servati
by the
ical an
the bu
mecha
vided.

No c
relievi
sible cl
the Ac

(b) Assum
gineer
portio:

(7-1-89)

STATE BUILDING CODE
(Part 1, Title 24, C.C.R.)

4-223

will be reimbursed for their reasonable expenses in attending meetings but shall receive no compensation for their services.

Authority: Section 16022, Health and Safety Code.
Reference: Section 16022, Health and Safety Code.

State Buildings
(Effective July 1, 1989)
Article 2

4-223. General.

The provisions of Article 1 and Article 2 of these regulations shall apply to state owned or leased essential services buildings. Article 2 requirements do not apply to essential services buildings under the jurisdiction of local enforcement agencies.

Authority: Section 16022, Health and Safety Code.
Reference: Section 16001, Health and Safety Code.

4-224. Application for OSA Approval of Drawings and Specifications.

- (a) The required written approval of drawings and specifications shall consist of a letter signed by the Chief Structural Engineer, OSA/SSS which will be issued when the procedures of Section 229 of these regulations are completed.
- (b) The agency responsible for the essential services function shall submit an application, in duplicate, for the approval of drawings and specifications with the Office of the State Architect. A separate application shall be submitted for each essential services building or group of buildings on the same site. Applications shall be submitted to OSA/SSS on Form SSS-1, Application for Approval of Plans and Specifications (see facsimile copy in the Appendix).
- (c) The application shall contain a definite identifying name and location of the essential services building or buildings, the name of the architect or registered engineer in general responsible charge of the work, the names of the architects or registered engineers who have been delegated responsibility for portions of the work (see Section 209), the estimated cost of the project and all such other information as is requested thereon.

Authority: Section 16022, Health and Safety Code.
Reference: Sections 16001 and 16011, Health and Safety Code.

4-225. Designation of Responsibility.

In addition to the requirements of Section 209, Article 1 of these regulations, the following provisions shall apply:

- (a) **Delegation of Responsibility.** The architect, structural engineer or civil engineer in general responsible charge shall employ or retain, under his/her supervision, registered mechanical and electrical engineers to design and observe the construction of the mechanical and electrical portions of the work when these elements are significant to the safety of the building or its occupants or the continuing functioning of the building. The requirement for observation of construction of the mechanical and electrical portions of the work by the mechanical and electrical engineers may be waived where the mechanical and electrical elements are not considered to be significant to the safety of the building or its occupants or its continuing functioning and when special mechanical and electrical inspection in accordance with Section 211 is provided.

No delegation to or employment or retention of others shall be construed as relieving the architect, structural engineer or civil engineer in general responsible charge of his/her rights, duties and responsibilities under Section 16015 of the Act and Section 217 of these regulations.

- (b) **Assumption of Responsibility.** The architect, structural engineer or civil engineer who submits for approval plans and specifications for any project or any portion of any project which have been prepared by others shall assume re-

(7-1-89)

(7-1-89)

STATE BUILDING CODE
(Part 1, Title 24, C.C.R.)

4-242

Reference: Section 16017, Health and Safety Code.

4-242. OSA/SSS Notifications by Project Inspector.

The project inspector shall notify OSA/SSS at these times:

- (1) When work is started or restarted on the project.
- (2) At least 48 hours in advance of the time when foundation trenches will be complete and ready for footing forms.
- (3) At least 48 hours in advance of the first pour of concrete and 24 hours in advance of any subsequent concrete pours.
- (4) When work is suspended for a period of more than two weeks.

Authority: Section 16022, Health and Safety Code.

Reference: Section 16017, Health and Safety Code.

Local Buildings
(Effective July 1, 1989)
Article 3

4-243. General.

- (a) The provisions of Article 1 and Article 3 of these regulations shall apply to essential services buildings owned or leased by a city, city and county or county or a special fire district within these jurisdictions. The Office of the State Architect shall observe the implementation and administration of the provisions of the Essential Services Buildings Seismic Safety Act and these regulations pertaining to local jurisdictions under the authority granted in the Act.
- (b) Local jurisdictions shall establish such administrative procedures as they deem necessary and proper for the enforcement of the provisions of the Act so long as those procedures do not conflict with the requirements of Articles 1 and 3 of these regulations. The enforcement of these regulations is the responsibility of an authorized official of the local enforcement agency.

Authority: Section 16022, Health and Safety Code.

Reference: Section 16001, Health and Safety Code.

4-244. Approval of Drawings and Specifications.

- (a) The required written approval of drawings and specifications may consist of either a building permit or other document as established by the enforcing agency.
- (b) Written notification to OSA/SSS shall be required when the written approval of the drawings and specifications is issued by the local enforcement agency. The written notification shall contain a definite name and location for the essential services building, the name of the architect or registered engineer in general responsible charge of the work, the estimated cost of the project, the name of the qualified plan reviewer and if available the name of the project inspector. The written notification shall also include a statement signed by an official of the enforcement agency that the plans and specifications and the review thereof has been accomplished in compliance with the provisions of the Act and of these regulations.

Authority: Section 16022, Health and Safety Code.

Reference: Sections 16001 and 16011, Health and Safety Code.

4-245. Voidance of Application.

Any change, erasure, alteration or modification of any plans or specifications bearing the identification stamp of the enforcement agency automatically voids the approval of the application. However, the "written approval of the plans" may be extended upon approval of the enforcement agency to include revised plans and specifications if proper documents are submitted for the review and approval of the enforcement agency.

Authority: Section 16022, Health and Safety Code.

Reference: Sections 16009, 16011 and 16013, Health and Safety Code.

4-246. Time of Beginning of Construction and Partial Construction.

Construction work whether for a new essential services building, or for a reconstruction, alteration or addition project for an essential services building, shall not be commenced nor shall any contract be let until the owner has applied for and obtained from the enforcement agency the required written approval of plans and specifications.

All work done and materials used and installed must be in accordance with and in conformity to the approved plans and specifications. The enforcement agency shall be notified whenever work is being carried on and failure to give such notice automatically voids approval of the plans and specifications.

An uncompleted building shall not be considered as having been constructed under the provisions of the Essential Services Buildings Seismic Safety Act.

Authority: Section 16002, Health and Safety Code.

Reference: Section 16016, Health and Safety Code.

4-247. Notice of Start of Construction.

The architect or registered engineer responsible for the project shall give written notification to the enforcement agency before construction is to be started. The architect or registered engineer shall furnish the name of the contractor, the contract price and the date of starting of construction. The names and addresses of the sub-contractors shall also be reported as soon as they are available.

Authority: Section 16022, Health and Safety Code.

Reference: Section 16016, Health and Safety Code.

4-248. Enforcement Agency Project and Special Inspector Approval.

- (a) The enforcement agency shall review the qualifications of the project and special inspectors proposed for essential services buildings projects to determine his/her competency to do the inspection required for each particular project. The qualification review shall include an appraisal of the candidate's education and experience and a personal interview which may include a written examination if deemed appropriate by the enforcement agency.
- (b) The approval of the enforcement agency shall include information to the project inspector of the "personal knowledge" provisions of the Act and of the additional requirement that he/she shall not assume other duties which would preclude him/her from obtaining the personal knowledge required by the project inspector for all the work of the project.
- (c) Representatives of the enforcement agency shall from time to time visit the construction site to observe the work of construction and to monitor the performance of the project inspector. The construction work is subject to all the inspections required by the enforcement agency.

Authority: Sections 16017 and 16022, Health and Safety Code.

Reference: Sections 16017 and 16021, Health and Safety Code.

4-249. Verified Reports.

The verified reports required by the Act to be filed by the architects, engineers, inspectors and contractors having responsibility for all or any portion of the construction work of the project shall be filed on a form established by the enforcement agency. The form shall contain all the information and statements contained in the facsimile verified report forms shown in the Appendix. Original manual signatures of the architect, engineer, inspector and contractor are required on the verified report.

Authority: Sections 16020, 16021 and 16022, Health and Safety Code.

Reference: Sections 16020, 16021, Health and Safety Code.

1992 Version

1992

Essential Services Buildings
(Effective July 1, 1989)
Article 1

4-201. Purpose.

Essential services buildings constructed pursuant to these rules and regulations shall be designed and constructed to resist gravity forces, to minimize fire hazards and to resist, insofar as practical, the forces generated by winds and major earthquakes of the intensity and severity of the strongest anticipated at the building site without catastrophic collapse, but with some repairable architectural or structural damage. The essential services buildings as designed and constructed shall be capable of providing essential services to the public after a disaster. In addition, the equipment and other accessories which are necessary for the continued functioning of the essential services operation shall be anchored and braced to resist earthquake forces.

Authority: Section 16022, Health and Safety Code.

Reference: Section 16001, Health and Safety Code.

4-202. Scope.

These regulations apply to the administrative procedures concerning the construction, reconstruction, alteration of or addition to any public essential services buildings under the jurisdiction of a city, city and county, county (including special fire districts) or the State of California.

Chapters 23, 24, 25, 26, 27, 28, 29, 30, 32, 37, 47, 54, and 60 of Part 2, Title 24, CCR, as adopted by the Office of the State Architect/Structural Safety Section, designate the structural building regulations which shall apply to any essential services building as defined in Section 16007 of the Health and Safety Code. The term "essential services" building shall include all buildings, structures, appurtenances and related systems or facilities as interpreted in Section 207.

These rules and regulations establish reasonable standards and minimum requirements for the structural integrity of essential services buildings. The design and construction of the electrical, mechanical and plumbing systems in essential services buildings shall conform to the applicable building regulations as adopted by OSA/SSS in Part 3, Part 4 and Part 5, respectively, of Title 24, CCR. The essential services buildings shall be designed and constructed to conform to the regulations adopted by the State Fire Marshal in Title 24, CCR, for the particular occupancy concerned.

If the building standards and regulations adopted by the city, city and county or county agency responsible for building safety are more stringent than those adopted in the applicable sections of Title 24, CCR, then the local building standards and regulations shall govern within its jurisdiction.

Authority: Section 16022, Health and Safety Code.

Reference: Section 16001, Health and Safety Code.

4-203. Interpretation.

No regulation shall be construed to deprive the enforcing agency of its right to exercise the powers conferred upon it by law or limit the enforcing agency in such enforcement as is necessary to secure the safety of construction as required in the Act.

Authority: Section 16022, Health and Safety Code.

Reference: Section 16001, Health and Safety Code.

4-204. Delegation of Authority.

All powers, duties and responsibilities pursuant to carrying out the provisions of the Essential Services Buildings Seismic Safety Act designated in Section 16022 of the Act for the State Architect have been delegated by the State Architect to the Chief Structural Engineer, Office of the State Architect subject to the direction of the State Architect.

Those powers, duties and responsibilities so delegated shall include the observation of the implementation and administration of the Act, the adoption in consultation with local jurisdictions of the regulations necessary for carrying out the provisions of the Act, providing advice and assistance to local jurisdictions in matters concerning the Act or these regulations and acting as an appeals agency relative to the administration of the Act.

Authority: Section 16022, Health and Safety Code.

Reference: Section 14608, Government Code.

4-205. Application of Building Standards.

Building standards are set forth in Parts 2, 3, 4, 5 and 7 of Title 24, CCR, and have been adopted as a basis for the approval of plans and specifications. These regulations shall not be construed to prevent the use of higher design standards nor to restrict the use of new or innovative design or construction techniques.

Where the designer desires to use innovative design or construction techniques not included in these regulations, it shall be necessary to submit for review and approval information including computations, test data and recommendations covering the design in question. The Office of the State Architect or local enforcement agency must be satisfied that the degree of safety achieved is equivalent to that achieved by the standard procedures. The enforcement agency review and approval of the innovative design or construction techniques shall precede the submission of plans and specifications utilizing these techniques.

Authority: Section 16022, Health and Safety Code.

Reference: Section 16001, Health and Safety Code.

4-206. Approval of New Essential Services Buildings.

Plans and specifications shall be submitted to the appropriate enforcement agency for every new owned or leased essential services building before the plans are adopted by the governing board, authority, owner, corporation or other agency proposing to construct any essential services building.

Before any agency may convert an existing building into an essential services building, that agency shall submit an application and plans of the building to the appropriate enforcement agency for approval. The plans shall provide for the reconstruction and alterations necessary for compliance with the requirements of these rules and regulations.

Authority: Section 16022, Health and Safety Code.

Reference: Section 16011, Health and Safety Code.

4-207. Definitions.

The words defined in this section shall have the meaning stated therein throughout the rules and regulations contained in Part 1 (Administrative), Title 24, CCR.

"Act" shall mean the Essential Services Buildings Seismic Safety Act of 1986, Sections 16000-16023, inclusive, of the Health and Safety Code.

"Addition" shall mean an increase in floor area or volume of enclosed space which is physically attached to an existing building by connections which are required for transmitting vertical or horizontal loads between units. The area exemption in Section 16010 of the Act does not apply to additions to essential services buildings when the total area of the existing building and the addition exceeds 2000 square feet. An "addition" which is not required to be physically attached either for its own support or for support of the existing building shall be separated as required by Section 2312 (h), Part 2, Title 24, CCR, and shall be deemed to be the construction of a new essential services building.

"Alteration" shall mean changes within an existing building as defined in Section 2312 (b) of Part 2, Title 24, CCR. Alterations to existing essential services buildings shall conform to the requirements of Title 24, CCR. Major alterations will be per-

mitted provided the entire essential services building as modified, including the structural alterations or additions, conform to the requirements of Title 24, CCR, if the area of the existing building including additions exceeds 2000 square feet.

"Approved Plans and Specifications" shall mean plans, specifications, addenda and change orders which have been duly approved by the appropriate enforcement agency pursuant to Sections 16013 and 16016 of the Health and Safety Code and which are identified by a stamp bearing the name of the enforcement agency, the identification number, the date and the signature of the qualified reviewer as required in Section 16011 of the Act.

"Complying Building" shall mean a building which has been constructed or reconstructed in accordance with these rules and regulations.

"Enforcement Agency" shall mean the Structural Safety Section of the Office of the State Architect for state owned or leased buildings and shall mean the enforcement agency of any city, county or city and county having jurisdiction over locally owned or leased essential services facilities.

"Equipment" shall mean all new or replacement equipment installed in any new or existing owned or leased building which is required for the functioning of the essential services operation. The installation of such equipment shall meet the support, bracing and anchorage requirements of Title 24, CCR. The area exemption in Section 16010 of the Act does not apply to the anchorage or bracing of equipment necessary to the operation of the essential services function.

"Fire Station" shall mean any building that contains the operational facilities, fire suppression, alarm and communications equipment necessary to respond to fire emergencies.

"Maintenance" shall mean and include ordinary upkeep or repair work such as replacement in kind, repainting, replastering and reroofing.

"New Essential Services Building" shall mean any newly erected essential services building or any existing building converted to essential services use subsequent to the effective date of the Act regardless of whether the building is owned or leased by the public agency. Existing buildings housing essential services facilities owned or leased by the State, a city, a city and county or a county prior to the effective date of the Act are exempt from these regulations except for the installation of new or replacement equipment. When a portion of a building is to be utilized for an essential services operation, the area so utilized and the utilities systems and components servicing the area shall be constructed according to these rules and regulations and shall be separated or protected from damage due to failures of other portions of the structure to the extent determined by the enforcement agency to insure continued functioning after an earthquake or other disaster. Ancillary buildings and facilities related to the essential services building function may be exempt from these regulations if the enforcement agency determines that such buildings and facilities are not necessary to the functioning of the essential services operation after an earthquake or other disaster.

"Nonstructural Alterations" shall mean only such alterations which do not affect the safety of the essential services building and do not change, in any manner, its structural elements.

"Office of the State Architect", or "Office" or the initials "OSA/SSS" shall mean the Structural Safety Section of the Office of the State Architect in the State Department of General Services. Approvals, disapprovals, orders and certificates of compliance for state owned or leased buildings shall be issued directly by the Chief Structural Engineer who shall act for the State Architect in carrying out the provisions of the Act.

"Owner" for the purposes of these regulations shall mean the public agency responsible for the essential services functions performed under its authority within an essential services building. The owner is responsible for applying for and obtaining the approvals and certifications required by these regulations.

"Plans" as used in these regulations shall mean the drawings associated with the project such as, but not limited to, vicinity maps, site plans, foundation plans, floor plans, ceiling plans, roof plans, cross-sections, interior elevations, exterior elevations and details which are used in conjunction with the project specifications and which are necessary to accomplish construction in conformance with the requirements of the Act.

"Police Station" shall mean any building that contains the operational facilities and the alarm and communications equipment necessary to respond to police emergencies. This definition shall include the offices of local police departments, county sheriffs, California State Police and the California Highway Patrol.

"Project Inspector" shall mean any individual duly approved by the enforcement agency as the on-site inspector for a particular project. The project inspector shall be hired by and paid by the owner and he/she shall act as the agent of the owner at the project site under the general direction of the architect or registered engineer in general responsible charge and under the supervision of the enforcement agency. The project inspector shall be independent of the contractor. The project inspector shall be responsible for inspecting all work included in the contract. A special inspector shall be responsible only for inspecting the work for which he/she is approved. (See Section 211(c) for special inspection.)

"Reconstruction" is the repair of damage to an existing complying essential services building or an alteration of an existing non-complying building to bring it into conformance with the safety standards established by these regulations for essential services buildings.

"Registered Engineer" as used in these regulations shall mean a structural engineer, civil engineer, mechanical engineer or electrical engineer holding a valid certificate under Chapter 7, Division 3, of the California Business and Professions Code.

"Specifications" as used in these regulations shall mean the written document which is used in conjunction with the project plans to establish the job conditions, the quality and quantity of construction materials used in the project and the quality of workmanship required to accomplish the construction in conformance with the provisions of the Act.

Authority: Section 16022, Health and Safety Code.

Reference: Sections 16003, 16011, 16018 and 16019, Health and Safety Code.

4-208. Application for Approval of Drawings and Specifications.

- (a) **General.** Before adopting plans and specifications, the agency responsible for the essential services function shall submit an application to the appropriate enforcing agency for written approval of said plans and specifications except where the new construction is a Type V or Type II N one-story structure which contains 2000 square feet or less of floor area and is not located in a special studies zone as defined in Section 2622 of the Public Resources Code.
- (b) An architect, structural engineer or civil engineer may act as the agent for the essential services agency when filing the application for approval of plans and specifications.

An architect or registered engineer who is a contracting party or who has any employment relationship with any entity which may be a contracting party for the construction of the essential services building shall not perform the functions prescribed by Section 16015 of the Health and Safety Code or be delegated responsibility for any portion of the work.

Authority: Section 16022, Health and Safety Code.

Reference: Sections 16010, 16011 & 16015, Health and Safety Code.

4-209. Designation of Responsibilities.

- (a) **General Responsible Charge.** For every essential services building project there shall be an architect, structural engineer or civil engineer in general responsible charge of plans, specifications and observation of construction, except that where plans, specifications and observation of the work of construction for alterations or repairs do not involve architectural or structural changes, said plans, specifications and observation of construction may be under the responsible charge of a registered mechanical or electrical engineer for work involving only those branches of engineering.
- A project may be divided into parts, provided that each part is clearly defined by a building or similar distinct unit. The part, so defined, shall include all portions and utility systems or facilities necessary to the complete functioning of that part. Separate assignments of general responsible charge may be made for the parts.
- (b) **Delegation of Responsibility.** The architect, structural engineer or civil engineer in general responsible charge may delegate responsibility for any portion of the work to, or may employ, or retain other architects, structural engineers or civil engineers. Registered mechanical and electrical engineers may be delegated responsibility for the mechanical and electrical portions of the work, respectively.
- (c) **Evidence of Responsibility.** The manual signature of the architect or registered engineer on a plan, specification, or other document shall be deemed evidence that full responsibility is assumed by the signator for the work shown thereon, including also those portions of the accompanying computations, specifications or plans which pertain to such work.
- (d) **Alternates.** The applicant, or the architect or registered engineer having general or delegated responsibility, may name one or more persons to act as alternate(s) for the design and/or observations of the work of construction provided such persons are architects or registered engineers who themselves are qualified under these regulations to assume the responsibility assigned.

Authority: Section 16022, Health and Safety Code.

Reference: Sections 16011, 16012, & 16015, Health and Safety Code.

4-210. Plans, Specifications, Computations and Other Data.

- (a) **General.** When an application is filed, it shall be accompanied by the required number of complete sets of the plans and specifications, the full structural design calculations, site data and a fee as established by the enforcement agency.
- (b) **Plans.** Plans shall show the use or occupancy of all parts of the essential services buildings and shall give such other information as may be required to indicate the nature of the work proposed and to show compliance with the Act and these regulations. The drawings shall be legible and sufficiently detailed and cross-referenced to show clearly the pertinent features of the construction, and shall have sufficient dimensions to be readily interpreted. Where a project includes several buildings, the plans for each shall be drawn independently except that details common to all need not be repeated.
- Submitted plans and specifications, which are obviously incomplete or incorrect, shall be returned to the architect or registered engineer in general responsible charge with a request for compliance with these regulations before checking is begun or resumed by the enforcement agency.
- (c) **Specifications.** Specifications shall completely set forth the requirements for the various types of materials that will enter into the permanent construction and shall describe the methods not covered in the technical regulations which are to be used to obtain the required quality of the work shown on the plans and described in the specifications.

- (d) **Design Computations.** Computations, stress diagrams and other pertinent data shall accompany the plans and specifications and shall be sufficiently complete so that calculations for individual structural members can be readily interpreted. The computations shall be prefaced by a statement clearly and concisely outlining the basis for the structural design and indicating the manner in which the proposed essential services building will resist vertical loads and horizontal forces. The computations shall be sufficiently complete to establish that the structure will resist the loads and forces prescribed in Part 2, Title 24, CCR. Assumed safe bearing pressures on soils and specified strengths of concrete shall be given in the computations and noted on the plans. Where unusual conditions occur, such additional data as are pertinent to the work shall be submitted.
- (e) **Site Data.** Site data for all essential services buildings covered by these regulations shall include a soil investigation report providing information on subsurface site work and laboratory testing, an evaluation of site soil conditions, a recommendation for the type of foundation to be used and an allowable design value for the soil bearing capacity.
For all essential services building sites not exempted from the provisions of the Act, a geologic and earthquake hazard report including an evaluation of both known and potentially active local and regional fault systems, slope stability, liquefaction potential and other hazards shall be prepared by competent persons and submitted with the application, plans and specifications.
All or parts of the geologic and earthquake hazard investigation and report may be waived by the enforcement agency when in the judgment of the enforcement agency those requirements are unnecessary and would not be beneficial to public safety.
- (f) **Signatures Required.** All plans and specifications submitted for approval shall bear the manual signature of the architect or professional engineer in general responsible charge of design. When responsibility for a portion of the work has been delegated, the plans and specifications covering that portion of design shall also bear the manual signature of the responsible registered engineer or architect.

Authority: Section 16022, Health and Safety Code.

Reference: Sections 16009, 16011, 16012, 16013, & 16014, Health and Safety Code.

4-211. **Observation and Inspection of Construction.**

- (a) **Observation by Architect or Registered Engineer.** The Act provides that the observation of the work of construction, reconstruction, alteration or addition shall be under the general responsible charge of an architect, structural engineer, civil engineer or, under certain conditions, a registered mechanical or electrical engineer for work involving only those branches of engineering. A civil engineer qualified in soil engineering shall provide the observation for placement of fills and shall submit a verified report attesting to the compliance of the engineered fill.
- (b) **Inspection by Project Inspector.** The owner must provide for and require competent, adequate and continuous inspection by a project inspector approved by the enforcement agency. The project inspector so approved shall cooperate with the architect or registered engineer in general responsible charge of the observation of the work of construction to insure compliance with the approved drawings and specifications. The project inspector shall request interpretations and clarifications of the approved contract drawings and specifications when necessary from the responsible architect or registered engineer. Code interpretations received by the project inspector which cause deviations from the approved drawings and specifications shall be referred to the responsible architect or registered engineer for preparation of change orders to cover the required work.

For every project there shall be a project inspector who shall have personal knowledge as defined in Section 16021 of the Health and Safety Code of all work done on the project or its parts. On large projects adequate inspection may require the employment of assistant inspectors. The employment of special inspectors or assistant inspectors shall not be construed as relieving the project inspector of his/her duties and responsibilities under Section 16021 and Sections 214 and 219 of these regulations.

No work shall be carried out except under the inspection of the project inspector approved by the enforcement agency. The project inspector shall have had at least three years equivalent experience in construction work of a type similar to that for which he/she is proposed as inspector, shall have a thorough knowledge of building materials, and shall be able to read and interpret plans and specifications.

The cost of project inspection shall be paid for by the owner.

- (c) **Special Inspection.** Special inspection by inspectors specially approved by the enforcement agency may be required on all masonry construction, glued laminated lumber fabrication, wood framing using timber connectors, ready mixed concrete batching, gunite, prestressed concrete, important steel fabrication, high strength steel bolt installations, welding, pile driving, electrical and mechanical work.

The project inspector may be used for special inspections if he/she has been specially approved for such purposes and if he/she has the time available for the work.

The detailed inspection of all work covered by this section is the responsibility of the project inspector when special inspection is not provided.

The enforcement agency may also require special inspection for any other shop fabrication procedures that preclude the complete inspection of the work after assembly. It may require special inspection at the site in addition to those listed above if found necessary because of the special use of material or methods of construction.

Special inspectors shall submit verified progress reports as required by Section 214, for the special work covered.

Authority: Sections 16017, 16022, Health and Safety Code.

Reference: Sections 16015, 16017, 16020 and 16021, Health and Safety Code.

4-212. Supervision of Construction by the Enforcement Agency.

During the construction, reconstruction, repair, alteration of or addition to any essential services building, the enforcement agency as provided in the Act, shall make such site visits and observations as in its judgement is necessary or proper for enforcement of the Act and the protection of the safety of the occupants of the building and the public. If at any time as the work progresses, prior to the issuance of the final certification of compliance, it is found that modifications or changes are necessary to secure safety, the enforcement agency shall direct the architect or registered engineer in general responsible charge to prepare and submit documents covering such modifications or changes for the review and approval of the enforcement agency.

Authority: Section 16022, Health and Safety Code.

Reference: Sections 16001, 16009 and 16020, Health and Safety Code.

4-213. Tests.

- (a) **General.** Tests of materials are required as set forth in the approved plans and specifications and in Part 2, Title 24, CCR. Other materials or combination of materials may require additional tests. Where job conditions warrant the architect or registered engineer may waive certain tests with the approval of the enforcement agency. A list of all required tests of materials and of all required special inspections shall be prepared and submitted by the architect, structural

engineer or civil engineer in general responsible charge of the project at the time the plans and specifications are stamped for identification by the enforcement agency.

- (b) **Test Sampling.** Test samples or specimens of material for testing may be taken by the architect or registered engineer, his representative, the project inspector, or a representative of the testing agency. In no case shall the contractor, his employee or a vendor select the sample.
- (c) **Test Reports.** One copy each of all test reports shall be forwarded to the enforcement agency, the architect, the registered engineer and the project inspector by the testing agency. Such reports shall include all tests made, regardless of whether such tests indicate that the material is satisfactory or unsatisfactory. Records of special sampling operations as required shall also be reported. The reports shall show that the material or materials were sampled and tested in accordance with the requirements of these regulations and with the approved specifications. In the case of masonry or concrete, test reports shall show the specified design strength. They shall also state definitely whether or not the material or materials tested comply with the requirements.
- (d) **Verification of Test Reports.** Each testing agency shall submit to the enforcement agency a verified report, in duplicate, covering all of the tests which were required to be performed each time that work on the project is suspended, covering the tests up to that time, and at the completion of the project, covering all of the tests.
The verified report shall contain all the information included in the sample Laboratory Verified Report (see Appendix).

Authority: Section 16022, Health and Safety Code.

Reference: Sections 16009, 16020 and 16021, Health and Safety Code.

4-214. Verified Reports.

Sections 16020 and 16021 of the Act require that from time to time as the work progresses, the architect or registered engineer in charge of observation of construction of the work, each architect or registered engineer delegated responsibility for a portion of the work, the project inspector and the contractor shall each make a duly verified report to the enforcement agency upon a prescribed form or forms, showing that of his or her own personal knowledge the work during the period covered by the report has been performed and materials have been used and installed in every material respect in compliance with the duly approved plans and specifications, and setting forth such detailed statement of fact as shall be required. For a definition of personal knowledge refer to Sections 16020 and 16021 of the Act. See Articles 2 and 3 for the reporting requirements for state and local enforcement agencies, respectively.

Authority: Sections 16020, 16021 and 16022, Health and Safety Code.

Reference: Sections 16020 and 16021, Health and Safety Code.

4-215. Changes in the Approved Drawings and Specifications.

- (a) **General.** All work shall be executed in accordance with the approved plans and specifications except where documents authorizing changes have been submitted by the responsible architect or registered engineer to the enforcement agency for review and approval. These documents shall describe the authorized changes, show the increase or decrease in the contract cost involved and shall contain the signatures of the responsible architect or registered engineer and the owner and shall bear the approval stamp of the enforcement agency.

Authority: Section 16022, Health and Safety Code.

Reference: Sections 16011, 16013 and 16015, Health and Safety Code.

4-216. Final Certification of Compliance.

The certification of compliance for the essential services building by the enforcement agency will be issued when the work has been completed in accordance with the requirements as to safety of design and construction with Sections 16000-16023 of the Health and Safety Code (Essential Services Buildings Seismic Safety Act) and with the requirements of these regulations. The certification of compliance will be evidenced by a letter or a certificate of occupancy each of which shall contain a statement that the building design and review and the work of construction have been completed in accordance with the requirements of Sections 16000 through 16023 of the Health and Safety Code and of Part 1, Title 24, CCR. The certificate of compliance will be directed to the owner of the essential services building.

Local enforcement agencies shall forward one copy of the certification of compliance to the OSA/SSS Headquarters Office in Sacramento.

Authority: Section 16022, Health and Safety Code.

Reference: Sections 16009 and 16022, Health and Safety Code.

4-217. Duties of the Architect and Registered Engineers.

- (a) **General.** The architect or registered engineer is responsible to the owner and to the enforcement agency to see that the completed work conforms in every material respect to these regulations and the approved plans and specifications. He or she may, if so authorized, act as agent for the owner in completing and submitting the application to the enforcement agency.

The architect or registered engineer, in no way, is relieved of any responsibility by the activities of the enforcement agency in the performance of its duties.

- (b) **General Responsible Charge.** The architect or registered engineer in general responsible charge shall advise the owner in regard to filing of the application for approval of plans, the selection of a project inspector and the selection of a testing laboratory. He or she shall prepare the plans, specifications, design computations and other data and shall prepare documents authorizing changes in the approved drawings and specifications when so directed by the owner or as required by conditions on the project. He or she shall make, or cause to be made, the corrections required on the various documents to comply with the requirements of these regulations and shall provide the project inspector and testing agency with a complete set of stamped plans, specifications and documents authorizing changes.

The enforcement agency directs all technical correspondence to the architect or registered engineer in general responsible charge of the project.

- (c) **Verified Reports.** All architects and registered engineers having responsibility for observation of the work of construction shall maintain such personal contact with the project as is necessary to assure themselves of compliance in every material respect with the approved plans and specifications and shall submit verified reports to the enforcement agency as required in Section 214. The architect or registered engineer in general responsible charge shall be responsible for the timely submittal of the required verified reports from the project inspector, the contractor and the other architects and engineers who have been delegated responsibility for a portion of the project.
- (d) **Testing Program.** The architect or registered engineer in general responsible charge shall establish the extent of the testing of materials consistent with the needs of the particular project and shall issue specific instructions to the testing agency. He or she shall also notify the enforcement agency as to the disposition of materials noted on laboratory reports as not conforming to the approved plans and specifications.

Authority: Section 16022, Health and Safety Code.

Reference: Sections 16015 and 16020, Health and Safety Code.

4-218. Duties of the Mechanical and Electrical Engineers.

The architect, structural engineer or civil engineer in general responsible charge retains overall responsibility for the mechanical and electrical portions of the work when the design responsibility for that work has been delegated and the plans have been prepared by registered mechanical and electrical engineers.

Where plans, specifications, and estimates for alterations or repairs do not involve architectural or structural changes, said plans, specifications and estimates may be prepared and the work of construction observed by a registered mechanical or electrical engineer who shall be in general responsible charge.

The mechanical or electrical engineer shall fulfill the duties outlined in Section 217 when assuming general responsible charge and shall submit verified reports as required in Section 214. When accepting delegated responsibility, he or she shall comply with the requirements of Sections 209 and 210 insofar as these may relate to the work delegated to him or her.

Authority: Section 16022, Health and Safety Code.

Reference: Section 16015, Health and Safety Code.

4-219. Duties of the Project Inspector.

(a) **General.** The project inspector as an agent for the owner shall act under the general direction of the architect or registered engineer and under the supervision of the enforcement agency.

(b) **Duties.** The general duties of the project inspector in fulfilling his or her responsibilities are as follows:

(1) **Continuous Inspection Requirements.** He or she must have actual personal knowledge obtained by his or her personal and continuous inspection of the work of construction in all stages of its progress that the requirements of the approved plans and specifications are being executed.

Continuous inspection means complete inspection of every part of the work. Work, such as concrete work or brick work which can be inspected only as it is placed, shall require the constant presence of the project inspector. Other types of work which can be completely inspected after the work is installed may be carried on while the project inspector is not present. In any case, the project inspector must personally inspect every part of the work. In no case shall the project inspector have or assume any duties which will prevent him or her from providing continuous inspection.

The project inspector may obtain personal knowledge of the work of construction, either on-site or off-site, from the inspections performed by special inspectors or assistant inspectors and from the reporting of others on testing and inspection of materials and workmanship for compliance with the plans, specifications and applicable standards. The exercise of reasonable diligence to obtain the facts shall be required.

(2) **Relations with the Architect or Engineer.** The project inspector shall work under the general direction of the architect or registered engineer. All inconsistencies or seeming errors in the plans and specifications shall be reported promptly to the architect or registered engineer for his/her interpretation and instructions. In no case shall the instructions of the architect or registered engineer be construed to cause work to be done which is not in conformity with the approved plans, specifications and documents authorizing changes.

(3) **Job File.** The project inspector shall keep a file of approved plans and specifications (including all approved documents authorizing changes) on the job at all times, and shall immediately return any unapproved documents to the architect or registered engineer for proper action.

(4) **Construction Procedure Records.** The project inspector shall keep a record of certain phases of construction procedures including, but not limited to the following:

(A) Concrete pouring operations. The records show the time and date of plac-

ing concrete and the time and date of removal of forms in each portion of the structure.

(B) **Welding operations.** The record shall include identification marks of welders, lists of defective welds, manner of correction of defects, etc.

(C) **Penetration under the last ten (10) blows for each pile when piles are driven for foundations.** All such records of construction procedures shall be kept on the job until the completion of the work. These records shall be made a part of the permanent records of the owner.

(5) **Deviations.** The project inspector shall notify the contractor, in writing, of any deviations from the approved plans and specifications which are not immediately corrected by the contractor when brought to his or her attention. Copies of such notice shall be forwarded immediately to the architect or registered engineer and to the enforcement agency.

Failure on the part of the project inspector to notify the contractor of deviations from the approved plans and specifications shall in no way relieve the contractor of any responsibility to complete the work covered by his or her contract in accordance with the approved plans and specifications and all laws and regulations.

(6) **Verified Reports.** The project inspector shall submit to the enforcement agency verified reports as required in Section 214.

(c) **Violations.** Failure, refusal or neglect on the part of the project inspector to notify the contractor of any work which does not comply with the requirements of the approved plans and specifications, or failure, refusal or neglect to report immediately, in writing any such violation to the architect or registered engineer, to the owner and to the enforcement agency shall constitute a violation of the Act and shall be cause for the enforcement agency to take action.

Authority: Section 16022, Health and Safety Code.

Reference: Sections 16017 and 16021, Health and Safety Code.

4-220. Duties of the Contractor.

(a) **Responsibilities.** It is the duty of the contractor to complete the work covered by his or her contract in accordance with the approved plans and specifications therefor. The contractor in no way is relieved of any responsibility by the activities of the architect, registered engineer, project inspector or the enforcement agency in the performance of their duties.

(b) **Performance of the Work.** The contractor shall study carefully the approved plans and specifications and shall plan his schedule of operations well ahead of time. If at any time it is discovered the work is being done which is not in accordance with the approved plans and specifications, the contractor shall correct the work immediately.

All inconsistencies or items which appear to be in error in the plans and specifications shall be promptly called to the attention of the architect or registered engineer, through the project inspector, for interpretation or correction. Local conditions which may affect the structure shall likewise be brought to the architect's or registered engineer's attention at once. In no case, however, shall the instruction of the architect or registered engineer be construed to cause work to be done which is not in conformity with the approved plans, specifications and change orders.

The contractor shall not carry on work except with the knowledge of the project inspector.

(c) **Verified Reports.** The contractor shall make and submit to the enforcement agency from time to time, verified reports as required in Section 214.

If work on the building is being done by independent contractors, having contracts with the owner, verified reports shall be submitted by each contractor regardless of the type of work involved.

Authority: Section 16022, Health and Safety Code.

Reference: Section 16021, Health and Safety Code.

4-221. Records.

The Office of the State Architect/Structural Safety Section shall maintain a record of the approved plans, specifications, addenda, change orders and letters of certification for the state owned or leased essential services buildings which have been certified as complying with the provisions of the Act. This record shall be kept in the Essential Services Buildings Central File at the OSA/SSS Headquarters Office in Sacramento. The Office shall also maintain a record of the letters of compliance for essential services buildings built under the jurisdiction of local enforcement agencies which have been submitted to the Office by those agencies.

Authority: Section 16022, Health and Safety Code.

Reference: Section 16022, Health and Safety Code.

4-222. Advisory Board.

- (a) **General.** The State Architect may appoint an advisory board whose duty it is to serve in an advisory capacity to the OSA/SSS in connection with administrative matters and with reference to regulations and requirements pertaining to the administration of the Act. This board shall also act as a board of review to which appeal can be made by owners, architects, engineers or other interested parties in case of disagreement with the interpretation by the local enforcement agencies and/or local appeals board of the Essential Services Seismic Safety Act or the regulations adopted pursuant thereto. For state agencies, the Advisory Board shall act as an appeals board for disagreements with the rulings, decisions, interpretations or acts of the Office of the State Architect/Structural Safety Section.
- (b) **Membership.** The said board shall consist of 9 members appointed by the State Architect and four ex-officio members who are: State Architect, the Chief Structural Engineer, the State Fire Marshal, the Executive Director of the Building Standards Commission and the Chairman of the Seismic Safety Commission. The ex-officio board members may appoint alternates to serve on the board as their representatives. Of the appointive members, one shall be an architect, one shall be a structural engineer, one shall be a civil engineer, one shall be a mechanical engineer or an electrical engineer, one shall be a representative of the League of California Cities, one shall be a representative of the County Supervisors Association, one shall be a representative of the California Building Officials, one shall be a representative of the California Fire Chiefs Association and one shall be a representative of the law enforcement agencies. The appointive members shall serve at the pleasure of the State Architect. The State Architect will select appointive members from nominations solicited from the California Council, American Institute of Architects, the Structural Engineers Association of California, the Consulting Engineers Association of California, the California Building Officials, the League of California Cities, the County Supervisors Association, the California Peace Officers Association and from the California Fire Chiefs Association. He or she may also appoint as many ex-officio members as he or she may desire. Ex-officio members are not entitled to vote in board actions.
- (c) **Meetings.** The board shall elect its own chairperson and vice chairperson and shall convene upon the call of the chairperson or the State Architect whenever it may be necessary in his or her judgment for the board to meet. The board shall adopt such rules of procedure as are necessary to enable it to perform the obligations delegated to it. The chairperson of the board shall at his or her discretion or upon the instruction of the board designate subcommittees to study and report back to the board on any technical subject or matter for which an independent study is desired or regarding appeals which are made to the board from interpretations of the enforcement agencies. The board members

will be reimbursed for their reasonable expenses in attending meetings but shall receive no compensation for their services.

Authority: Section 16022, Health and Safety Code.

Reference: Section 16022, Health and Safety Code.

State Buildings
(Effective July 1, 1989)
Article 2

4-223. General.

The provisions of Article 1 and Article 2 of these regulations shall apply to state owned or leased essential services buildings. Article 2 requirements do not apply to essential services buildings under the jurisdiction of local enforcement agencies.

Authority: Section 16022, Health and Safety Code.

Reference: Section 16001, Health and Safety Code.

4-224. Application for OSA Approval of Drawings and Specifications.

- (a) The required written approval of drawings and specifications shall consist of a letter signed by the Chief Structural Engineer, OSA/SSS which will be issued when the procedures of Section 229 of these regulations are completed.
- (b) The agency responsible for the essential services function shall submit an application, in duplicate, for the approval of drawings and specifications with the Office of the State Architect. A separate application shall be submitted for each essential services building or group of buildings on the same site. Applications shall be submitted to OSA/SSS on Form SSS-1, Application for Approval of Plans and Specifications (see facsimile copy in the Appendix).
- (c) The application shall contain a definite identifying name and location of the essential services building or buildings, the name of the architect or registered engineer in general responsible charge of the work, the names of the architects or registered engineers who have been delegated responsibility for portions of the work (see Section 209), the estimated cost of the project and all such other information as is requested thereon.

Authority: Section 16022, Health and Safety Code.

Reference: Sections 16001 and 16011, Health and Safety Code.

4-225. Designation of Responsibility.

In addition to the requirements of Section 209, Article 1 of these regulations, the following provisions shall apply:

- (a) **Delegation of Responsibility.** The architect, structural engineer or civil engineer in general responsible charge shall employ or retain, under his/her supervision, registered mechanical and electrical engineers to design and observe the construction of the mechanical and electrical portions of the work when these elements are significant to the safety of the building or its occupants or the continuing functioning of the building. The requirement for observation of construction of the mechanical and electrical portions of the work by the mechanical and electrical engineers may be waived where the mechanical and electrical elements are not considered to be significant to the safety of the building or its occupants or its continuing functioning and when special mechanical and electrical inspection in accordance with Section 211 is provided.

No delegation to or employment or retention of others shall be construed as relieving the architect, structural engineer or civil engineer in general responsible charge of his/her rights, duties and responsibilities under Section 16015 of the Act and Section 217 of these regulations.

- (b) **Assumption of Responsibility.** The architect, structural engineer or civil engineer who submits for approval plans and specifications for any project or any portion of any project which have been prepared by others shall assume re-

Reference: Section 16017, Health and Safety Code.

4-242. OSA/SSS Notifications by Project Inspector.

The project inspector shall notify OSA/SSS at these times:

- (1) When work is started or restarted on the project.
- (2) At least 48 hours in advance of the time when foundation trenches will be complete and ready for footing forms.
- (3) At least 48 hours in advance of the first pour of concrete and 24 hours in advance of any subsequent concrete pours.
- (4) When work is suspended for a period of more than two weeks.

Authority: Section 16022, Health and Safety Code.

Reference: Section 16017, Health and Safety Code.

Local Buildings
(Effective July 1, 1989)
Article 3

4-243. General.

- (a) The provisions of Article 1 and Article 3 of these regulations shall apply to essential services buildings owned or leased by a city, city and county or county or a special fire district within these jurisdictions. The Office of the State Architect shall observe the implementation and administration of the provisions of the Essential Services Buildings Seismic Safety Act and these regulations pertaining to local jurisdictions under the authority granted in the Act.
- (b) Local jurisdictions shall establish such administrative procedures as they deem necessary and proper for the enforcement of the provisions of the Act so long as those procedures do not conflict with the requirements of Articles 1 and 3 of these regulations. The enforcement of these regulations is the responsibility of an authorized official of the local enforcement agency.

Authority: Section 16022, Health and Safety Code.

Reference: Section 16001, Health and Safety Code.

4-244. Approval of Drawings and Specifications.

- (a) The required written approval of drawings and specifications may consist of either a building permit or other document as established by the enforcing agency.
- (b) Written notification to OSA/SSS shall be required when the written approval of the drawings and specifications is issued by the local enforcement agency. The written notification shall contain a definite name and location for the essential services building, the name of the architect or registered engineer in general responsible charge of the work, the estimated cost of the project, the name of the qualified plan reviewer and if available the name of the project inspector. The written notification shall also include a statement signed by an official of the enforcement agency that the plans and specifications and the review thereof has been accomplished in compliance with the provisions of the Act and of these regulations.

Authority: Section 16022, Health and Safety Code.

Reference: Sections 16001 and 16011, Health and Safety Code.

4-245. Voidance of Application.

Any change, erasure, alteration or modification of any plans or specifications bearing the identification stamp of the enforcement agency automatically voids the approval of the application. However, the "written approval of the plans" may be extended upon approval of the enforcement agency to include revised plans and specifications if proper documents are submitted for the review and approval of the enforcement agency.

Authority: Section 16022, Health and Safety Code.

Reference: Sections 16009, 16011 and 16013, Health and Safety Code.

4-246. Time of Beginning of Construction and Partial Construction.

Construction work whether for a new essential services building, or for a reconstruction, alteration or addition project for an essential services building, shall not be commenced nor shall any contract be let until the owner has applied for and obtained from the enforcement agency the required written approval of plans and specifications.

All work done and materials used and installed must be in accordance with and in conformity to the approved plans and specifications. The enforcement agency shall be notified whenever work is being carried on and failure to give such notice automatically voids approval of the plans and specifications.

An uncompleted building shall not be considered as having been constructed under the provisions of the Essential Services Buildings Seismic Safety Act.

Authority: Section 16002, Health and Safety Code.

Reference: Section 16016, Health and Safety Code.

4-247. Notice of Start of Construction.

The architect or registered engineer responsible for the project shall give written notification to the enforcement agency before construction is to be started. The architect or registered engineer shall furnish the name of the contractor, the contract price and the date of starting of construction. The names and addresses of the sub-contractors shall also be reported as soon as they are available.

Authority: Section 16022, Health and Safety Code.

Reference: Section 16016, Health and Safety Code.

4-248. Enforcement Agency Project and Special Inspector Approval.

- (a) The enforcement agency shall review the qualifications of the project and special inspectors proposed for essential services buildings projects to determine his/her competency to do the inspection required for each particular project. The qualification review shall include an appraisal of the candidate's education and experience and a personal interview which may include a written examination if deemed appropriate by the enforcement agency.
- (b) The approval of the enforcement agency shall include information to the project inspector of the "personal knowledge" provisions of the Act and of the additional requirement that he/she shall not assume other duties which would preclude him/her from obtaining the personal knowledge required by the project inspector for all the work of the project.
- (c) Representatives of the enforcement agency shall from time to time visit the construction site to observe the work of construction and to monitor the performance of the project inspector. The construction work is subject to all the inspections required by the enforcement agency.

Authority: Sections 16017 and 16022, Health and Safety Code.

Reference: Sections 16017 and 16021, Health and Safety Code.

4-249. Verified Reports.

The verified reports required by the Act to be filed by the architects, engineers, inspectors and contractors having responsibility for all or any portion of the construction work of the project shall be filed on a form established by the enforcement agency. The form shall contain all the information and statements contained in the facsimile verified report forms shown in the Appendix. Original manual signatures of the architect, engineer, inspector and contractor are required on the verified report.

Authority: Sections 16020, 16021 and 16022, Health and Safety Code.

Reference: Sections 16020, 16021, Health and Safety Code.

1994 Version

Essential Services Buildings
(Effective July 1, 1989)
Article 1

4-201. Purpose.

Essential services buildings constructed pursuant to these rules and regulations shall be designed and constructed to resist gravity forces, to minimize fire hazards and to resist, insofar as practical, the forces generated by winds and major earthquakes of the intensity and severity of the strongest anticipated at the building site without catastrophic collapse, but with some repairable architectural or structural damage. The essential services buildings as designed and constructed shall be capable of providing essential services to the public after a disaster. In addition, the equipment and other accessories which are necessary for the continued functioning of the essential services operation shall be anchored and braced to resist earthquake forces.

Authority: Section 16022, Health and Safety Code.

Reference: Section 16001, Health and Safety Code.

4-202. Scope.

These regulations apply to the administrative procedures concerning the construction, reconstruction, alteration of or addition to any public essential services buildings under the jurisdiction of a city, city and county, county (including special fire districts) or the State of California.

When the enforcement agency is the Division of the State Architect/Office of Regulation Services (DSA/ORS) all parts of the State Building Standards Code, as contained in Title 24 of the California Code of Regulations and adopted by that agency designate the structural building regulations which shall apply to essential services buildings as defined in Section 16007 of the Health and Safety Code. The term "essential services" building shall include all buildings, structures, appurtenances and related systems or facilities as interpreted in Section 4-207.

These rules and regulations establish reasonable standards and minimum requirements for the structural integrity of essential services buildings. The essential services buildings shall be designed and constructed to conform to the regulations adopted by the California State Fire Marshal in Title 24, CCR, for the particular occupancy concerned.

When the enforcement agency is a local agency, the locally adopted editions of the model codes and the administrative regulations contained in Part 1 (Sections 4-201 through 4-222 and 4-243 through 4-249) Title 24, California Code of Regulations (CCR) designate the structural building regulations which shall apply to essential services buildings as defined in Section 16007 of the Health and Safety Code. The term "essential services" building shall include all buildings, structures, appurtenances and related systems or facilities as interpreted in Section 4-207.

If the building standards and regulations adopted by the city, city and county or county agency responsible for building safety are more stringent than those adopted in the applicable sections of Title 24, CCR, then the local building standards and regulations shall govern within its jurisdiction.

Authority: Section 16022, Health and Safety Code.

Reference: Section 16001, Health and Safety Code.

4-203. Interpretation.

No regulation shall be construed to deprive the enforcing agency of its right to exercise the powers conferred upon it by law or limit the enforcing agency in such enforcement as is necessary to secure the safety of construction as required in the Act.

Authority: Section 16022, Health and Safety Code.

Reference: Section 16001, Health and Safety Code.

4-204. Delegation of Authority.

All powers, duties and responsibilities pursuant to carrying out the provisions of the Essential Services Buildings Seismic Safety Act designated in Section 16022 of

INTRO
ADDED

Δ #

REPHRASE

ADDED
TO VARY FROM
ABOVE

△ NAME || the Act for the State Architect have been delegated by the State Architect to the Chief of the Office of Regulation Services, Division of the State Architect subject to the direction of the State Architect.

Those powers, duties and responsibilities so delegated shall include the observation of the implementation and administration of the Act, the adoption in consultation with local jurisdictions of the regulations necessary for carrying out the provisions of the Act, providing advice and assistance to local jurisdictions in matters concerning the Act or these regulations and acting as an appeals agency relative to the administration of the Act.

Authority: Section 16022, Health and Safety Code.

Reference: Section 14608, Government Code.

4-205. Application of Building Standards.

Building standards are set forth in Parts 2, 3, 4, 5 and 7 of Title 24, CCR, and have been adopted as a basis for the approval of plans and specifications. These regulations shall not be construed to prevent the use of higher design standards nor to restrict the use of new or innovative design or construction techniques.

△ || Where the designer desires to use innovative design or construction techniques not included in these regulations, it shall be necessary to submit for review and approval information including computations, test data and recommendations covering the design in question. The Division of the State Architect or local enforcement agency must be satisfied that the degree of safety achieved is equivalent to that achieved by the standard procedures. The enforcement agency review and approval of the innovative design or construction techniques shall precede the submission of plans and specifications utilizing these techniques.

Authority: Section 16022, Health and Safety Code.

Reference: Section 16001, Health and Safety Code.

4-206. Approval of New Essential Services Buildings.

Plans and specifications shall be submitted to the appropriate enforcement agency for every new owned or leased essential services building before the plans are adopted by the governing board, authority, owner, corporation or other agency proposing to construct any essential services building.

Before any agency may convert an existing building into an essential services building, that agency shall submit an application and plans of the building to the appropriate enforcement agency for approval. The plans shall provide for the reconstruction and alterations necessary for compliance with the requirements of these rules and regulations.

Authority: Section 16022, Health and Safety Code.

Reference: Section 16011, Health and Safety Code.

4-207. Definitions.

The words defined in this section shall have the meaning stated therein throughout the rules and regulations contained in Part 1 (Administrative), Title 24, CCR.

"Act" shall mean the Essential Services Buildings Seismic Safety Act of 1986, Sections 16000-16023, inclusive, of the Health and Safety Code.

△ || "Addition" shall mean an increase in floor area or volume of enclosed space which is physically attached to an existing building by connections which are required for transmitting vertical or horizontal loads between units. The area exemption in Section 16010 of the Act does not apply to additions to essential services buildings when the total area of the existing building and the addition exceeds 2000 square feet. An "addition" which is not required to be physically attached either for its own support or for support of the existing building shall be separated as required by Section 2331, Part 2, Title 24, CCR, and shall be deemed to be the construction of a new essential services building.

"Alteration" shall mean changes within an existing building as defined in Section 2331 of Part 2, Title 24, CCR. Alterations to exiting essential services buildings shall conform to the requirements of Title 24, CCR. Major alterations will be permitted provided the entire essential services building as modified, including the structural alterations or additions, conform to the requirements of Title 24, CCR, if the area of the existing building, including additions, exceeds 2,000 square feet. || △

"Approved Plans and Specifications" shall mean plans, specifications, addenda and change orders which have been duly approved by the appropriate enforcement agency pursuant to Sections 16013 and 16016 of the Health and Safety Code and which are identified by a stamp bearing the name of the enforcement agency, the identification number, the date and the signature of the qualified reviewer as required in Section 16011 of the Act.

"Complying Building" shall mean a building which has been constructed or reconstructed in accordance with these rules and regulations.

"Enforcement Agency" shall mean the Office of Regulation Services of the Division of the State Architect for state owned or leased buildings and shall mean the enforcement agency of any city, county or city and county having jurisdiction over locally owned or leased essential services facilities. || △

"Equipment" shall mean all new or replacement equipment installed in any new or existing owned or leased building which is required for the functioning of the essential services operation. The installation of such equipment shall meet the support, bracing and anchorage requirements of Title 24, CCR. The area exemption in Section 16010 of the Act does not apply to the anchorage or bracing of equipment necessary to the operation of the essential services function.

"Fire Station" shall mean any building that contains the operational facilities, fire suppression, alarm and communications equipment necessary to respond to fire emergencies.

"Maintenance" shall mean and include ordinary upkeep or repair work such as replacement in kind, repainting, replastering and reroofing.

"New Essential Services Building" shall mean any newly erected essential services building or any existing building converted to essential services use subsequent to the effective date of the Act regardless of whether the building is owned or leased by the public agency. Existing buildings housing essential services facilities owned or leased by the State, a city, a city and county or a county prior to the effective date of the Act are exempt from these regulations except for the installation of new or replacement equipment. When a portion of a building is to be utilized for an essential services operation, the area so utilized and the utilities systems and components servicing the area shall be constructed according to these rules and regulations and shall be separated or protected from damage due to failures of other portions of the structure to the extent determined by the enforcement agency to insure continued functioning after an earthquake or other disaster. Ancillary buildings and facilities related to the essential services building function may be exempt from these regulations if the enforcement agency determines that such buildings and facilities are not necessary to the functioning of the essential services operation after an earthquake or other disaster.

"Nonstructural Alterations" shall mean only such alterations which do not affect the safety of the essential services building and do not change, in any manner, its structural elements.

Division of the State Architect, or "Office" or the initials "DSA/ORS" shall mean the Office of Regulation Services of the Division of the State Architect in the State Department of General Services. Approvals, disapprovals, orders and certificates of compliance for state owned or leased buildings shall be issued directly by the Chief of the Office of Regulation Services, who shall act for the State Architect in carrying out the provisions of the Act. || △

"Owner" for the purposes of these regulations shall mean the public agency responsible for the essential services functions performed under its authority within

an essential services building. The owner is responsible for applying for and obtaining the approvals and certifications required by these regulations.

"Plans" as used in these regulations shall mean the drawings associated with the project such as, but not limited to, vicinity maps, site plans, foundation plans, floor plans, ceiling plans, roof plans, cross-sections, interior elevations, exterior elevations and details which are used in conjunction with the project specifications and which are necessary to accomplish construction in conformance with the requirements of the Act.

"Police Station" shall mean any building that contains the operation al facilities and the alarm and communications equipment necessary to respond to police emergencies. This definition shall include the offices of local police departments, county sheriffs, California State Police, California Highway Patrol and all offices necessary to the functioning of the essential services operation after an earthquake or other disaster.

"Project Inspector" shall mean any individual duly approved by the enforcement agency as the on-site inspector for a particular project. The project inspector shall be hired by and paid by the owner and he/she shall act as the agent of the owner at the project site under the general direction of the architect or registered engineer in general responsible charge and under the supervision of the enforcement agency. The project inspector shall be independent of the contractor. The project inspector shall be responsible for inspecting all work included in the contract. A special inspector shall be responsible only for inspecting the work for which he/she is approved. (See Section 4-211 (c) for special inspection.)

"Reconstruction" is the repair of damage to an existing complying essential services building or an alteration of an existing non-complying building to bring it into conformance with the safety standards established by these regulations for essential services buildings.

"Registered Engineer" as used in these regulations shall mean a structural engineer, civil engineer, mechanical engineer or electrical engineer holding a valid certificate under Chapter 7, Division 3, of the California Business and Professions Code.

"Specifications" as used in these regulations shall mean the written document which is used in conjunction with the project plans to establish the job conditions, the quality and quantity of construction materials used in the project and the quality of workmanship required to accomplish the construction in conformance with the provisions of the Act.

Authority: Section 16022, Health and Safety Code.

Reference: Sections 16003, 16011, 16018 and 16019, Health and Safety Code.

4-208. Application for Approval of Drawings and Specifications.

(a) **General.** Before adopting plans and specifications, the agency responsible for the essential services function shall submit an application to the appropriate enforcing agency for written approval of said plans and specifications except where the new construction is a Type V or Type II N one-story structure which contains 2000 square feet or less of floor area and is not located in a special studies zone as defined in Section 2622 of the Public Resources Code.

(b) An architect, structural engineer or civil engineer may act as the agent for the essential services agency when filing the application for approval of plans and specifications.

An architect or registered engineer who is a contracting party or who has any employment relationship with any entity which may be a contracting party for the construction of the essential services building shall not perform the functions prescribed by Section 16015 of the Health and Safety Code or be delegated responsibility for any portion of the work.

Authority: Section 16022, Health and Safety Code.

Reference: Sections 16010, 16011 & 16015, Health and Safety Code.

4-209. Designation of Responsibilities.

- (a) **General Responsible Charge.** For every essential services building project there shall be an architect, structural engineer or civil engineer in general responsible charge of plans, specifications and observation of construction, except that where plans, specifications and observation of the work of construction for alterations or repairs do not involve architectural or structural changes, said plans, specifications and observation of construction may be under the responsible charge of a registered mechanical or electrical engineer for work involving only those branches of engineering.
- A project may be divided into parts, provided that each part is clearly defined by a building or similar distinct unit. The part, so defined, shall include all portions and utility systems or facilities necessary to the complete functioning of that part. Separate assignments of general responsible charge may be made for the parts.
- (b) **Delegation of Responsibility.** The architect, structural engineer or civil engineer in general responsible charge may delegate responsibility for any portion of the work to, or may employ, or retain other architects, structural engineers or civil engineers. Registered mechanical and electrical engineers may be delegated responsibility for the mechanical and electrical portions of the work, respectively.
- (c) **Evidence of Responsibility.** The manual signature of the architect or registered engineer on a plan, specification, or other document shall be deemed evidence that full responsibility is assumed by the signator for the work shown thereon, including also those portions of the accompanying computations, specifications or plans which pertain to such work.
- (d) **Alternates.** The applicant, or the architect or registered engineer having general or delegated responsibility, may name one or more persons to act as alternate(s) for the design and/or observations of the work of construction provided such persons are architects or registered engineers who themselves are qualified under these regulations to assume the responsibility assigned.

Authority: Section 16022, Health and Safety Code.

Reference: Sections 16011, 16012, & 16015, Health and Safety Code.

4-210. Plans, Specifications, Computations and Other Data.

- (a) **General.** When an application is filed, it shall be accompanied by the required number of complete sets of the plans and specifications, the full structural design calculations, site data and a fee as established by the enforcement agency.
- (b) **Plans.** Plans shall show the use or occupancy of all parts of the essential services buildings and shall give such other information as may be required to indicate the nature of the work proposed and to show compliance with the Act and these regulations. The drawings shall be legible and sufficiently detailed and cross-referenced to show clearly the pertinent features of the construction, and shall have sufficient dimensions to be readily interpreted. Where a project includes several buildings, the plans for each shall be drawn independently except that details common to all need not be repeated.
- Submitted plans and specifications, which are obviously incomplete or incorrect, shall be returned to the architect or registered engineer in general responsible charge with a request for compliance with these regulations before checking is begun or resumed by the enforcement agency.
- (c) **Specifications.** Specifications shall completely set forth the requirements for the various types of materials that will enter into the permanent construction and shall describe the methods not covered in the technical regulations which are to be used to obtain the required quality of the work shown on the plans and described in the specifications.

- (d) **Design Computations.** Computations, stress diagrams and other pertinent data shall accompany the plans and specifications and shall be sufficiently complete so that calculations for individual structural members can be readily interpreted. The computations shall be prefaced by a statement clearly and concisely outlining the basis for the structural design and indicating the manner in which the proposed essential services building will resist vertical loads and horizontal forces. The computations shall be sufficiently complete to establish that the structure will resist the loads and forces prescribed in Part 2, Title 24, CCR. Assumed safe bearing pressures on soils and specified strengths of concrete shall be given in the computations and noted on the plans. Where unusual conditions occur, such additional data as are pertinent to the work shall be submitted.
- (e) **Site Data.** Site data for all essential services buildings covered by these regulations shall include a soil investigation report providing information on subsurface site work and laboratory testing, an evaluation of site soil conditions, a recommendation for the type of foundation to be used and an allowable design value for the soil bearing capacity.
For all essential services building sites not exempted from the provisions of the Act, a geologic and earthquake hazard report including an evaluation of both known and potentially active local and regional fault systems, slope stability, liquefaction potential and other hazards shall be prepared by competent persons and submitted with the application, plans and specifications.
All or parts of the geologic and earthquake hazard investigation and report may be waived by the enforcement agency when in the judgment of the enforcement agency those requirements are unnecessary and would not be beneficial to public safety.
- (f) **Signatures Required.** All plans and specifications submitted for approval shall bear the manual signature of the architect or professional engineer in general responsible charge of design. When responsibility for a portion of the work has been delegated, the plans and specifications covering that portion of design shall also bear the manual signature of the responsible registered engineer or architect.

Authority: Section 16022, Health and Safety Code.

Reference: Sections 16009, 16011, 16012, 16013, & 16014, Health and Safety Code.

4-211. Observation and Inspection of Construction.

- (a) **Observation by Architect or Registered Engineer.** The Act provides that the observation of the work of construction, reconstruction, alteration or addition shall be under the general responsible charge of an architect, structural engineer, civil engineer or, under certain conditions, a registered mechanical or electrical engineer for work involving only those branches of engineering.
A civil engineer qualified in soil engineering shall provide the observation for placement of fills and shall submit a verified report attesting to the compliance of the engineered fill.
- (b) **Inspection by Project Inspector.** The owner must provide for and require competent, adequate and continuous inspection by a project inspector approved by the enforcement agency. The project inspector so approved shall cooperate with the architect or registered engineer in general responsible charge of the observation of the work of construction to insure compliance with the approved drawings and specifications. The project inspector shall request interpretations and clarifications of the approved contract drawings and specifications when necessary from the responsible architect or registered engineer. Code interpretations received by the project inspector which cause deviations from the approved drawings and specifications shall be referred to the responsible architect or registered engineer for preparation of change orders to cover the required work.

For every project there shall be a project inspector who shall have personal knowledge as defined in Section 16021 of the Health and Safety Code of all work done on the project or its parts. On large projects adequate inspection may require the employment of assistant inspectors. The employment of special inspectors or assistant inspectors shall not be construed as relieving the project inspector of his/her duties and responsibilities under Section 16021 and Sections 214 and 219 of these regulations.

No work shall be carried out except under the inspection of the project inspector approved by the enforcement agency. The project inspector shall have had at least three years equivalent experience in construction work of a type similar to that for which he/she is proposed as inspector, shall have a thorough knowledge of building materials, and shall be able to read and interpret plans and specifications.

The cost of project inspection shall be paid for by the owner.

- (c) **Special Inspection.** Special inspection by inspectors specially approved by the enforcement agency may be required on all masonry construction, glued laminated lumber fabrication, wood framing using timber connectors, ready mixed concrete batching, gunite, prestressed concrete, important steel fabrication, high strength steel bolt installations, welding, pile driving, electrical and mechanical work.

The project inspector may be used for special inspections if he/she has been specially approved for such purposes and if he/she has the time available for the work.

The detailed inspection of all work covered by this section is the responsibility of the project inspector when special inspection is not provided.

The enforcement agency may also require special inspection for any other shop fabrication procedures that preclude the complete inspection of the work after assembly. It may require special inspection at the site in addition to those listed above if found necessary because of the special use of material or methods of construction.

Special inspectors shall submit verified progress reports as required by Section 214, for the special work covered.

Authority: Sections 16017, 16022, Health and Safety Code.

Reference: Sections 16015, 16017, 16020 and 16021, Health and Safety Code.

4-212. Supervision of Construction by the Enforcement Agency.

During the construction, reconstruction, repair, alteration of or addition to any essential services building, the enforcement agency as provided in the Act, shall make such site visits and observations as in its judgement is necessary or proper for enforcement of the Act and the protection of the safety of the occupants of the building and the public. If at any time as the work progresses, prior to the issuance of the final certification of compliance, it is found that modifications or changes are necessary to secure safety, the enforcement agency shall direct the architect or registered engineer in general responsible charge to prepare and submit documents covering such modifications or changes for the review and approval of the enforcement agency.

Authority: Section 16022, Health and Safety Code.

Reference: Sections 16001, 16009 and 16020, Health and Safety Code.

4-213. Tests.

- (a) **General.** Tests of materials are required as set forth in the approved plans and specifications and in Part 2, Title 24, CCR. Other materials or combination of materials may require additional tests. Where job conditions warrant the architect or registered engineer may waive certain tests with the approval of the enforcement agency. A list of all required tests of materials and of all required special inspections shall be prepared and submitted by the architect, structural

engineer or civil engineer in general responsible charge of the project at the time the plans and specifications are stamped for identification by the enforcement agency.

- (b) **Test Sampling.** Test samples or specimens of material for testing may be taken by the architect or registered engineer, his representative, the project inspector, or a representative of the testing agency. In no case shall the contractor, his employee or a vendor select the sample.
- (c) **Test Reports.** One copy each of all test reports shall be forwarded to the enforcement agency, the architect, the registered engineer and the project inspector by the testing agency. Such reports shall include all tests made, regardless of whether such tests indicate that the material is satisfactory or unsatisfactory. Records of special sampling operations as required shall also be reported. The reports shall show that the material or materials were sampled and tested in accordance with the requirements of these regulations and with the approved specifications. In the case of masonry or concrete, test reports shall show the specified design strength. They shall also state definitely whether or not the material or materials tested comply with the requirements.
- (d) **Verification of Test Reports.** Each testing agency shall submit to the enforcement agency a verified report, in duplicate, covering all of the tests which were required to be performed each time that work on the project is suspended, covering the tests up to that time, and at the completion of the project, covering all of the tests.
The verified report shall contain all the information included in the sample Laboratory Verified Report (see Appendix).

Authority: Section 16022, Health and Safety Code.

Reference: Sections 16009, 16020 and 16021, Health and Safety Code.

4-214. Verified Reports.

Sections 16020 and 16021 of the Act require that from time to time as the work progresses, the architect or registered engineer in charge of observation of construction of the work, each architect or registered engineer delegated responsibility for a portion of the work, the project inspector and the contractor shall each make a duly verified report to the enforcement agency upon a prescribed form or forms, showing that of his or her own personal knowledge the work during the period covered by the report has been performed and materials have been used and installed in every material respect in compliance with the duly approved plans and specifications, and setting forth such detailed statement of fact as shall be required. For a definition of personal knowledge refer to Sections 16020 and 16021 of the Act. See Articles 2 and 3 for the reporting requirements for state and local enforcement agencies, respectively.

Authority: Sections 16020, 16021 and 16022, Health and Safety Code.

Reference: Sections 16020 and 16021, Health and Safety Code.

4-215. Changes in the Approved Drawings and Specifications.


- (a) **General.** All work shall be executed in accordance with the approved plans and specifications except where documents authorizing changes have been submitted by the responsible architect or registered engineer to the enforcement agency for review and approval. These documents shall describe the authorized changes, show the increase or decrease in the contract cost involved and shall contain the signatures of the responsible architect or registered engineer and the owner and shall bear the approval stamp of the enforcement agency.

Authority: Section 16022, Health and Safety Code.

Reference: Sections 16011, 16013 and 16015, Health and Safety Code.

4-216. Final Certification of Compliance.

The certification of compliance for the essential services building by the enforcement agency will be issued when the work has been completed in accordance with the requirements as to safety of design and construction with Sections 16000-16023 of the Health and Safety Code (Essential Services Buildings Seismic Safety Act) and with the requirements of these regulations. The certification of compliance will be evidenced by a letter or a certificate of occupancy each of which shall contain a statement that the building design and review and the work of construction have been completed in accordance with the requirements of Sections 16000 through 16023 of the Health and Safety Code and of Part 1, Title 24, CCR. The certificate of compliance will be directed to the owner of the essential services building.

Local enforcement agencies shall forward one copy of the certification of compliance to the DSA/ORS Headquarters Office in Sacramento. || 

Authority: Section 16022, Health and Safety Code.

Reference: Sections 16009 and 16022, Health and Safety Code.

4-217. Duties of the Architect and Registered Engineers.

(a) **General.** The architect or registered engineer is responsible to the owner and to the enforcement agency to see that the completed work conforms in every material respect to these regulations and the approved plans and specifications. He or she may, if so authorized, act as agent for the owner in completing and submitting the application to the enforcement agency.

The architect or registered engineer, in no way, is relieved of any responsibility by the activities of the enforcement agency in the performance of its duties.

(b) **General Responsible Charge.** The architect or registered engineer in general responsible charge shall advise the owner in regard to filing of the application for approval of plans, the selection of a project inspector and the selection of a testing laboratory. He or she shall prepare the plans, specifications, design computations and other data and shall prepare documents authorizing changes in the approved drawings and specifications when so directed by the owner or as required by conditions on the project. He or she shall make, or cause to be made, the corrections required on the various documents to comply with the requirements of these regulations and shall provide the project inspector and testing agency with a complete set of stamped plans, specifications and documents authorizing changes.

The enforcement agency directs all technical correspondence to the architect or registered engineer in general responsible charge of the project.

(c) **Verified Reports.** All architects and registered engineers having responsibility for observation of the work of construction shall maintain such personal contact with the project as is necessary to assure themselves of compliance in every material respect with the approved plans and specifications and shall submit verified reports to the enforcement agency as required in Section 214. The architect or registered engineer in general responsible charge shall be responsible for the timely submittal of the required verified reports from the project inspector, the contractor and the other architects and engineers who have been delegated responsibility for a portion of the project.

(d) **Testing Program.** The architect or registered engineer in general responsible charge shall establish the extent of the testing of materials consistent with the needs of the particular project and shall issue specific instructions to the testing agency. He or she shall also notify the enforcement agency as to the disposition of materials noted on laboratory reports as not conforming to the approved plans and specifications.

Authority: Section 16022, Health and Safety Code.

Reference: Sections 16015 and 16020, Health and Safety Code.

4-218. Duties of the Mechanical and Electrical Engineers.

The architect, structural engineer or civil engineer in general responsible charge retains overall responsibility for the mechanical and electrical portions of the work when the design responsibility for that work has been delegated and the plans have been prepared by registered mechanical and electrical engineers.

Where plans, specifications, and estimates for alterations or repairs do not involve architectural or structural changes, said plans, specifications and estimates may be prepared and the work of construction observed by a registered mechanical or electrical engineer who shall be in general responsible charge.

The mechanical or electrical engineer shall fulfill the duties outlined in Section 4-217 when assuming general responsible charge and shall submit verified reports as required in Section 4-214. When accepting delegated responsibility, he or she shall comply with the requirements of Sections 4-209 and 4-210 insofar as these may relate to the work delegated to him or her.

Authority: Section 16022, Health and Safety Code.

Reference: Section 16015, Health and Safety Code.

4-219. Duties of the Project Inspector.

(a) **General.** The project inspector as an agent for the owner shall act under the general direction of the architect or registered engineer and under the supervision of the enforcement agency.

(b) **Duties.** The general duties of the project inspector in fulfilling his or her responsibilities are as follows:

(1) **Continuous Inspection Requirements.** He or she must have actual personal knowledge obtained by his or her personal and continuous inspection of the work of construction in all stages of its progress that the requirements of the approved plans and specifications are being executed.

Continuous inspection means complete inspection of every part of the work. Work, such as concrete work or brick work which can be inspected only as it is placed, shall require the constant presence of the project inspector. Other types of work which can be completely inspected after the work is installed may be carried on while the project inspector is not present. In any case, the project inspector must personally inspect every part of the work. In no case shall the project inspector have or assume any duties which will prevent him or her from providing continuous inspection.

The project inspector may obtain personal knowledge of the work of construction, either on-site or off-site, from the inspections performed by special inspectors or assistant inspectors and from the reporting of others on testing and inspection of materials and workmanship for compliance with the plans, specifications and applicable standards. The exercise of reasonable diligence to obtain the facts shall be required.

(2) **Relations with the Architect or Engineer.** The project inspector shall work under the general direction of the architect or registered engineer. All inconsistencies or seeming errors in the plans and specifications shall be reported promptly to the architect or registered engineer for his/her interpretation and instructions. In no case shall the instructions of the architect or registered engineer be construed to cause work to be done which is not in conformity with the approved plans, specifications and documents authorizing changes.

(3) **Job File.** The project inspector shall keep a file of approved plans and specifications (including all approved documents authorizing changes) on the job at all times, and shall immediately return any unapproved documents to the architect or registered engineer for proper action.

(4) **Construction Procedure Records.** The project inspector shall keep a record of certain phases of construction procedures including, but not limited to the following:

(A) Concrete pouring operations. The records show the time and date of plac-

ing concrete and the time and date of removal of forms in each portion of the structure.

- (B) Welding operations. The record shall include identification marks of welders, lists of defective welds, manner of correction of defects, etc.
 - (C) Penetration under the last ten (10) blows for each pile when piles are driven for foundations. All such records of construction procedures shall be kept on the job until the completion of the work. These records shall be made a part of the permanent records of the owner.
- (5) **Deviations.** The project inspector shall notify the contractor, in writing, of any deviations from the approved plans and specifications which are not immediately corrected by the contractor when brought to his or her attention. Copies of such notice shall be forwarded immediately to the architect or registered engineer and to the enforcement agency.

Failure on the part of the project inspector to notify the contractor of deviations from the approved plans and specifications shall in no way relieve the contractor of any responsibility to complete the work covered by his or her contract in accordance with the approved plans and specifications and all laws and regulations.

- (6) **Verified Reports.** The project inspector shall submit to the enforcement agency verified reports as required in Section 4-214.
- (c) **Violations.** Failure, refusal or neglect on the part of the project inspector to notify the contractor of any work which does not comply with the requirements of the approved plans and specifications, or failure, refusal or neglect to report immediately, in writing any such violation to the architect or registered engineer, to the owner and to the enforcement agency shall constitute a violation of the Act and shall be cause for the enforcement agency to take action.

Authority: Section 16022, Health and Safety Code.

Reference: Sections 16017 and 16021, Health and Safety Code.

4-220. Duties of the Contractor.

- (a) **Responsibilities.** It is the duty of the contractor to complete the work covered by his or her contract in accordance with the approved plans and specifications therefor. The contractor in no way is relieved of any responsibility by the activities of the architect, registered engineer, project inspector or the enforcement agency in the performance of their duties.
- (b) **Performance of the Work.** The contractor shall study carefully the approved plans and specifications and shall plan his schedule of operations well ahead of time. If at any time it is discovered the work is being done which is not in accordance with the approved plans and specifications, the contractor shall correct the work immediately.

All inconsistencies or items which appear to be in error in the plans and specifications shall be promptly called to the attention of the architect or registered engineer, through the project inspector, for interpretation or correction. Local conditions which may affect the structure shall likewise be brought to the architect's or registered engineer's attention at once. In no case, however, shall the instruction of the architect or registered engineer be construed to cause work to be done which is not in conformity with the approved plans, specifications and change orders.

The contractor shall not carry on work except with the knowledge of the project inspector.

- (c) **Verified Reports.** The contractor shall make and submit to the enforcement agency from time to time, verified reports as required in Section 4-214.
- If work on the building is being done by independent contractors, having contracts with the owner, verified reports shall be submitted by each contractor regardless of the type of work involved.

Authority: Section 16022, Health and Safety Code.

Reference: Section 16021, Health and Safety Code.

4-221. Records.

- △ || DSA/ORS shall maintain a record of the approved plans, specifications, addenda, change orders and letters of certification for the state owned or leased essential services buildings which have been certified as complying with the provisions of the Act. This record shall be kept in the Essential Services Buildings Central File at the DSA/ORS Headquarters Office in Sacramento. The Office shall also maintain a record of the letters of compliance for essential services buildings built under the jurisdiction of local enforcement agencies which have been submitted to the Office by those agencies.

Authority: Section 16022, Health and Safety Code.

Reference: Section 16022, Health and Safety Code.

4-222. Advisory Board.

- △ || (a) **General.** The State Architect may appoint an advisory board whose duty it is to serve in an advisory capacity to the DSA/ORS in connection with administrative matters and with reference to regulations and requirements pertaining to the administration of the Act. This board shall also act as a board of review to which appeal can be made by owners, architects, engineers or other interested parties in case of disagreement with the interpretation by the local enforcement agencies and/or local appeals board of the Essential Services Seismic Safety Act or the regulations adopted pursuant thereto. For state agencies, the Advisory Board shall act as an appeals board for disagreements with the rulings, decisions, interpretations or acts of DSA/ORS.
- △ || (b) **Membership.** The said board shall consist of 9 members appointed by the State Architect and four ex-officio members who are: State Architect, ~~the Chief of the Office of Regulation Services,~~ the California State Fire Marshal, the Executive Director of the Building Standards Commission and the Chairman of the Seismic Safety Commission. The ex-officio board members may appoint alternates to serve on the board as their representatives. Of the appointive members, one shall be an architect, one shall be a structural engineer, one shall be a civil engineer, one shall be a mechanical engineer or an electrical engineer, one shall be a representative of the League of California Cities, one shall be a representative of the County Supervisors Association, one shall be a representative of the California Building Officials, one shall be a representative of the California Fire Chiefs Association and one shall be a representative of the law enforcement agencies. The appointive members shall serve at the pleasure of the State Architect. The State Architect will select appointive members from nominations solicited from the California Council, American Institute of Architects, the Structural Engineers Association of California, the Consulting Engineers and Land Surveyors Association of California, the California Building Officials, the League of California Cities, the County Supervisors Association, the California Peace Officers Association and from the California Fire Chiefs Association. He or she may also appoint as many ex-officio members as he or she may desire. Ex-officio members are not entitled to vote in board actions.
- (c) **Meetings.** The board shall elect its own chairperson and vice chairperson and shall convene upon the call of the chairperson or the State Architect whenever it may be necessary in his or her judgment for the board to meet. The board shall adopt such rules of procedure as are necessary to enable it to perform the obligations delegated to it. The chairperson of the board shall at his or her discretion or upon the instruction of the board designate subcommittees to study and report back to the board on any technical subject or matter for which an independent study is desired or regarding appeals which are made to the board from interpretations of the enforcement agencies. The board members

will be reimbursed for their reasonable expenses in attending meetings but shall receive no compensation for their services.

Authority: Section 16022, Health and Safety Code.

Reference: Section 16022, Health and Safety Code.

State Buildings
(Effective July 1, 1989)

Article 2

4-223. General.

The provisions of Article 1 and Article 2 of these regulations shall apply to state owned or leased essential services buildings. Article 2 requirements do not apply to essential services buildings under the jurisdiction of local enforcement agencies.

Authority: Section 16022, Health and Safety Code.

Reference: Section 16001, Health and Safety Code.

4-224. Application for DSA Approval of Drawings and Specifications.

- (a) The required written approval of drawings and specifications shall consist of a letter signed by the Chief of the Office of Regulation Services, DSA/ORS which will be issued when the procedures of Section 4-229 of these regulations are completed.
- (b) The agency responsible for the essential services function shall submit an application, in duplicate, for the approval of drawings and specifications with DSA/ORS. A separate application shall be submitted for each essential services building or group of buildings on the same site. Applications shall be submitted to DSA/ORS on Form SSS-1, Application for Approval of Plans and Specifications (see facsimile copy in the Appendix).
- (c) The application shall contain a definite identifying name and location of the essential services building or buildings, the name of the architect or registered engineer in general responsible charge of the work, the names of the architects or registered engineers who have been delegated responsibility for portions of the work (see Section 4-209), the estimated cost of the project and all such other information as is requested thereon.

Authority: Section 16022, Health and Safety Code.

Reference: Sections 16001 and 16011, Health and Safety Code.

4-225. Designation of Responsibility.

In addition to the requirements of Section 4-209, Article 1 of these regulations, the following provisions shall apply;

- (a) **Delegation of Responsibility.** The architect, structural engineer or civil engineer in general responsible charge shall employ or retain, under his/her supervision, registered mechanical and electrical engineers to design and observe the construction of the mechanical and electrical portions of the work when these elements are significant to the safety of the building or its occupants or the continuing functioning of the building. The requirement for observation of construction of the mechanical and electrical portions of the work by the mechanical and electrical engineers may be waived where the mechanical and electrical elements are not considered to be significant to the safety of the building or its occupants or its continuing functioning and when special mechanical and electrical inspection in accordance with Section 4-211 is provided.

No delegation to or employment or retention of others shall be construed as relieving the architect, structural engineer or civil engineer in general responsible charge of his/her rights, duties and responsibilities under Section 16015 of the Act and Section 4-217 of these regulations.

- (b) **Assumption of Responsibility.** The architect, structural engineer or civil engineer who submits for approval plans and specifications for any project or any portion of any project which have been prepared by others shall assume re-

Reference: Section 16017, Health and Safety Code.

4-242. DSA/ORS Notifications by Project Inspector.

The project inspector shall notify DSA/ORS at these times:

- (1) When work is started or restarted on the project.
- (2) At least 48 hours in advance of the time when foundation trenches will be complete and ready for footing forms.
- (3) At least 48 hours in advance of the first pour of concrete and 24 hours in advance of any subsequent concrete pours.
- (4) When work is suspended for a period of more than two weeks.

Authority: Section 16022, Health and Safety Code.

Reference: Section 16017, Health and Safety Code.

Local Buildings
(Effective July 1, 1989)
Article 3

4-243. General.

- (a) The provisions of Article 1 and Article 3 of these regulations shall apply to essential services buildings owned or leased by a city, city and county or county or a special fire district within these jurisdictions. The Division of the State Architect shall observe the implementation and administration of the provisions of the Essential Services Buildings Seismic Safety Act and these regulations pertaining to local jurisdictions under the authority granted in the Act.
- (b) Local jurisdictions shall establish such administrative procedures as they deem necessary and proper for the enforcement of the provisions of the Act so long as those procedures do not conflict with the requirements of Articles 1 and 3 of these regulations. The enforcement of these regulations is the responsibility of an authorized official of the local enforcement agency.

Authority: Section 16022, Health and Safety Code.

Reference: Section 16001, Health and Safety Code.

4-244. Approval of Drawings and Specifications.

- (a) The required written approval of drawings and specifications may consist of either a building permit or other document as established by the enforcing agency.
- (b) Written notification to DSA/ORS shall be required when the written approval of the drawings and specifications is issued by the local enforcement agency. The written notification shall contain a definite name and location for the essential services building, the name of the architect or registered engineer in general responsible charge of the work, the estimated cost of the project, the name of the qualified plan reviewer and if available the name of the project inspector. The written notification shall also include a statement signed by an official of the enforcement agency that the plans and specifications and the review thereof has been accomplished in compliance with the provisions of the Act and of these regulations.

Authority: Section 16022, Health and Safety Code.

Reference: Sections 16001 and 16011, Health and Safety Code.

4-245. Voidance of Application.

Any change, erasure, alteration or modification of any plans or specifications bearing the identification stamp of the enforcement agency automatically voids the approval of the application. However, the "written approval of the plans" may be extended upon approval of the enforcement agency to include revised plans and specifications if proper documents are submitted for the review and approval of the enforcement agency.

Authority: Section 16022, Health and Safety Code.

Reference: Sections 16009, 16011 and 16013, Health and Safety Code.

4-246. Time of Beginning of Construction and Partial Construction.

Construction work whether for a new essential services building, or for a reconstruction, alteration or addition project for an essential services building, shall not be commenced nor shall any contract be let until the owner has applied for and obtained from the enforcement agency the required written approval of plans and specifications.

All work done and materials used and installed must be in accordance with and in conformity to the approved plans and specifications. The enforcement agency shall be notified whenever work is being carried on and failure to give such notice automatically voids approval of the plans and specifications.

An uncompleted building shall not be considered as having been constructed under the provisions of the Essential Services Buildings Seismic Safety Act.

Authority: Section 16002, Health and Safety Code.

Reference: Section 16016, Health and Safety Code.

4-247. Notice of Start of Construction.

The architect or registered engineer responsible for the project shall give written notification to the enforcement agency before construction is to be started. The architect or registered engineer shall furnish the name of the contractor, the contract price and the date of starting of construction. The names and addresses of the sub-contractors shall also be reported as soon as they are available.

Authority: Section 16022, Health and Safety Code.

Reference: Section 16016, Health and Safety Code.

4-248. Enforcement Agency Project and Special Inspector Approval.

- (a) The enforcement agency shall review the qualifications of the project and special inspectors proposed for essential services buildings projects to determine his/her competency to do the inspection required for each particular project. The qualification review shall include an appraisal of the candidate's education and experience and a personal interview which may include a written examination if deemed appropriate by the enforcement agency.
- (b) The approval of the enforcement agency shall include information to the project inspector of the "personal knowledge" provisions of the Act and of the additional requirement that he/she shall not assume other duties which would preclude him/her from obtaining the personal knowledge required by the project inspector for all the work of the project.
- (c) Representatives of the enforcement agency shall from time to time visit the construction site to observe the work of construction and to monitor the performance of the project inspector. The construction work is subject to all the inspections required by the enforcement agency.

Authority: Sections 16017 and 16022, Health and Safety Code.

Reference: Sections 16017 and 16021, Health and Safety Code.

4-249. Verified Reports.

The verified reports required by the Act to be filed by the architects, engineers, inspectors and contractors having responsibility for all or any portion of the construction work of the project shall be filed on a form established by the enforcement agency. The form shall contain all the information and statements contained in the facsimile verified report forms shown in the Appendix. Original manual signatures of the architect, engineer, inspector and contractor are required on the verified report.

Authority: Sections 16020, 16021 and 16022, Health and Safety Code.

Reference: Sections 16020, 16021, Health and Safety Code.

1995 Version

Essential Services Buildings
(Effective July 1, 1989)
Article 1**4-201. Purpose.**

Essential services buildings constructed pursuant to these rules and regulations shall be designed and constructed to resist gravity forces, to minimize fire hazards and to resist, insofar as practical, the forces generated by winds and major earthquakes of the intensity and severity of the strongest anticipated at the building site without catastrophic collapse, but with some repairable architectural or structural damage. The essential services buildings as designed and constructed shall be capable of providing essential services to the public after a disaster. In addition, the equipment and other accessories which are necessary for the continued functioning of the essential services operation shall be anchored and braced to resist earthquake forces.

Authority: Section 16022, Health and Safety Code.

Reference: Section 16001, Health and Safety Code.

4-202. Scope.

These regulations apply to the administrative procedures concerning the construction, reconstruction, alteration of or addition to any public essential services buildings under the jurisdiction of a city, city and county, county (including special fire districts) or the State of California.

When the enforcement agency is the Division of the State Architect/Office of Regulation Services (DSA/ORS) all parts of the State Building Standards Code, as contained in Title 24 of the California Code of Regulations and adopted by that agency designate the structural building regulations which shall apply to essential services buildings as defined in Section 16007 of the Health and Safety Code. The term "essential services" building shall include all buildings, structures, appurtenances and related systems or facilities as interpreted in Section 4-207.

These rules and regulations establish reasonable standards and minimum requirements for the structural integrity of essential services buildings. The essential services buildings shall be designed and constructed to conform to the regulations adopted by the California State Fire Marshal in Title 24, CCR, for the particular occupancy concerned.

When the enforcement agency is a local agency, the locally adopted editions of the model codes and the administrative regulations contained in Part 1 (Sections 4-201 through 4-222 and 4-243 through 4-249) Title 24, California Code of Regulations (CCR) designate the structural building regulations which shall apply to essential services buildings as defined in Section 16007 of the Health and Safety Code. The term "essential services" building shall include all buildings, structures, appurtenances and related systems or facilities as interpreted in Section 4-207.

If the building standards and regulations adopted by the city, city and county or county agency responsible for building safety are more stringent than those adopted in the applicable sections of Title 24, CCR, then the local building standards and regulations shall govern within its jurisdiction.

Authority: Section 16022, Health and Safety Code.

Reference: Section 16001, Health and Safety Code.

4-203. Interpretation.

No regulation shall be construed to deprive the enforcing agency of its right to exercise the powers conferred upon it by law or limit the enforcing agency in such enforcement as is necessary to secure the safety of construction as required in the Act.

Authority: Section 16022, Health and Safety Code.

Reference: Section 16001, Health and Safety Code.

4-204. Delegation of Authority.

All powers, duties and responsibilities pursuant to carrying out the provisions of the Essential Services Buildings Seismic Safety Act designated in Section 16022 of

the Act for the State Architect have been delegated by the State Architect to the Chief of the Office of Regulation Services, Division of the State Architect subject to the direction of the State Architect.

Those powers, duties and responsibilities so delegated shall include the observation of the implementation and administration of the Act, the adoption in consultation with local jurisdictions of the regulations necessary for carrying out the provisions of the Act, providing advice and assistance to local jurisdictions in matters concerning the Act or these regulations and acting as an appeals agency relative to the administration of the Act.

Authority: Section 16022, Health and Safety Code.

Reference: Section 14608, Government Code.

4-205. Application of Building Standards.

Building standards are set forth in Parts 2, 3, 4, 5 and 7 of Title 24, CCR, and have been adopted as a basis for the approval of plans and specifications. These regulations shall not be construed to prevent the use of higher design standards nor to restrict the use of new or innovative design or construction techniques.

Where the designer desires to use innovative design or construction techniques not included in these regulations, it shall be necessary to submit for review and approval information including computations, test data and recommendations covering the design in question. The Division of the State Architect or local enforcement agency must be satisfied that the degree of safety achieved is equivalent to that achieved by the standard procedures. The enforcement agency review and approval of the innovative design or construction techniques shall precede the submission of plans and specifications utilizing these techniques.

Authority: Section 16022, Health and Safety Code.

Reference: Section 16001, Health and Safety Code.

4-206. Approval of New Essential Services Buildings.

Plans and specifications shall be submitted to the appropriate enforcement agency for every new owned or leased essential services building before the plans are adopted by the governing board, authority, owner, corporation or other agency proposing to construct any essential services building.

Before any agency may convert an existing building into an essential services building, that agency shall submit an application and plans of the building to the appropriate enforcement agency for approval. The plans shall provide for the reconstruction and alterations necessary for compliance with the requirements of these rules and regulations.

Authority: Section 16022, Health and Safety Code.

Reference: Section 16011, Health and Safety Code.

4-207. Definitions.

The words defined in this section shall have the meaning stated therein throughout the rules and regulations contained in Part 1 (Administrative), Title 24, CCR.

"Act" shall mean the Essential Services Buildings Seismic Safety Act of 1986, Sections 16000-16023, inclusive, of the Health and Safety Code.

"Addition" shall mean an increase in floor area or volume of enclosed space which is physically attached to an existing building by connections which are required for transmitting vertical or horizontal loads between units. The area exemption in Section 16010 of the Act does not apply to additions to essential services buildings when the total area of the existing building and the addition exceeds 2000 square feet. An "addition" which is not required to be physically attached either for its own support or for support of the existing building shall be separated as required by Section 2331, Part 2, Title 24, CCR, and shall be deemed to be the construction of a new essential services building.

"Alteration" shall mean changes within an existing building as defined in Section 2331 of Part 2, Title 24, CCR. Alterations to existing essential services buildings shall conform to the requirements of Title 24, CCR. Major alterations will be permitted provided the entire essential services building as modified, including the structural alterations or additions, conform to the requirements of Title 24, CCR, if the area of the existing building, including additions, exceeds 2,000 square feet.

"Approved Plans and Specifications" shall mean plans, specifications, addenda and change orders which have been duly approved by the appropriate enforcement agency pursuant to Sections 16013 and 16016 of the Health and Safety Code and which are identified by a stamp bearing the name of the enforcement agency, the identification number, the date and the signature of the qualified reviewer as required in Section 16011 of the Act.

"Complying Building" shall mean a building which has been constructed or reconstructed in accordance with these rules and regulations.

"Enforcement Agency" shall mean the Office of Regulation Services of the Division of the State Architect for state owned or leased buildings and shall mean the enforcement agency of any city, county or city and county having jurisdiction over locally owned or leased essential services facilities.

"Equipment" shall mean all new or replacement equipment installed in any new or existing owned or leased building which is required for the functioning of the essential services operation. The installation of such equipment shall meet the support, bracing and anchorage requirements of Title 24, CCR. The area exemption in Section 16010 of the Act does not apply to the anchorage or bracing of equipment necessary to the operation of the essential services function.

"Fire Station" shall mean any building that contains the operational facilities, fire suppression, alarm and communications equipment necessary to respond to fire emergencies.

"Maintenance" shall mean and include ordinary upkeep or repair work such as replacement in kind, repainting, replastering and reroofing.

"New Essential Services Building" shall mean any newly erected essential services building or any existing building converted to essential services use subsequent to the effective date of the Act regardless of whether the building is owned or leased by the public agency. Existing buildings housing essential services facilities owned or leased by the State, a city, a city and county or a county prior to the effective date of the Act are exempt from these regulations except for the installation of new or replacement equipment. When a portion of a building is to be utilized for an essential services operation, the area so utilized and the utilities systems and components servicing the area shall be constructed according to these rules and regulations and shall be separated or protected from damage due to failures of other portions of the structure to the extent determined by the enforcement agency to insure continued functioning after an earthquake or other disaster. Ancillary buildings and facilities related to the essential services building function may be exempt from these regulations if the enforcement agency determines that such buildings and facilities are not necessary to the functioning of the essential services operation after an earthquake or other disaster.

"Nonstructural Alterations" shall mean only such alterations which do not affect the safety of the essential services building and do not change, in any manner, its structural elements.

Division of the State Architect", or "Office" or the initials "DSA/ORS" shall mean the Office of Regulation Services of the Division of the State Architect in the State Department of General Services. Approvals, disapprovals, orders and certificates of compliance for state owned or leased buildings shall be issued directly by the Chief of the Office of Regulation Services, who shall act for the State Architect in carrying out the provisions of the Act.

"Owner" for the purposes of these regulations shall mean the public agency responsible for the essential services functions performed under its authority within

an essential services building. The owner is responsible for applying for and obtaining the approvals and certifications required by these regulations.

"Plans" as used in these regulations shall mean the drawings associated with the project such as, but not limited to, vicinity maps, site plans, foundation plans, floor plans, ceiling plans, roof plans, cross-sections, interior elevations, exterior elevations and details which are used in conjunction with the project specifications and which are necessary to accomplish construction in conformance with the requirements of the Act.

"Police Station" shall mean any building that contains the operational facilities and the alarm and communications equipment necessary to respond to police emergencies. This definition shall include the offices of local police departments, county sheriffs, California State Police, California Highway Patrol and all offices necessary to the functioning of the essential services operation after an earthquake or other disaster.

"Project Inspector" shall mean any individual duly approved by the enforcement agency as the on-site inspector for a particular project. The project inspector shall be hired by and paid by the owner and he/she shall act as the agent of the owner at the project site under the general direction of the architect or registered engineer in general responsible charge and under the supervision of the enforcement agency. The project inspector shall be independent of the contractor. The project inspector shall be responsible for inspecting all work included in the contract. A special inspector shall be responsible only for inspecting the work for which he/she is approved. (See Section 4-211 (c) for special inspection.)

"Reconstruction" is the repair of damage to an existing complying essential services building or an alteration of an existing non-complying building to bring it into conformance with the safety standards established by these regulations for essential services buildings.

"Registered Engineer" as used in these regulations shall mean a structural engineer, civil engineer, mechanical engineer or electrical engineer holding a valid certificate under Chapter 7, Division 3, of the California Business and Professions Code.

"Specifications" as used in these regulations shall mean the written document which is used in conjunction with the project plans to establish the job conditions, the quality and quantity of construction materials used in the project and the quality of workmanship required to accomplish the construction in conformance with the provisions of the Act.

Authority: Section 16022, Health and Safety Code.

Reference: Sections 16003, 16011, 16018 and 16019, Health and Safety Code.

4-208. Application for Approval of Drawings and Specifications.

- (a) **General.** Before adopting plans and specifications, the agency responsible for the essential services function shall submit an application to the appropriate enforcing agency for written approval of said plans and specifications except where the new construction is a Type V or Type II N one-story structure which contains 2000 square feet or less of floor area and is not located in a special studies zone as defined in Section 2622 of the Public Resources Code.
- (b) An architect, structural engineer or civil engineer may act as the agent for the essential services agency when filing the application for approval of plans and specifications.

An architect or registered engineer who is a contracting party or who has any employment relationship with any entity which may be a contracting party for the construction of the essential services building shall not perform the functions prescribed by Section 16015 of the Health and Safety Code or be delegated responsibility for any portion of the work.

Authority: Section 16022, Health and Safety Code.

Reference: Sections 16010, 16011 & 16015, Health and Safety Code.

4-209. Designation of Responsibilities.

- (a) **General Responsible Charge.** For every essential services building project there shall be an architect, structural engineer or civil engineer in general responsible charge of plans, specifications and observation of construction, except that where plans, specifications and observation of the work of construction for alterations or repairs do not involve architectural or structural changes, said plans, specifications and observation of construction may be under the responsible charge of a registered mechanical or electrical engineer for work involving only those branches of engineering.
- A project may be divided into parts, provided that each part is clearly defined by a building or similar distinct unit. The part, so defined, shall include all portions and utility systems or facilities necessary to the complete functioning of that part. Separate assignments of general responsible charge may be made for the parts.
- (b) **Delegation of Responsibility.** The architect, structural engineer or civil engineer in general responsible charge may delegate responsibility for any portion of the work to, or may employ, or retain other architects, structural engineers or civil engineers. Registered mechanical and electrical engineers may be delegated responsibility for the mechanical and electrical portions of the work, respectively.
- (c) **Evidence of Responsibility.** The manual signature of the architect or registered engineer on a plan, specification, or other document shall be deemed evidence that full responsibility is assumed by the signator for the work shown thereon, including also those portions of the accompanying computations, specifications or plans which pertain to such work.
- (d) **Alternates.** The applicant, or the architect or registered engineer having general or delegated responsibility, may name one or more persons to act as alternate(s) for the design and/or observations of the work of construction provided such persons are architects or registered engineers who themselves are qualified under these regulations to assume the responsibility assigned.

Authority: Section 16022, Health and Safety Code.

Reference: Sections 16011, 16012, & 16015, Health and Safety Code.

4-210. Plans, Specifications, Computations and Other Data.

- (a) **General.** When an application is filed, it shall be accompanied by the required number of complete sets of the plans and specifications, the full structural design calculations, site data and a fee as established by the enforcement agency.
- (b) **Plans.** Plans shall show the use or occupancy of all parts of the essential services buildings and shall give such other information as may be required to indicate the nature of the work proposed and to show compliance with the Act and these regulations. The drawings shall be legible and sufficiently detailed and cross-referenced to show clearly the pertinent features of the construction, and shall have sufficient dimensions to be readily interpreted. Where a project includes several buildings, the plans for each shall be drawn independently except that details common to all need not be repeated.
- Submitted plans and specifications, which are obviously incomplete or incorrect, shall be returned to the architect or registered engineer in general responsible charge with a request for compliance with these regulations before checking is begun or resumed by the enforcement agency.
- (c) **Specifications.** Specifications shall completely set forth the requirements for the various types of materials that will enter into the permanent construction and shall describe the methods not covered in the technical regulations which are to be used to obtain the required quality of the work shown on the plans and described in the specifications.

- (d) **Design Computations.** Computations, stress diagrams and other pertinent data shall accompany the plans and specifications and shall be sufficiently complete so that calculations for individual structural members can be readily interpreted. The computations shall be prefaced by a statement clearly and concisely outlining the basis for the structural design and indicating the manner in which the proposed essential services building will resist vertical loads and horizontal forces. The computations shall be sufficiently complete to establish that the structure will resist the loads and forces prescribed in Part 2, Title 24, CCR. Assumed safe bearing pressures on soils and specified strengths of concrete shall be given in the computations and noted on the plans. Where unusual conditions occur, such additional data as are pertinent to the work shall be submitted.
- (e) **Site Data.** Site data for all essential services buildings covered by these regulations shall include a soil investigation report providing information on subsurface site work and laboratory testing, an evaluation of site soil conditions, a recommendation for the type of foundation to be used and an allowable design value for the soil bearing capacity.
For all essential services building sites not exempted from the provisions of the Act, a geologic and earthquake hazard report including an evaluation of both known and potentially active local and regional fault systems, slope stability, liquefaction potential and other hazards shall be prepared by competent persons and submitted with the application, plans and specifications.
All or parts of the geologic and earthquake hazard investigation and report may be waived by the enforcement agency when in the judgment of the enforcement agency those requirements are unnecessary and would not be beneficial to public safety.
- (f) **Signatures Required.** All plans and specifications submitted for approval shall bear the manual signature of the architect or professional engineer in general responsible charge of design. When responsibility for a portion of the work has been delegated, the plans and specifications covering that portion of design shall also bear the manual signature of the responsible registered engineer or architect.

Authority: Section 16022, Health and Safety Code.

Reference: Sections 16009, 16011, 16012, 16013, & 16014, Health and Safety Code.

4-211. Observation and Inspection of Construction.

- (a) **Observation by Architect or Registered Engineer.** The Act provides that the observation of the work of construction, reconstruction, alteration or addition shall be under the general responsible charge of an architect, structural engineer, civil engineer or, under certain conditions, a registered mechanical or electrical engineer for work involving only those branches of engineering.
A civil engineer qualified in soil engineering shall provide the observation for placement of fills and shall submit a verified report attesting to the compliance of the engineered fill.
- (b) **Inspection by Project Inspector.** The owner must provide for and require competent, adequate and continuous inspection by a project inspector approved by the enforcement agency. The project inspector so approved shall cooperate with the architect or registered engineer in general responsible charge of the observation of the work of construction to insure compliance with the approved drawings and specifications. The project inspector shall request interpretations and clarifications of the approved contract drawings and specifications when necessary from the responsible architect or registered engineer. Code interpretations received by the project inspector which cause deviations from the approved drawings and specifications shall be referred to the responsible architect or registered engineer for preparation of change orders to cover the required work.

For every project there shall be a project inspector who shall have personal knowledge as defined in Section 16021 of the Health and Safety Code of all work done on the project or its parts. On large projects adequate inspection may require the employment of assistant inspectors. The employment of special inspectors or assistant inspectors shall not be construed as relieving the project inspector of his/her duties and responsibilities under Section 16021 and Sections 214 and 219 of these regulations.

No work shall be carried out except under the inspection of the project inspector approved by the enforcement agency. The project inspector shall have had at least three years equivalent experience in construction work of a type similar to that for which he/she is proposed as inspector, shall have a thorough knowledge of building materials, and shall be able to read and interpret plans and specifications.

The cost of project inspection shall be paid for by the owner.

- (c) **Special Inspection.** Special inspection by inspectors specially approved by the enforcement agency may be required on all masonry construction, glued laminated lumber fabrication, wood framing using timber connectors, ready mixed concrete batching, gunite, prestressed concrete, important steel fabrication, high strength steel bolt installations, welding, pile driving, electrical and mechanical work.

The project inspector may be used for special inspections if he/she has been specially approved for such purposes and if he/she has the time available for the work.

The detailed inspection of all work covered by this section is the responsibility of the project inspector when special inspection is not provided.

The enforcement agency may also require special inspection for any other shop fabrication procedures that preclude the complete inspection of the work after assembly. It may require special inspection at the site in addition to those listed above if found necessary because of the special use of material or methods of construction.

Special inspectors shall submit verified progress reports as required by Section 214, for the special work covered.

Authority: Sections 16017, 16022, Health and Safety Code.

Reference: Sections 16015, 16017, 16020 and 16021, Health and Safety Code.

4-212. Supervision of Construction by the Enforcement Agency.

During the construction, reconstruction, repair, alteration of or addition to any essential services building, the enforcement agency as provided in the Act, shall make such site visits and observations as in its judgement is necessary or proper for enforcement of the Act and the protection of the safety of the occupants of the building and the public. If at any time as the work progresses, prior to the issuance of the final certification of compliance, it is found that modifications or changes are necessary to secure safety, the enforcement agency shall direct the architect or registered engineer in general responsible charge to prepare and submit documents covering such modifications or changes for the review and approval of the enforcement agency.

Authority: Section 16022, Health and Safety Code.

Reference: Sections 16001, 16009 and 16020, Health and Safety Code.

4-213. Tests.

- (a) **General.** Tests of materials are required as set forth in the approved plans and specifications and in Part 2, Title 24, CCR. Other materials or combination of materials may require additional tests. Where job conditions warrant the architect or registered engineer may waive certain tests with the approval of the enforcement agency. A list of all required tests of materials and of all required special inspections shall be prepared and submitted by the architect, structural

engineer or civil engineer in general responsible charge of the project at the time the plans and specifications are stamped for identification by the enforcement agency.

- (b) **Test Sampling.** Test samples or specimens of material for testing may be taken by the architect or registered engineer, his representative, the project inspector, or a representative of the testing agency. In no case shall the contractor, his employee or a vendor select the sample.
- (c) **Test Reports.** One copy each of all test reports shall be forwarded to the enforcement agency, the architect, the registered engineer and the project inspector by the testing agency. Such reports shall include all tests made, regardless of whether such tests indicate that the material is satisfactory or unsatisfactory. Records of special sampling operations as required shall also be reported. The reports shall show that the material or materials were sampled and tested in accordance with the requirements of these regulations and with the approved specifications. In the case of masonry or concrete, test reports shall show the specified design strength. They shall also state definitely whether or not the material or materials tested comply with the requirements.
- (d) **Verification of Test Reports.** Each testing agency shall submit to the enforcement agency a verified report, in duplicate, covering all of the tests which were required to be performed each time that work on the project is suspended, covering the tests up to that time, and at the completion of the project, covering all of the tests.

The verified report shall contain all the information included in the sample Laboratory Verified Report (see Appendix).

Authority: Section 16022, Health and Safety Code.

Reference: Sections 16009, 16020 and 16021, Health and Safety Code.

4-214. Verified Reports.

Sections 16020 and 16021 of the Act require that from time to time as the work progresses, the architect or registered engineer in charge of observation of construction of the work, each architect or registered engineer delegated responsibility for a portion of the work, the project inspector and the contractor shall each make a duly verified report to the enforcement agency upon a prescribed form or forms, showing that of his or her own personal knowledge the work during the period covered by the report has been performed and materials have been used and installed in every material respect in compliance with the duly approved plans and specifications, and setting forth such detailed statement of fact as shall be required. For a definition of personal knowledge refer to Sections 16020 and 16021 of the Act. See Articles 2 and 3 for the reporting requirements for state and local enforcement agencies, respectively.

Authority: Sections 16020, 16021 and 16022, Health and Safety Code.

Reference: Sections 16020 and 16021, Health and Safety Code.

4-215. Changes in the Approved Drawings and Specifications.

- (a) **General.** All work shall be executed in accordance with the approved plans and specifications except where documents authorizing changes have been submitted by the responsible architect or registered engineer to the enforcement agency for review and approval. These documents shall describe the authorized changes, show the increase or decrease in the contract cost involved and shall contain the signatures of the responsible architect or registered engineer and the owner and shall bear the approval stamp of the enforcement agency.

Authority: Section 16022, Health and Safety Code.

Reference: Sections 16011, 16013 and 16015, Health and Safety Code.

4-216. Final Certification of Compliance.

The certification of compliance for the essential services building by the enforcement agency will be issued when the work has been completed in accordance with the requirements as to safety of design and construction with Sections 16000-16023 of the Health and Safety Code (Essential Services Buildings Seismic Safety Act) and with the requirements of these regulations. The certification of compliance will be evidenced by a letter or a certificate of occupancy each of which shall contain a statement that the building design and review and the work of construction have been completed in accordance with the requirements of Sections 16000 through 16023 of the Health and Safety Code and of Part 1, Title 24, CCR. The certificate of compliance will be directed to the owner of the essential services building.

Local enforcement agencies shall forward one copy of the certification of compliance to the DSA/ORS Headquarters Office in Sacramento.

Authority: Section 16022, Health and Safety Code.

Reference: Sections 16009 and 16022, Health and Safety Code.

4-217. Duties of the Architect and Registered Engineers.

- (a) **General.** The architect or registered engineer is responsible to the owner and to the enforcement agency to see that the completed work conforms in every material respect to these regulations and the approved plans and specifications. He or she may, if so authorized, act as agent for the owner in completing and submitting the application to the enforcement agency.

The architect or registered engineer, in no way, is relieved of any responsibility by the activities of the enforcement agency in the performance of its duties.

- (b) **General Responsible Charge.** The architect or registered engineer in general responsible charge shall advise the owner in regard to filing of the application for approval of plans, the selection of a project inspector and the selection of a testing laboratory. He or she shall prepare the plans, specifications, design computations and other data and shall prepare documents authorizing changes in the approved drawings and specifications when so directed by the owner or as required by conditions on the project. He or she shall make, or cause to be made, the corrections required on the various documents to comply with the requirements of these regulations and shall provide the project inspector and testing agency with a complete set of stamped plans, specifications and documents authorizing changes.

The enforcement agency directs all technical correspondence to the architect or registered engineer in general responsible charge of the project.

- (c) **Verified Reports.** All architects and registered engineers having responsibility for observation of the work of construction shall maintain such personal contact with the project as is necessary to assure themselves of compliance in every material respect with the approved plans and specifications and shall submit verified reports to the enforcement agency as required in Section 214. The architect or registered engineer in general responsible charge shall be responsible for the timely submittal of the required verified reports from the project inspector, the contractor and the other architects and engineers who have been delegated responsibility for a portion of the project.

- (d) **Testing Program.** The architect or registered engineer in general responsible charge shall establish the extent of the testing of materials consistent with the needs of the particular project and shall issue specific instructions to the testing agency. He or she shall also notify the enforcement agency as to the disposition of materials noted on laboratory reports as not conforming to the approved plans and specifications.

Authority: Section 16022, Health and Safety Code.

Reference: Sections 16015 and 16020, Health and Safety Code.

4-218. Duties of the Mechanical and Electrical Engineers.

The architect, structural engineer or civil engineer in general responsible charge retains overall responsibility for the mechanical and electrical portions of the work when the design responsibility for that work has been delegated and the plans have been prepared by registered mechanical and electrical engineers.

Where plans, specifications, and estimates for alterations or repairs do not involve architectural or structural changes, said plans, specifications and estimates may be prepared and the work of construction observed by a registered mechanical or electrical engineer who shall be in general responsible charge.

The mechanical or electrical engineer shall fulfill the duties outlined in Section 4-217 when assuming general responsible charge and shall submit verified reports as required in Section 4-214. When accepting delegated responsibility, he or she shall comply with the requirements of Sections 4-209 and 4-210 insofar as these may relate to the work delegated to him or her.

Authority: Section 16022, Health and Safety Code.

Reference: Section 16015, Health and Safety Code.

4-219. Duties of the Project Inspector.

- (a) **General.** The project inspector as an agent for the owner shall act under the general direction of the architect or registered engineer and under the supervision of the enforcement agency.
- (b) **Duties.** The general duties of the project inspector in fulfilling his or her responsibilities are as follows:
 - (1) **Continuous Inspection Requirements.** He or she must have actual personal knowledge obtained by his or her personal and continuous inspection of the work of construction in all stages of its progress that the requirements of the approved plans and specifications are being executed.

Continuous inspection means complete inspection of every part of the work. Work, such as concrete work or brick work which can be inspected only as it is placed, shall require the constant presence of the project inspector. Other types of work which can be completely inspected after the work is installed may be carried on while the project inspector is not present. In any case, the project inspector must personally inspect every part of the work. In no case shall the project inspector have or assume any duties which will prevent him or her from providing continuous inspection.

The project inspector may obtain personal knowledge of the work of construction, either on-site or off-site, from the inspections performed by special inspectors or assistant inspectors and from the reporting of others on testing and inspection of materials and workmanship for compliance with the plans, specifications and applicable standards. The exercise of reasonable diligence to obtain the facts shall be required.

- (2) **Relations with the Architect or Engineer.** The project inspector shall work under the general direction of the architect or registered engineer. All inconsistencies or seeming errors in the plans and specifications shall be reported promptly to the architect or registered engineer for his/her interpretation and instructions. In no case shall the instructions of the architect or registered engineer be construed to cause work to be done which is not in conformity with the approved plans, specifications and documents authorizing changes.
- (3) **Job File.** The project inspector shall keep a file of approved plans and specifications (including all approved documents authorizing changes) on the job at all times, and shall immediately return any unapproved documents to the architect or registered engineer for proper action.
- (4) **Construction Procedure Records.** The project inspector shall keep a record of certain phases of construction procedures including, but not limited to the following:
 - (A) Concrete pouring operations. The records show the time and date of plac-

ing concrete and the time and date of removal of forms in each portion of the structure.

- (B) Welding operations. The record shall include identification marks of welders, lists of defective welds, manner of correction of defects, etc.
 - (C) Penetration under the last ten (10) blows for each pile when piles are driven for foundations. All such records of construction procedures shall be kept on the job until the completion of the work. These records shall be made a part of the permanent records of the owner.
- (5) **Deviations.** The project inspector shall notify the contractor, in writing, of any deviations from the approved plans and specifications which are not immediately corrected by the contractor when brought to his or her attention. Copies of such notice shall be forwarded immediately to the architect or registered engineer and to the enforcement agency.

Failure on the part of the project inspector to notify the contractor of deviations from the approved plans and specifications shall in no way relieve the contractor of any responsibility to complete the work covered by his or her contract in accordance with the approved plans and specifications and all laws and regulations.

- (6) **Verified Reports.** The project inspector shall submit to the enforcement agency verified reports as required in Section 4-214.
- (c) **Violations.** Failure, refusal or neglect on the part of the project inspector to notify the contractor of any work which does not comply with the requirements of the approved plans and specifications, or failure, refusal or neglect to report immediately, in writing any such violation to the architect or registered engineer, to the owner and to the enforcement agency shall constitute a violation of the Act and shall be cause for the enforcement agency to take action.

Authority: Section 16022, Health and Safety Code.

Reference: Sections 16017 and 16021, Health and Safety Code.

4-220. Duties of the Contractor.

- (a) **Responsibilities.** It is the duty of the contractor to complete the work covered by his or her contract in accordance with the approved plans and specifications therefor. The contractor in no way is relieved of any responsibility by the activities of the architect, registered engineer, project inspector or the enforcement agency in the performance of their duties.
- (b) **Performance of the Work.** The contractor shall study carefully the approved plans and specifications and shall plan his schedule of operations well ahead of time. If at any time it is discovered the work is being done which is not in accordance with the approved plans and specifications, the contractor shall correct the work immediately.

All inconsistencies or items which appear to be in error in the plans and specifications shall be promptly called to the attention of the architect or registered engineer, through the project inspector, for interpretation or correction. Local conditions which may affect the structure shall likewise be brought to the architect's or registered engineer's attention at once. In no case, however, shall the instruction of the architect or registered engineer be construed to cause work to be done which is not in conformity with the approved plans, specifications and change orders.

The contractor shall not carry on work except with the knowledge of the project inspector.

- (c) **Verified Reports.** The contractor shall make and submit to the enforcement agency from time to time, verified reports as required in Section 4-214.

If work on the building is being done by independent contractors, having contracts with the owner, verified reports shall be submitted by each contractor regardless of the type of work involved.

Authority: Section 16022, Health and Safety Code.

Reference: Section 16021, Health and Safety Code.

4-221. Records.

DSA/ORS shall maintain a record of the approved plans, specifications, addenda, change orders and letters of certification for the state owned or leased essential services buildings which have been certified as complying with the provisions of the Act. This record shall be kept in the Essential Services Buildings Central File at the DSA/ORS Headquarters Office in Sacramento. The Office shall also maintain a record of the letters of compliance for essential services buildings built under the jurisdiction of local enforcement agencies which have been submitted to the Office by those agencies.

Authority: Section 16022, Health and Safety Code.

Reference: Section 16022, Health and Safety Code.

4-222. Advisory Board.

(a) **General.** The State Architect may appoint an advisory board whose duty it is to serve in an advisory capacity to the DSA/ORS in connection with administrative matters and with reference to regulations and requirements pertaining to the administration of the Act. This board shall also act as a board of review to which appeal can be made by owners, architects, engineers or other interested parties in case of disagreement with the interpretation by the local enforcement agencies and/or local appeals board of the Essential Services Seismic Safety Act or the regulations adopted pursuant thereto. For state agencies, the Advisory Board shall act as an appeals board for disagreements with the rulings, decisions, interpretations or acts of DSA/ORS.

(b) **Membership.** The said board shall consist of 9 members appointed by the State Architect and four ex-officio members who are: State Architect, the Chief of the Office of Regulation Services, the California State Fire Marshal, the Executive Director of the Building Standards Commission and the Chairman of the Seismic Safety Commission. The ex-officio board members may appoint alternates to serve on the board as their representatives. Of the appointive members, one shall be an architect, one shall be a structural engineer, one shall be a civil engineer, one shall be a mechanical engineer or an electrical engineer, one shall be a representative of the League of California Cities, one shall be a representative of the County Supervisors Association, one shall be a representative of the California Building Officials, one shall be a representative of the California Fire Chiefs Association and one shall be a representative of the law enforcement agencies. The appointive members shall serve at the pleasure of the State Architect. The State Architect will select appointive members from nominations solicited from the California Council, American Institute of Architects, the Structural Engineers Association of California, the Consulting Engineers and Land Surveyors Association of California, the California Building Officials, the League of California Cities, the County Supervisors Association, the California Fire Chiefs Association and from the California Fire Chiefs Association. He or she may also appoint as many ex-officio members as he or she may desire. Ex-officio members are not entitled to vote in board actions.

(c) **Meetings.** The board shall elect its own chairperson and vice chairperson and shall convene upon the call of the chairperson or the State Architect whenever it may be necessary in his or her judgment for the board to meet. The board shall adopt such rules of procedure as are necessary to enable it to perform the obligations delegated to it. The chairperson of the board shall at his or her discretion or upon the instruction of the board designate subcommittees to study and report back to the board on any technical subject or matter for which an independent study is desired or regarding appeals which are made to the board from interpretations of the enforcement agencies. The board members

will be reimbursed for their reasonable expenses in attending meetings but shall receive no compensation for their services.

Authority: Section 16022, Health and Safety Code.

Reference: Section 16022, Health and Safety Code.

State Buildings
(Effective July 1, 1989)

Article 2

4-223. General.

The provisions of Article 1 and Article 2 of these regulations shall apply to state owned or leased essential services buildings. Article 2 requirements do not apply to essential services buildings under the jurisdiction of local enforcement agencies.

Authority: Section 16022, Health and Safety Code.

Reference: Section 16001, Health and Safety Code.

4-224. Application for DSA Approval of Drawings and Specifications.

- (a) The required written approval of drawings and specifications shall consist of a letter signed by the Chief of the Office of Regulation Services, DSA/ORS which will be issued when the procedures of Section 4-229 of these regulations are completed.
- (b) The agency responsible for the essential services function shall submit an application, in duplicate, for the approval of drawings and specifications with DSA/ORS. A separate application shall be submitted for each essential services building or group of buildings on the same site. Applications shall be submitted to DSA/ORS on Form SSS-1, Application for Approval of Plans and Specifications (see facsimile copy in the Appendix).
- (c) The application shall contain a definite identifying name and location of the essential services building or buildings, the name of the architect or registered engineer in general responsible charge of the work, the names of the architects or registered engineers who have been delegated responsibility for portions of the work (see Section 4-209), the estimated cost of the project and all such other information as is requested thereon.

Authority: Section 16022, Health and Safety Code.

Reference: Sections 16001 and 16011, Health and Safety Code.

4-225. Designation of Responsibility.

In addition to the requirements of Section 4-209, Article 1 of these regulations, the following provisions shall apply;

- (a) **Delegation of Responsibility.** The architect, structural engineer or civil engineer in general responsible charge shall employ or retain, under his/her supervision, registered mechanical and electrical engineers to design and observe the construction of the mechanical and electrical portions of the work when these elements are significant to the safety of the building or its occupants or the continuing functioning of the building. The requirement for observation of construction of the mechanical and electrical portions of the work by the mechanical and electrical engineers may be waived where the mechanical and electrical elements are not considered to be significant to the safety of the building or its occupants or its continuing functioning and when special mechanical and electrical inspection in accordance with Section 4-211 is provided.
No delegation to or employment or retention of others shall be construed as relieving the architect, structural engineer or civil engineer in general responsible charge of his/her rights, duties and responsibilities under Section 16015 of the Act and Section 4-217 of these regulations.
- (b) **Assumption of Responsibility.** The architect, structural engineer or civil engineer who submits for approval plans and specifications for any project or any portion of any project which have been prepared by others shall assume re-

Reference: Section 16017, Health and Safety Code.

4-242. DSA/ORS Notifications by Project Inspector.

The project inspector shall notify DSA/ORS at these times:

- (1) When work is started or restarted on the project.
- (2) At least 48 hours in advance of the time when foundation trenches will be complete and ready for footing forms.
- (3) At least 48 hours in advance of the first pour of concrete and 24 hours in advance of any subsequent concrete pours.
- (4) When work is suspended for a period of more than two weeks.

Authority: Section 16022, Health and Safety Code.

Reference: Section 16017, Health and Safety Code.

Local Buildings
(Effective July 1, 1989)
Article 3

4-243. General.

- (a) The provisions of Article 1 and Article 3 of these regulations shall apply to essential services buildings owned or leased by a city, city and county or county or a special fire district within these jurisdictions. The Division of the State Architect shall observe the implementation and administration of the provisions of the Essential Services Buildings Seismic Safety Act and these regulations pertaining to local jurisdictions under the authority granted in the Act.
- (b) Local jurisdictions shall establish such administrative procedures as they deem necessary and proper for the enforcement of the provisions of the Act so long as those procedures do not conflict with the requirements of Articles 1 and 3 of these regulations. The enforcement of these regulations is the responsibility of an authorized official of the local enforcement agency.

Authority: Section 16022, Health and Safety Code.

Reference: Section 16001, Health and Safety Code.

4-244. Approval of Drawings and Specifications.

- (a) The required written approval of drawings and specifications may consist of either a building permit or other document as established by the enforcing agency.
- (b) Written notification to DSA/ORS shall be required when the written approval of the drawings and specifications is issued by the local enforcement agency. The written notification shall contain a definite name and location for the essential services building, the name of the architect or registered engineer in general responsible charge of the work, the estimated cost of the project, the name of the qualified plan reviewer and if available the name of the project inspector. The written notification shall also include a statement signed by an official of the enforcement agency that the plans and specifications and the review thereof has been accomplished in compliance with the provisions of the Act and of these regulations.

Authority: Section 16022, Health and Safety Code.

Reference: Sections 16001 and 16011, Health and Safety Code.

4-245. Voidance of Application.

Any change, erasure, alteration or modification of any plans or specifications bearing the identification stamp of the enforcement agency automatically voids the approval of the application. However, the "written approval of the plans" may be extended upon approval of the enforcement agency to include revised plans and specifications if proper documents are submitted for the review and approval of the enforcement agency.

Authority: Section 16022, Health and Safety Code.

Reference: Sections 16009, 16011 and 16013, Health and Safety Code.

4-246. Time of Beginning of Construction and Partial Construction.

Construction work whether for a new essential services building, or for a reconstruction, alteration or addition project for an essential services building, shall not be commenced nor shall any contract be let until the owner has applied for and obtained from the enforcement agency the required written approval of plans and specifications.

All work done and materials used and installed must be in accordance with and in conformity to the approved plans and specifications. The enforcement agency shall be notified whenever work is being carried on and failure to give such notice automatically voids approval of the plans and specifications.

An uncompleted building shall not be considered as having been constructed under the provisions of the Essential Services Buildings Seismic Safety Act.

Authority: Section 16002, Health and Safety Code.

Reference: Section 16016, Health and Safety Code.

4-247. Notice of Start of Construction.

The architect or registered engineer responsible for the project shall give written notification to the enforcement agency before construction is to be started. The architect or registered engineer shall furnish the name of the contractor, the contract price and the date of starting of construction. The names and addresses of the subcontractors shall also be reported as soon as they are available.

Authority: Section 16022, Health and Safety Code.

Reference: Section 16016, Health and Safety Code.

4-248. Enforcement Agency Project and Special Inspector Approval.

- (a) The enforcement agency shall review the qualifications of the project and special inspectors proposed for essential services buildings projects to determine his/her competency to do the inspection required for each particular project. The qualification review shall include an appraisal of the candidate's education and experience and a personal interview which may include a written examination if deemed appropriate by the enforcement agency.
- (b) The approval of the enforcement agency shall include information to the project inspector of the "personal knowledge" provisions of the Act and of the additional requirement that he/she shall not assume other duties which would preclude him/her from obtaining the personal knowledge required by the project inspector for all the work of the project.
- (c) Representatives of the enforcement agency shall from time to time visit the construction site to observe the work of construction and to monitor the performance of the project inspector. The construction work is subject to all the inspections required by the enforcement agency.

Authority: Sections 16017 and 16022, Health and Safety Code.

Reference: Sections 16017 and 16021, Health and Safety Code.

4-249. Verified Reports.

The verified reports required by the Act to be filed by the architects, engineers, inspectors and contractors having responsibility for all or any portion of the construction work of the project shall be filed on a form established by the enforcement agency. The form shall contain all the information and statements contained in the facsimile verified report forms shown in the Appendix. Original manual signatures of the architect, engineer, inspector and contractor are required on the verified report.

Authority: Sections 16020, 16021 and 16022, Health and Safety Code.

Reference: Sections 16020, 16021, Health and Safety Code.

1998 Version

1998

CHAPTER 4. ADMINISTRATIVE REGULATIONS FOR THE DIVISION OF THE STATE ARCHITECT—STRUCTURAL SAFETY SECTION (DSA/SS)

Article 1. Essential Services Buildings

4-201. Purpose. Essential services buildings constructed pursuant to these rules and regulations shall be designed and constructed to resist gravity forces, to minimize fire hazards and to resist, insofar as practical, the forces generated by winds and major earthquakes of the intensity and severity of the strongest anticipated at the building site without catastrophic collapse, but with some repairable architectural or structural damage. The essential services buildings as designed and constructed shall be capable of providing essential services to the public after a disaster. In addition, the equipment and other accessories which are necessary for the continued functioning of the essential services operation shall be anchored and braced to resist earthquake forces.

Authority: Health & Safety Code Section 16022.
Reference: Health & Safety Code Section 16001.

4-202. Scope. These regulations apply to the administrative procedures concerning the construction, reconstruction, alteration of or addition to any public essential services buildings under the jurisdiction of a city, city and county, county (including special fire districts) or the State of California.

When the enforcement agency is the Division of the State Architect/Office of Regulation Services (DSA/ORS) all parts of the State Building Standards Code, as contained in Title 24 of the California Code of Regulations and adopted by that agency designate the structural building regulations which shall apply to essential services buildings as defined in Section 16007 of the Health and Safety Code. The term "essential services" building shall include all buildings, structures, appurtenances and related systems or facilities as interpreted in Section 4-207.

These rules and regulations establish reasonable standards and minimum requirements for the structural integrity of essential services buildings. The essential services buildings shall be designed and constructed to conform to the regulations adopted by the California State Fire Marshal in Title 24, CCR, for the particular occupancy concerned.

When the enforcement agency is a local agency, the locally adopted editions of the model codes and the administrative regulations contained in Part 1 (Sections 4-201 through 4-222 and 4-243 through 4-249) Title 24, California Code of Regulations (CCR) designate the structural building regulations which shall apply to essential services buildings as defined in Section 16007 of the Health and Safety Code. The term "essential services" building shall include all buildings, structures, appurtenances and related systems or facilities as interpreted in Section 4-207.

If the building standards and regulations adopted by the city, city and county or county agency responsible for building safety are more stringent than those adopted in the applicable sections of Title 24, CCR, then the local building standards and regulations shall govern within its jurisdiction.

Authority: Health & Safety Code Section 16022.
Reference: Health & Safety Code Section 16001.

4-203. Interpretation. No regulation shall be construed to deprive the enforcing agency of its right to exercise the powers conferred upon it by law or limit the enforcing agency in such enforcement as is necessary to secure the safety of construction as required in the act.

Authority: Health & Safety Code Section 16022.
Reference: Health & Safety Code Section 16001.

4-204. Delegation of Authority. All powers, duties and responsibilities pursuant to carrying out the provisions of the Essential Services Buildings Seismic Safety Act designated in Section 16022 of the Act for the State Architect have been delegated by the State Architect to the Chief of the Office of Regulation Services, Division of the State Architect subject to the direction of the State Architect.

Those powers, duties and responsibilities so delegated shall include the observation of the implementation and administration of the Act, the adoption in consultation with local jurisdictions of the regulations necessary for carrying out the provisions of the Act, providing advice and assistance to local jurisdictions in matters concerning the Act or these regulations and acting as an appeals agency relative to the administration of the Act.

Authority: Health & Safety Code Section 16022.
Reference: Government Code Section 14608.

4-205. Application of Building Standards. Building standards are set forth in Parts 2, 3, 4, 5 and 7 of Title 24, CCR, and have been adopted as a basis for the approval of plans and specifications. These regulations shall not be construed to prevent the use of higher design standards nor to restrict the use of new or innovative design or construction techniques.

Where the designer desires to use innovative design or construction techniques not included in these regulations, it shall be necessary to submit for review and approval information including computations, test data and recommendations covering the design in question. The Division of the State Architect or local enforcement agency must be satisfied that the degree of safety achieved is equivalent to that achieved by the standard procedures. The enforcement agency review and approval of the innovative design or construction techniques shall precede the submission of plans and specifications utilizing these techniques.

Authority: Health & Safety Code Section 16022.
Reference: Health & Safety Code Section 16001.

4-206. Approval of New Essential Services Buildings. Plans and specifications shall be submitted to the appropriate enforcement agency for every new owned or leased essential services building before the plans are adopted by the governing board, authority, owner, corporation or other agency proposing to construct any essential services building.

Before any agency may convert an existing building into an essential services building, that agency shall submit an application and plans of the building to the appropriate enforcement agency for approval. The plans shall provide for the reconstruction and alterations necessary for compliance with the requirements of these rules and regulations.

Authority: Health & Safety Code Section 16022.
Reference: Health & Safety Code Section 16011.

4-207. Definitions. The words defined in this section shall have the meaning stated therein throughout the rules and regulations contained in Part I (Administrative), Title 24, CCR.

"Act" shall mean the Essential Services Buildings Seismic Safety Act of 1986, Sections 16000-16023, inclusive, of the Health and Safety Code.

"Addition" shall mean an increase in floor area or volume of enclosed space which is physically attached to an existing building by connections which are required for transmitting vertical or horizontal loads between units. The area exemption in Section 16010 of the act does not apply to additions to essential services

buildings when the total area of the existing building and the addition exceeds 2000 square feet. An "addition" which is not required to be physically attached either for its own support or for support of the existing building shall be separated as required by Section 2331, Part 2, Title 24, CCR, and shall be deemed to be the construction of a new essential services building.

"Alteration" shall mean changes within an existing building as defined in Section 2331 of Part 2 Title 24, CCR. Alterations to existing essential services buildings shall conform to the requirements of Title 24, CCR. Major alterations will be permitted provided the entire essential services building as modified, including the structural alterations or additions, conform to the requirements of Title 24, CCR, if the area of the existing building, including additions, exceeds 2,000 square feet.

"Approved Plans and Specifications" shall mean plans, specifications, addenda and change orders which have been duly approved by the appropriate enforcement agency pursuant to Sections 16013 and 16016 of the Health and Safety Code and which are identified by a stamp bearing the name of the enforcement agency, the identification number, the date and the signature of the qualified reviewer as required in Section 16011 of the act.

"Complying Building" shall mean a building which has been constructed or reconstructed in accordance with these rules and regulations.

"Enforcement Agency" shall mean the Office of Regulation Services of the Division of the State Architect for state owned or leased buildings and shall mean the enforcement agency of any city, county or city and county having jurisdiction over locally owned or leased essential services facilities.

"Equipment" shall mean all new or replacement equipment installed in any new or existing owned or leased building which is required for the functioning of the essential services operation. The installation of such equipment shall meet the support, bracing and anchorage requirements of Title 24, CCR. The area exemption in Section 16010 of the Act does not apply to the anchorage or bracing of equipment necessary to the operation of the essential services function.

"Fire Station" shall mean any building that contains the operational facilities, fire suppression, alarm and communications equipment necessary to respond to fire emergencies.

"Maintenance" shall mean and include ordinary upkeep or repair work such as replacement in kind, repainting, replastering and reroofing.

"New Essential Services Building" shall mean any newly erected essential services building or any existing building converted to essential services use subsequent to the effective date of the act regardless of whether the building is owned or leased by the public agency. Existing buildings housing essential services facilities owned or leased by the state, a city, a city and county or a county prior to the effective date of the act are exempt from these regulations except for the installation of new or replacement equipment. When a portion of a building is to be utilized for an essential services operation, the area so utilized and the utilities systems and components servicing the area shall be constructed according to these rules and regulations and shall be separated or protected from damage due to failures of other portions of the structure to the extent determined by the enforcement agency to insure continued functioning after an earthquake or other disaster. Ancillary buildings and facilities related to the essential services building function may be exempt from these regulations if the enforcement agency determines that such buildings and facilities are not necessary to the functioning of the essential services operation after an earthquake or other disaster.

"Nonstructural Alterations" shall mean only such alterations which do not affect the safety of the essential services building and do not change, in any manner, its structural elements.

"Division of the State Architect," or "Office" or the initials "DSA/ORS" shall mean the Office of Regulation Services of the Division of the State Architect in the State Department of General Services. Approvals, disapprovals, orders and certificates of compliance for state owned or leased buildings shall be issued directly by the Chief of the Office of Regulation Services, who shall act for the State Architect in carrying out the provisions of the act.

"Owner" for the purposes of these regulations shall mean the public agency responsible for the essential services functions performed under its authority within an essential services building. The owner is responsible for applying for and obtaining the approvals and certifications required by these regulations.

"Plans" as used in these regulations shall mean the drawings associated with the project such as, but not limited to, vicinity maps, site plans, foundation plans, floor plans, ceiling plans, roof plans, cross-sections, interior elevations, exterior elevations and details which are used in conjunction with the project specifications and which are necessary to accomplish construction in conformance with the requirements of the act.

"Police Station" shall mean any building that contains the operational facilities and the alarm and communications equipment necessary to respond to police emergencies. This definition shall include the offices of local police departments, county sheriffs, California State Police, California Highway Patrol and all offices necessary to the functioning of the essential services operation after an earthquake or other disaster.

"Project Inspector" shall mean any individual duly approved by the enforcement agency as the on-site inspector for a particular project. The project inspector shall be hired by and paid by the owner and he/she shall act as the agent of the owner at the project site under the general direction of the architect or registered engineer in general responsible charge and under the supervision of the enforcement agency. The project inspector shall be independent of the contractor. The project inspector shall be responsible for inspecting all work included in the contract. A special inspector shall be responsible only for inspecting the work for which he/she is approved. (See Section 4-211 (c) for special inspection.)

"Reconstruction" is the repair of damage to an existing complying essential services building or an alteration of an existing non-complying building to bring it into conformance with the safety standards established by these regulations for essential services buildings.

"Registered Engineer" as used in these regulations shall mean a structural engineer, civil engineer, mechanical engineer or electrical engineer holding a valid certificate under Chapter 7, Division 3, of the California Business and Professions Code.

"Specifications" as used in these regulations shall mean the written document which is used in conjunction with the project plans to establish the job conditions, the quality and quantity of construction materials used in the project and the quality of workmanship required to accomplish the construction in conformance with the provisions of the act.

Authority: Health & Safety Code Section 16022.

Reference: Health & Safety Code Sections 16003, 16011, 16018 and 16019.

4-208. Application for Approval of Drawings and Specifications.

(a) **General.** Before adopting plans and specifications, the agency responsible for the essential services function shall submit an application to the appropriate enforcing agency for written approval of said plans and specifications except where the new construction is a Type V or Type II N one-story structure which

contains 2000 square feet or less of floor area and is not located in a special studies zone as defined in Section 2622 of the Public Resources Code.

(b) An architect, structural engineer or civil engineer may act as the agent for the essential services agency when filing the application for approval of plans and specifications. An architect or registered engineer who is a contracting party or who has any employment relationship with any entity which may be a contracting party for the construction of the essential services building shall not perform the functions prescribed by Section 16015 of the Health and Safety Code or be delegated responsibility for any portion of the work.

Authority: Health & Safety Code Section 16022.

Reference: Health & Safety Code Sections 16010, 16011 and 16015.

4-209. Designation of Responsibilities.

(a) **General Responsible Charge.** For every essential services building project there shall be an architect, structural engineer or civil engineer in general responsible charge of plans, specifications and observation of construction, except that where plans, specifications and observation of the work of construction for alterations or repairs do not involve architectural or structural changes, said plans, specifications and observation of construction may be under the responsible charge of a registered mechanical or electrical engineer for work involving only those branches of engineering. A project may be divided into parts, provided that each part is clearly defined by a building or similar distinct unit. The part, so defined, shall include all portions and utility systems or facilities necessary to the complete functioning of that part. Separate assignments of general responsible charge may be made for the parts.

(b) **Delegation of Responsibility.** The architect, structural engineer or civil engineer in general responsible charge may delegate responsibility for any portion of the work to, or may employ, or retain other architects, structural engineers or civil engineers. Registered mechanical and electrical engineers may be delegated responsibility for the mechanical and electrical portions of the work, respectively.

(c) **Evidence of Responsibility.** The manual signature of the architect or registered engineer on a plan, specification, or other document shall be deemed evidence that full responsibility is assumed by the signator for the work shown thereon, including also those portions of the accompanying computations, specifications or plans which pertain to such work.

(d) **Alternates.** The applicant, or the architect or registered engineer having general or delegated responsibility, may name one or more persons to act as alternate(s) for the design and/or observations of the work of construction provided such persons are architects or registered engineers who themselves are qualified under these regulations to assume the responsibility assigned.

Authority: Health & Safety Code Section 16022.

Reference: Health & Safety Code Sections 16011, 16012 and 16015.

4-210. Plans, Specifications, Computations and Other Data.

(a) **General.** When an application is filed, it shall be accompanied by the required number of complete sets of the plans and specifications, the full structural design calculations, site data and a fee as established by the enforcement agency.

(b) **Plans.** Plans shall show the use or occupancy of all parts of the essential services buildings and shall give such other information as may be required to indicate the nature of the work proposed and to show compliance with the act and these regulations. The drawings shall be legible and sufficiently detailed and cross-referenced to show clearly the pertinent features of the construction, and shall have sufficient dimensions to be readily

interpreted. Where a project includes several buildings, the plans for each shall be drawn independently except that details common to all need not be repeated. Submitted plans and specifications, which are obviously incomplete or incorrect, shall be returned to the architect or registered engineer in general responsible charge with a request for compliance with these regulations before checking is begun or resumed by the enforcement agency.

(c) **Specifications.** Specifications shall completely set forth the requirements for the various types of materials that will enter into the permanent construction and shall describe the methods not covered in the technical regulations which are to be used to obtain the required quality of the work shown on the plans and described in the specifications.

(d) **Design Computations.** Computations, stress diagrams and other pertinent data shall accompany the plans and specifications and shall be sufficiently complete so that calculations for individual structural members can be readily interpreted. The computations shall be prefaced by a statement clearly and concisely outlining the basis for the structural design and indicating the manner in which the proposed essential services building will resist vertical loads and horizontal forces. The computations shall be sufficiently complete to establish that the structure will resist the loads and forces prescribed in Part 2, Title 24, CCR. Assumed safe bearing pressures on soils and specified strengths of concrete shall be given in the computations and noted on the plans. Where unusual conditions occur, such additional data as are pertinent to the work shall be submitted.

(e) **Site Data.** Site data for all essential services buildings covered by these regulations shall include a soil investigation report providing information on subsurface site work and laboratory testing, an evaluation of site soil conditions, a recommendation for the type of foundation to be used and an allowable design value for the soil bearing capacity. For all essential services building sites not exempted from the provisions of the act, a geologic and earthquake hazard report including an evaluation of both known and potentially active local and regional fault systems, slope stability, liquefaction potential and other hazards shall be prepared by competent persons and submitted with the application, plans and specifications. All or parts of the geologic and earthquake hazard investigation and report may be waived by the enforcement agency when in the judgment of the enforcement agency those requirements are unnecessary and would not be beneficial to public safety.

(f) **Signatures Required.** All plans and specifications submitted for approval shall bear the manual signature of the architect or professional engineer in general responsible charge of design. When responsibility for a portion of the work has been delegated, the plans and specifications covering that portion of design shall also bear the manual signature of the responsible registered engineer or architect.

Authority: Health & Safety Code Section 16022.

Reference: Health & Safety Code Sections 16009, 16011, 16012, 16013 and 16014.

4-211. Observation and Inspection of Construction.

(a) **Observation by Architect or Registered Engineer.** The act provides that the observation of the work of construction, reconstruction, alteration or addition shall be under the general responsible charge of an architect, structural engineer, civil engineer or, under certain conditions, a registered mechanical or electrical engineer for work involving only those branches of engineering. A civil engineer qualified in soil engineering shall provide the observation for placement of fills and shall submit a verified report attesting to the compliance of the engineered fill.

(b) **Inspection by Project Inspector.** The owner must provide for and require competent, adequate and continuous inspection by

a project inspector approved by the enforcement agency. The project inspector so approved shall cooperate with the architect or registered engineer in general responsible charge of the observation of the work of construction to insure compliance with the approved drawings and specifications. The project inspector shall request interpretations and clarifications of the approved contract drawings and specifications when necessary from the responsible architect or registered engineer, Code interpretations received by the project inspector which cause deviations from the approved drawings and specifications shall be referred to the responsible architect or registered engineer for preparation of change orders to cover the required work.

For every project there shall be a project inspector who shall have personal knowledge as defined in Section 16021 of the Health and Safety Code of all work done on the project or its parts. On large projects adequate inspection may require the employment of assistant inspectors. The employment of special inspectors or assistant inspectors shall not be construed as relieving the project inspector of his/her duties and responsibilities under Section 16021 and Sections 214 and 219 of these regulations.

No work shall be carried out except under the inspection of the project inspector approved by the enforcement agency. The project inspector shall have had at least three years equivalent experience in construction work of a type similar to that for which he/she is proposed as inspector, shall have a thorough knowledge of building materials, and shall be able to read and interpret plans and specifications.

The cost of project inspection shall be paid for by the owner.

(c) **Special Inspection.** Special inspection by inspectors specially approved by the enforcement agency may be required on all masonry construction, glued laminated lumber fabrication, wood framing using timber connectors, ready mixed concrete batching, gunite, prestressed concrete, important steel fabrication, high strength steel bolt installations, welding, pile driving, electrical and mechanical work.

The project inspector may be used for special inspections if he/she has been specially approved for such purposes and if he/she has the time available for the work.

The detailed inspection of all work covered by this section is the responsibility of the project inspector when special inspection is not provided. The enforcement agency may also require special inspection for any other shop fabrication procedures that preclude the complete inspection of the work after assembly. It may require special inspection at the site in addition to those listed above if found necessary because of the special use of material or methods of construction.

Special inspectors shall submit verified progress reports as required by Section 214, for the special work covered.

Authority: Health & Safety Code Sections 16017 and 16022.
Reference: Health & Safety Code Sections 16015, 16017, 16020 and 16021.

4-212. Supervision of Construction by the Enforcement Agency. During the construction, reconstruction, repair, alteration of or addition to any essential services building, the enforcement agency as provided in the act, shall make such site visits and observations as in its judgment is necessary or proper for enforcement of the act and the protection of the safety of the occupants of the building and the public. If at any time as the work progresses, prior to the issuance of the final certification of compliance, it is found that modifications or changes are necessary to secure safety, the enforcement agency shall direct the architect or registered engineer in general responsible charge to prepare and submit documents covering such modifications or changes for the review and approval of the enforcement agency.

Authority: Health & Safety Code Section 16022.
Reference: Health & Safety Code Sections 16001, 16009 and 16020.

4-213. Tests.

(a) **General.** Tests of materials are required as set forth in the approved plans and specifications and in Part 2, Title 24, CCR. Other materials or combination of materials may require additional tests. Where job conditions warrant the architect or registered engineer may waive certain tests with the approval of the enforcement agency. A list of all required tests of materials and of all required special inspections shall be prepared and submitted by the architect, structural engineer or civil engineer in general responsible charge of the project at the time the plans and specifications are stamped for identification by the enforcement agency.

(b) **Test Sampling.** Test samples or specimens of material for testing may be taken by the architect or registered engineer, his representative, the project inspector, or a representative of the testing agency. In no case shall the contractor, his employee or a vendor select the sample.

(c) **Test Reports.** One copy each of all test reports shall be forwarded to the enforcement agency, the architect, the registered engineer and the project inspector by the testing agency. Such reports shall include all tests made, regardless of whether such tests indicate that the material is satisfactory or unsatisfactory. Records of special sampling operations as required shall also be reported. The reports shall show that the material or materials were sampled and tested in accordance with the requirements of these regulations and with the approved specifications. In the case of masonry or concrete, test reports shall show the specified design strength. They shall also state definitely whether or not the material or materials tested comply with the requirements.

(d) **Verification of Test Reports.** Each testing agency shall submit to the enforcement agency a verified report, in duplicate, covering all of the tests which were required to be performed each time that work on the project is suspended, covering the tests up to that time, and at the completion of the project, covering all of the tests. The verified report shall contain all the information included in the sample Laboratory Verified Report (see Appendix).

Authority: Health & Safety Code Section 16022.
Reference: Health & Safety Code Sections 16009, 16020 and 16021.

4-214. Verified Reports. Sections 16020 and 16021 of the act require that from time to time as the work progresses, the architect or registered engineer in charge of observation of construction of the work, each architect or registered engineer delegated responsibility for a portion of the work, the project inspector and the contractor shall each make a duly verified report to the enforcement agency upon a prescribed form or forms, showing that of his or her own personal knowledge the work during the period covered by the report has been performed and materials have been used and installed in every material respect in compliance with the duly approved plans and specifications, and setting forth such detailed statement of fact as shall be required. For a definition of personal knowledge refer to Sections 16020 and 16021 of the act. See Articles 2 and 3 for the reporting requirements for state and local enforcement agencies, respectively.

Authority: Health & Safety Code Sections 16020, 16021 and 16022.
Reference: Health & Safety Code Sections 16020 and 16021.

4-215. Changes in the Approved Drawings and Specifications.

(a) **General.** All work shall be executed in accordance with the approved plans and specifications except where documents authorizing changes have been submitted by the responsible architect or registered engineer to the enforcement agency for review and approval. These documents shall describe the authorized changes, show the increase or decrease in the contract cost involved and shall contain the signatures of the responsible archi-

tect or registered engineer and the owner and shall bear the approval stamp of the enforcement agency.

Authority: Health & Safety Code Section 16022.

Reference: Health & Safety Code Sections 16011, 16013 and 16015.

4-216. Final Certification of Compliance. The certification of compliance for the essential services building by the enforcement agency will be issued when the work has been completed in accordance with the requirements as to safety of design and construction with Sections 16000-16023 of the Health and Safety Code (Essential Services Buildings Seismic Safety Act) and with the requirements of these regulations. The certification of compliance will be evidenced by a letter or a certificate of occupancy each of which shall contain a statement that the building design and review and the work of construction have been completed in accordance with the requirements of Sections 16000 through 16023 of the Health and Safety Code and of Part 1, Title 24, CCR. The certificate of compliance will be directed to the owner of the essential services building.

Local enforcement agencies shall forward one copy of the certification of compliance to the DSA/ORS Headquarters Office in Sacramento.

Authority: Health & Safety Code Section 16022.

Reference: Health & Safety Code Sections 16009 and 16022.

4-217. Duties of the Architect and Registered Engineers.

(a) **General.** The architect or registered engineer is responsible to the owner and to the enforcement agency to see that the completed work conforms in every material respect to these regulations and the approved plans and specifications. He or she may, if so authorized, act as agent for the owner in completing and submitting the application to the enforcement agency.

The architect or registered engineer, in no way, is relieved of any responsibility by the activities of the enforcement agency in the performance of its duties.

(b) **General Responsible Charge.** The architect or registered engineer in general responsible charge shall advise the owner in regard to filing of the application for approval of plans, the selection of a project inspector and the selection of a testing laboratory. He or she shall prepare the plans, specifications, design computations and other data and shall prepare documents authorizing changes in the approved drawings and specifications when so directed by the owner or as required by conditions on the project. He or she shall make, or cause to be made, the corrections required on the various documents to comply with the requirements of these regulations and shall provide the project inspector and testing agency with a complete set of stamped plans, specifications and documents authorizing changes.

The enforcement agency directs all technical correspondence to the architect or registered engineer in general responsible charge of the project.

(c) **Verified Reports.** All architects and registered engineers having responsibility for observation of the work of construction shall maintain such personal contact with the project as is necessary to assure themselves of compliance in every material respect with the approved plans and specifications and shall submit verified reports to the enforcement agency as required in Section 214. The architect or registered engineer in general responsible charge shall be responsible for the timely submittal of the required verified reports from the project inspector, the contractor and the other architects and engineers who have been delegated responsibility for a portion of the project.

(d) **Testing Program.** The architect or registered engineer in general responsible charge shall establish the extent of the testing

of materials consistent with the needs of the particular project and shall issue specific instructions to the testing agency. He or she shall also notify the enforcement agency as to the disposition of materials noted on laboratory reports as not conforming to the approved plans and specifications.

Authority: Health & Safety Code Section 16022.

Reference: Health & Safety Code Sections 16015 and 16020.

4-218. Duties of the Mechanical and Electrical Engineers. The architect, structural engineer or civil engineer in general responsible charge retains overall responsibility for the mechanical and electrical portions of the work when the design responsibility for that work has been delegated and the plans have been prepared by registered mechanical and electrical engineers.

Where plans, specifications, and estimates for alterations or repairs do not involve architectural or structural changes, said plans, specifications and estimates may be prepared and the work of construction observed by a registered mechanical or electrical engineer who shall be in general responsible charge.

The mechanical or electrical engineer shall fulfill the duties outlined in Section 4-217 when assuming general responsible charge and shall submit verified reports as required in Section 4-214. When accepting delegated responsibility, he or she shall comply with the requirements of Sections 4-209 and 4-210 insofar as these may relate to the work delegated to him or her.

Authority: Health & Safety Code Section 16022.

Reference: Health & Safety Code Section 16015.

4-219. Duties of the Project Inspector.

(a) **General.** The project inspector as an agent for the owner shall act under the general direction of the architect or registered engineer and under the supervision of the enforcement agency.

(b) **Duties.** The general duties of the project inspector in fulfilling his or her responsibilities are as follows:

1. **Continuous Inspection Requirements.** He or she must have actual personal knowledge obtained by his or her personal and continuous inspection of the work of construction in all stages of its progress that the requirements of the approved plans and specifications are being executed.

Continuous inspection means complete inspection of every part of the work. Work, such as concrete work or brick work which can be inspected only as it is placed, shall require the constant presence of the project inspector. Other types of work which can be completely inspected after the work is installed may be carried on while the project inspector is not present. In any case, the project inspector must personally inspect every part of the work. In no case shall the project inspector have or assume any duties which will prevent him or her from providing continuous inspection.

The project inspector may obtain personal knowledge of the work of construction, either on-site or off-site, from the inspections performed by special inspectors or assistant inspectors and from the reporting of others on testing and inspection of materials and workmanship for compliance with the plans, specifications and applicable standards. The exercise of reasonable diligence to obtain the facts shall be required.

2. **Relations with the Architect or Engineer.** The project inspector shall work under the general direction of the architect or registered engineer. All inconsistencies or seeming errors in the plans and specifications shall be reported promptly to the architect or registered engineer for his/her interpretation and instructions. In no case shall the instructions of the architect or registered engineer be construed to cause work to be done which is not in conformity with the approved plans, specifications and documents authorizing changes.

3. **Job File.** The project inspector shall keep a file of approved plans and specifications (including all approved documents authorizing changes) on the job at all times, and shall immediately return any unapproved documents to the architect or registered engineer for proper action.

4. **Construction Procedure Records.** The project inspector shall keep a record of certain phases of construction procedures including, but not limited to the following:

- A. Concrete pouring operations. The records show the time and date of placing concrete and the time and date of removal of forms in each portion of the structure.
- B. Welding operations. The record shall include identification marks of welders, lists of defective welds, manner of correction of defects, etc.
- C. Penetration under the last ten (10) blows for each pile when piles are driven for foundations. All such records of construction procedures shall be kept on the job until the completion of the work. These records shall be made a part of the permanent records of the owner.

5. **Deviations.** The project inspector shall notify the contractor, in writing, of any deviations from the approved plans and specifications which are not immediately corrected by the contractor when brought to his or her attention. Copies of such notice shall be forwarded immediately to the architect or registered engineer and to the enforcement agency.

Failure on the part of the project inspector to notify the contractor of deviations from the approved plans and specifications shall in no way relieve the contractor of any responsibility to complete the work covered by his or her contract in accordance with the approved plans and specifications and all laws and regulations.

6. **Verified Reports.** The project inspector shall submit to the enforcement agency verified reports as required in Section 4-214.

(c) **Violations.** Failure, refusal or neglect on the part of the project inspector to notify the contractor of any work which does not comply with the requirements of the approved plans and specifications, or failure, refusal or neglect to report immediately, in writing any such violation to the architect or registered engineer, to the owner and to the enforcement agency shall constitute a violation of the act and shall be cause for the enforcement agency to take action.

Authority: Health & Safety Code Section 16022.

Reference: Health & Safety Code Sections 16017 and 16021.

4-220. Duties of the Contractor.

(a) **Responsibilities.** It is the duty of the contractor to complete the work covered by his or her contract in accordance with the approved plans and specifications therefor. The contractor in no way is relieved of any responsibility by the activities of the architect, registered engineer, project inspector or the enforcement agency in the performance of their duties.

(b) **Performance of the Work.** The contractor shall study carefully the approved plans and specifications and shall plan his schedule of operations well ahead of time. If at any time it is discovered the work is being done which is not in accordance with the approved plans and specifications, the contractor shall correct the work immediately.

All inconsistencies or items which appear to be in error in the plans and specifications shall be promptly called to the attention of the architect or registered engineer, through the project inspector, for interpretation or correction. Local conditions which may affect the structure shall likewise be brought to the architect's or registered engineer's attention at once. In no case, however, shall

the instruction of the architect or registered engineer be construed to cause work to be done which is not in conformity with the approved plans, specifications and change orders.

The contractor shall not carry on work except with the knowledge of the project inspector.

(c) **Verified Reports.** The contractor shall make and submit to the enforcement agency from time to time, verified reports as required in Section 4-214.

If work on the building is being done by independent contractors having contracts with the owner, verified reports shall be submitted by each contractor regardless of the type of work involved.

Authority: Health & Safety Code Section 16022.

Reference: Health & Safety Code Section 16021.

4-221. **Records.** DSA/ORS shall maintain a record of the approved plans, specifications, addenda, change orders and letters of certification for the state owned or leased essential services buildings which have been certified as complying with the provisions of the act. This record shall be kept in the Essential Services Buildings Central File at the DSA/ORS Headquarters Office in Sacramento. The Office shall also maintain a record of the letters of compliance for essential services buildings built under the jurisdiction of local enforcement agencies which have been submitted to the Office by those agencies.

Authority: Health & Safety Code Section 16022.

Reference: Health & Safety Code Section 16022.

4-222. Advisory Board.

(a) **General.** The State Architect may appoint an advisory board whose duty it is to serve in an advisory capacity to the DSA/ORS in connection with administrative matters and with reference to regulations and requirements pertaining to the administration of the act. This board shall also act as a board of review to which appeal can be made by owners, architects, engineers or other interested parties in case of disagreement with the interpretation by the local enforcement agencies and/or local appeals board of the Essential Services Seismic Safety Act or the regulations adopted pursuant thereto. For state agencies, the Advisory Board shall act as an appeals board for disagreements with the rulings, decisions, interpretations or acts of DSA/ORS.

(b) **Membership.** The said board shall consist of nine members appointed by the State Architect and four ex-officio members who are: State Architect, the Chief of the Office of Regulation Services, the California State Fire Marshal, the Executive Director of the Building Standards Commission and the Chairman of the Seismic Safety Commission. The ex-officio board members may appoint alternates to serve on the board as their representatives. Of the appointive members, one shall be an architect, one shall be a structural engineer, one shall be a civil engineer, one shall be a mechanical engineer or an electrical engineer, one shall be a representative of the League of California Cities, one shall be a representative of the County Supervisors Association, one shall be a representative of the California Building Officials, one shall be a representative of the California Fire Chiefs Association and one shall be a representative of the law enforcement agencies. The appointive members shall serve at the pleasure of the State Architect. The State Architect will select appointive members from nominations solicited from the California Council, American Institute of Architects, the Structural Engineers Association of California, the Consulting Engineers and Land Surveyors Association of California, the California Building Officials, the League of California Cities, the County Supervisors Association, the California Peace Officers Association and from the California Fire Chiefs Association. He or she may also appoint as many ex-officio members as he or she may desire. Ex-officio members are not entitled to vote in board actions.

WIR ATTEN
OUT

(c) **Meetings.** The board shall elect its own chairperson and vice-chairperson and shall convene upon the call of the chairperson or the State Architect whenever it may be necessary in his or her judgment for the board to meet. The board shall adopt such rules of procedure as are necessary to enable it to perform the obligations delegated to it. The chairperson of the board shall at his or her discretion or upon the instruction of the board designate subcommittees to study and report back to the board on any tech-

nical subject or matter for which an independent study is desired or regarding appeals which are made to the board from interpretations of the enforcement agencies. The board members will be reimbursed for their reasonable expenses in attending meetings but shall receive no compensation for their services.

Authority: Health & Safety Code Section 16022.

Reference: Health & Safety Code Section 16022.

Article 2. State Buildings

4-223. General. The provisions of Article 1 and Article 2 of these regulations shall apply to state owned or leased essential services buildings. Article 2 requirements do not apply to essential services buildings under the jurisdiction of local enforcement agencies.

Authority: Health & Safety Code Section 16022.

Reference: Health & Safety Code Section 16001.

4-224. Application for DSA Approval of Drawings and Specifications.

(a) The required written approval of drawings and specifications shall consist of a letter signed by the Chief of the Office of Regulation Services, DSA/ORS which will be issued when the procedures of Section 4-229 of these regulations are completed.

(b) The agency responsible for the essential services function shall submit an application, in duplicate, for the approval of drawings and specifications with DSA/ORS. A separate application shall be submitted for each essential services building or group of buildings on the same site. Applications shall be submitted to DSA/ORS on Form SSS-1, Application for Approval of Plans and Specifications (see facsimile copy in the Appendix).

(c) The application shall contain a definite identifying name and location of the essential services building or buildings, the name of the architect or registered engineer in general responsible charge of the work, the names of the architects or registered engineers who have been delegated responsibility for portions of the work (see Section 4-209), the estimated cost of the project and all such other information as is requested thereon.

Authority: Health & Safety Code Section 16022.

Reference: Health & Safety Code Sections 16001 and 16011.

4-225. Designation of Responsibility. In addition to the requirements of Section 4-209, Article 1 of these regulations, the following provisions shall apply;

(a) **Delegation of Responsibility.** The architect, structural engineer or civil engineer in general responsible charge shall employ or retain, under his/her supervision, registered mechanical and electrical engineers to design and observe the construction of the mechanical and electrical portions of the work when these elements are significant to the safety of the building or its occupants or the continuing functioning of the building. The requirement for observation of construction of the mechanical and electrical portions of the work by the mechanical and electrical engineers may be waived where the mechanical and electrical elements are not considered to be significant to the safety of the building or its occupants or its continuing functioning and when special mechanical and electrical inspection in accordance with Section 4-211 is provided.

No delegation to or employment or retention of others shall be construed as relieving the architect, structural engineer or civil engineer in general responsible charge of his/her rights, duties and responsibilities under Section 16015 of the act and Section 4-217 of these regulations.

(b) **Assumption of Responsibility.** The architect, structural engineer or civil engineer who submits for approval plans and specifications for any project or any portion of any project which have been prepared by others shall assume responsibility for the safety of design of the completed construction and for the interpretation of and any necessary amplification of the plans and specifications of the project. He/she shall manually sign all plans submitted for approval to indicate his/her assumption of responsibility or may in lieu thereof, sign and submit plans prepared under his/her own charge. (See Section 4-210 for other signatures.) When an architect, structural engineer or civil engineer accepts the responsibility for completion of a project or a portion of a project relinquished by another, that architect, structural engineer or civil engineer thereby assumes responsibility as follows:

1. If the relinquishment occurs prior to the completion of the design documents, all responsibility shall be assumed. [See Section 4-225 (c) for the procedure.]

2. If the relinquishment occurs after the design drawings and specifications have been completed and approved by the enforcement agency, the assuming architect or registered engineer shall be responsible for the construction of the project in accordance with the design of the relinquishing architect or engineer. The assuming architect or registered engineer shall assume responsibility for the interpretation of and any necessary amplification of the plans and specifications and shall manually sign any such documents prepared for that purpose.

(c) **Acceptance of Responsibility.** The assumption of general responsible charge or of delegated responsibility shall be clearly outlined, accepted and approved by the parties concerned including the owner. The enforcement agency shall be notified when any change is made in the individuals in general responsible charge or delegated responsible charge.

Form SSS-1, Application for Approval of Plans and Specifications, provides for the common conditions of delegation of responsibility but for unusual cases, or for changes in responsibility taking place after the plans have been submitted for approval, the delegation of responsibility, acceptances and approvals thereof, shall be submitted in letter form in duplicate, which shall include an indication that the owner has been notified.

Authority: Health & Safety Code Section 16022.

Reference: Health & Safety Code Sections 16011 and 16015.

4-226. Alternates in General Responsible Charge or Delegated Responsible Charge. Alternates may be named on Form SSS-1, Application for Approval of Plans and Specifications, or in letter form in duplicate. Letter forms shall be submitted prior to performance of work by the alternate and shall include an indication that the owner has been notified.

Authority: Health & Safety Code Section 16022.

Reference: Health & Safety Code Section 16015.

4-227. Estimate of Cost. Estimates of cost shall be based on the cost of construction prevailing at the time the plans and specifications for the project are submitted to the DSA/ORS. The estimated cost of a project shall be increased as necessary to include

the estimated cost of every alternate building or portion thereof shown on the plans and specifications as if each alternate building and portion were to be constructed separately and simultaneously.

When a contract amount, or the cumulative total of two or more contract amounts, exceeds the estimated cost by more than 30 percent, the estimated cost shall be revised. An additional fee based upon the revisions shall be paid before proceeding with the work. When the actual cost of constructing all the work shown on the approved plans is less than 70 percent of the estimated cost, a refund may be claimed. (See Section 4-232 for actual cost.)

Authority: Health & Safety Code Section 16022.

Reference: Health & Safety Code Sections 16009 and 16011.

4-228. Procedure for Approval of Application and Voidance of Application.

(a) **General.** After DSA/ORS has completed its review of the documents submitted with the application, the checked prints of the plans and specifications with the requests for corrections and/or additional information noted thereon shall be returned to the responsible architect or registered engineer. When plans and/or specifications require extensive corrections, a corrected set of prints of the plans and specifications shall be submitted for rechecking if requested by DSA/ORS.

When the requested corrections have been made and/or the additional information has been provided by the responsible architect or registered engineer, an employee representative of the architect or registered engineer shall return the check set of plans and specifications along with the original plan tracings, the corrected specification pages and specification master cover sheet to DSA/ORS for backchecking. The backcheck is a comparison of the corrected plans and specifications with the check set of plans and specifications and shall be accomplished either by a conference at the DSA/ORS office between the architect or registered engineer or his/her employee representative and the checking engineer or by mail in the case of minor corrections to which all parties have agreed.

Changes in plans and specifications, other than changes necessary for correction, made after submission for approval shall be brought to the attention of DSA/ORS in writing or by submission of revised plans identifying those changes clearly at the time of backchecking. Failure to give such notice automatically voids any subsequent approval given to the plans and specifications.

All requested corrections shall be made, additional requested information furnished or original designs justified and a list of materials to be tested and special inspections to be made shall be supplied to DSA/ORS at the time of backcheck. When DSA/ORS deems that the corrected plans and specifications comply with these regulations and all parts of Title 24, CCR, that pertain to essential services building construction it shall place its stamp of identification on the reproducible sheets of drawings and master cover sheet of the specifications. This stamp is affixed for purposes of identification only and shall not be construed as authorization to let the construction contracts.

The check prints of the plans and specifications, computations and other data filed with the application are the property of and shall be retained by the enforcement agency after the backcheck process is completed and until the project files are closed.

One set of prints of the stamped plans and specifications shall be submitted to DSA/ORS. The submittal of the stamped prints of the plans and specifications is required before DSA/ORS will issue the written notice of approval of the application.

(b) **Approval of the Application.** DSA/ORS shall issue to the owner of the essential services building a letter approving the application for the project upon receipt of the stamped copies of the

approved plans and specifications. This letter shall constitute the approval of drawings and specifications as required by Section 16016 of the Health and Safety Code. No contract for construction shall be let or approved by the owner of the essential services building and no monies shall be spent for construction work on an essential services building project until this approval in writing has been had and obtained.

DSA/ORS will retain one set of the stamped plans and specifications and other pertinent project information in its files as a permanent record of the compliance of the approved project documents.

(c) **Voidance of the Application.** Any change, erasure, alteration or modification of any plans or specifications bearing the identification stamp of DSA/ORS automatically voids the approval of the application. However, the "written approval of plans" may be extended upon approval of DSA/ORS to include revised plans and specifications after documents are submitted for review and approval. (See Section 4-233 for revised plans and Section 4-215 for addenda and change orders.)

The procedures leading to written approval of plans shall be carried to conclusion without suspension or unnecessary delay. The application shall be void where either (1) prints from corrected plans or corrected original plans are not filed for backcheck and backcheck completed within six months after the date of return of the checked plans to the architect or registered engineer, or (2) prints of the stamped plans and one set of the stamped specifications are not submitted for DSA/ORS files within two months after the date shown on the stamp of identification.

Authority: Health & Safety Code Section 16022.

Reference: Health & Safety Code Sections 16009, 16011 and 16013.

4-229. Deferred Approvals. Where a portion of the construction cannot be adequately detailed on the approved plans because of variations in product design and manufacture, the approval of plans for such portion, when specifically accepted by the enforcement agency, may be deferred until the material suppliers are selected provided the following conditions are met:

(a) The plans clearly indicate that a deferred approval by the enforcement agency prior to the fabrication and installation is required for the indicated portions of the work.

(b) The plans and specifications adequately describe the performance and loading criteria for such work.

(c) The architect or registered engineer responsible for preparation of plans and specifications for the project manually signs the plans and specifications for the deferred approval items. Such architect or registered engineer may prepare his/her own plans or he/she may adopt or modify plans prepared by a manufacturer or anyone else provided that he/she reviews the plans and details and accepts responsibility therefor.

(d) Deferred approval shall not apply to the requirements of Section 210 (b), (c) and (d) with regard to the vertical and lateral load resisting systems and elements of the building. The plans, details, specifications and computations for the structural portions of the building shall provide sufficient information to permit a complete review when the project is submitted.

Authority: Health & Safety Code Section 16022.

Reference: Health & Safety Code Sections 16009, 16011, 16012, 16013 and 16014.

4-230. Withdrawal of Application. If a request is made by the owner of an essential services building for cancellation of the application and return of the plans and specifications, together with the fee paid, it will be granted only when the check of plans and specifications has not actually started. If the checking of the plans and specifications has started, 30 percent of the paid fee will be refunded or applied to a new application for the same project.

(b) At least 48 hours in advance of the time when foundation trenches will be complete and ready for footing forms.

(c) At least 48 hours in advance of the first pour of concrete and 24 hours in advance of any subsequent concrete pours.

(d) When work is suspended for a period of more than two weeks.

Authority: Health & Safety Code Section 16022.

Reference: Health & Safety Code Section 16017.

Article 3. Local Buildings

4-243. General.

(a) The provisions of Article 1 and Article 3 of these regulations shall apply to essential services buildings owned or leased by a city, city and county or county or a special fire district within these jurisdictions. The Division of the State Architect shall observe the implementation and administration of the provisions of the Essential Services Buildings Seismic Safety Act and these regulations pertaining to local jurisdictions under the authority granted in the Act.

(b) Local jurisdictions shall establish such administrative procedures as they deem necessary and proper for the enforcement of the provisions of the Act so long as those procedures do not conflict with the requirements of Articles 1 and 3 of these regulations. The enforcement of these regulations is the responsibility of an authorized official of the local enforcement agency.

Authority: Health & Safety Code Section 16022.

Reference: Health & Safety Code Section 16001.

4-244. Approval of Drawings and Specifications.

(a) The required written approval of drawings and specifications may consist of either a building permit or other document as established by the enforcing agency.

(b) Written notification to DSA/ORS shall be required when the written approval of the drawings and specifications is issued by the local enforcement agency. The written notification shall contain a definite name and location for the essential services building, the name of the architect or registered engineer in general responsible charge of the work, the estimated cost of the project, the name of the qualified plan reviewer and if available the name of the project inspector. The written notification shall also include a statement signed by an official of the enforcement agency that the plans and specifications and the review thereof has been accomplished in compliance with the provisions of the act and of these regulations.

Authority: Health & Safety Code Section 16022.

Reference: Health & Safety Code Sections 16001 and 16011.

4-245. Voidance of Application. Any change, erasure, alteration or modification of any plans or specifications bearing the identification stamp of the enforcement agency automatically voids the approval of the application. However, the "written approval of the plans" may be extended upon approval of the enforcement agency to include revised plans and specifications if proper documents are submitted for the review and approval of the enforcement agency.

Authority: Health & Safety Code Section 16022.

Reference: Health & Safety Code Sections 16009, 16011 and 16013.

4-246. Time of Beginning of Construction and Partial Construction. Construction work whether for a new essential services building, or for a reconstruction, alteration or addition project for an essential services building, shall not be commenced nor shall any contract be let until the owner has applied for and obtained from the enforcement agency the required written approval of plans and specifications.

All work done and materials used and installed must be in accordance with and in conformity to the approved plans and specifications. The enforcement agency shall be notified whenever work is being carried on and failure to give such notice automatically voids approval of the plans and specifications.

An uncompleted building shall not be considered as having been constructed under the provisions of the Essential Services Buildings Seismic Safety Act.

Authority: Health & Safety Code Section 16002.

Reference: Health & Safety Code Section 16016.

4-247. Notice of Start of Construction. The architect or registered engineer responsible for the project shall give written notification to the enforcement agency before construction is to be started. The architect or registered engineer shall furnish the name of the contractor, the contract price and the date of starting of construction. The names and addresses of the subcontractors shall also be reported as soon as they are available.

Authority: Health & Safety Code Section 16022.

Reference: Health & Safety Code Section 16016.

4-248. Enforcement Agency Project and Special Inspector Approval.

(a) The enforcement agency shall review the qualifications of the project and special inspectors proposed for essential services buildings projects to determine his/her competency to do the inspection required for each particular project. The qualification review shall include an appraisal of the candidate's education and experience and a personal interview which may include a written examination if deemed appropriate by the enforcement agency.

(b) The approval of the enforcement agency shall include information to the project inspector of the "personal knowledge" provisions of the Act and of the additional requirement that he/she shall not assume other duties which would preclude him/her from obtaining the personal knowledge required by the project inspector for all the work of the project.

(e) Representatives of the enforcement agency shall from time to time visit the construction site to observe the work of construction and to monitor the performance of the project inspector. The construction work is subject to all the inspections required by the enforcement agency.

Authority: Health & Safety Code Sections 16017 and 16022.

Reference: Health & Safety Code Sections 16017 and 16021.

4-249. Verified Reports. The verified reports required by the act to be filed by the architects, engineers, inspectors and contractors having responsibility for all or any portion of the construction work of the project shall be filed on a form established by the enforcement agency. The form shall contain all the information and statements contained in the facsimile verified report forms shown in the Appendix. Original manual signatures of the architect, engineer, inspector and contractor are required on the verified report.

Authority: Health & Safety Code Sections 16020, 16021 and 16022.

Reference: Health & Safety Code Sections 16020 and 16021.

2001 Version

CHAPTER 4. ADMINISTRATIVE REGULATIONS FOR THE DIVISION OF THE STATE ARCHITECT—STRUCTURAL SAFETY (DSA/SS)

DELETED "SECTION"

Article 1. Essential Services Buildings

4-201. Purpose. Essential services buildings constructed pursuant to these rules and regulations shall be designed and constructed to resist gravity forces, to minimize fire hazards and to resist, insofar as practical, the forces generated by winds and major earthquakes of the intensity and severity of the strongest anticipated at the building site without catastrophic collapse, but may experience some repairable architectural or structural damage. An essential services building as designed and constructed shall be capable of providing essential services to the public after a disaster. In addition, the equipment and other accessories which are necessary for the continued functioning of the essential services operation shall be anchored and braced to resist earthquake forces.

Authority: Health & Safety Code Section 16022.
Reference: Health & Safety Code Section 16001.

4-202. Scope. These regulations apply to the administrative procedures concerning the construction, reconstruction, alteration of or addition to any essential services building under the jurisdiction of a city, city and county, county (including special fire districts) or the State of California.

When the enforcement agency is the Division of the State Architect (DSA) all parts of the California Building Standards Code, as contained in Title 24 of the California Code of Regulations and adopted by that agency designate the building regulations which shall apply to an essential services building. The term "essential services building" shall include all buildings, structures, appurtenances and related systems or facilities as defined in Section 4-207.

These rules and regulations establish reasonable standards and minimum requirements for the design and construction of an essential services building. An essential services building shall also be designed and constructed to conform to the regulations adopted by the California State Fire Marshal in Title 24, CCR, for the particular occupancy concerned.

When the enforcement agency is a local agency, the locally adopted editions of the model codes and the administrative regulations contained in Part 1 (Sections 4-201 through 4-222 and 4-243 through 4-249) Title 24, California Code of Regulations (CCR) designate the building regulations which shall apply to an essential services building. The term "essential services building" shall include all buildings, structures, appurtenances and related systems or facilities as defined in Section 4-207.

If the building standards and regulations adopted by the city, city and county or county agency responsible for building safety are more restrictive than those adopted in the applicable sections of Title 24, CCR, then the local building standards and regulations shall govern within its jurisdiction.

Authority: Health & Safety Code Section 16022.
Reference: Health & Safety Code Section 16001.

4-203. Interpretation. No regulation shall be construed to deprive the enforcing agency of its right to exercise the powers conferred upon it by law or limit the enforcing agency in such enforcement as is necessary to secure the safety of construction as required in the Essential Services Seismic Safety Act (see "Act," Section 4-207.

Authority: Health & Safety Code Section 16022.
Reference: Health & Safety Code Section 16001.

4-204. Delegation of Authority. Any powers, duties and responsibilities pursuant to carrying out the provisions of the Essential Services Buildings Seismic Safety Act for the State Architect may be delegated by the State Architect to the Chief Structural Engineer, Division of the State Architect, subject to the direction of the State Architect.

Those powers, duties and responsibilities so delegated may include the observation of the implementation and administration of the Act, the adoption in consultation with local jurisdictions of the regulations necessary for carrying out the provisions of the Act, providing advice and assistance to local jurisdictions in matters concerning the Act or these regulations and acting as an appeals agency relative to the administration of the Act.

Authority: Health & Safety Code Section 16022.
Reference: Health & Safety Code Section 16022.

4-205. Application of Building Standards. Building standards are set forth in Parts 2, 3, 4, 5, 6, 7 and 12 of Title 24, CCR, and have been adopted as a basis for the approval of plans and specifications. These regulations shall not be construed to prevent the use of higher design standards nor to restrict the use of new or innovative design or construction techniques.

Where the designer desires to use innovative design or construction techniques not addressed in these regulations, it shall be necessary to submit for review and approval information including computations, test data and recommendations covering the design in question. The Division of the State Architect or local enforcement agency must be satisfied that the degree of safety achieved is equivalent to that achieved by the standards contained in Title 24, CCR. The enforcement agency review and approval of the innovative design or construction techniques shall precede the submission of plans and specifications utilizing these techniques.

Authority: Health & Safety Code Section 16022.
Reference: Health & Safety Code Section 16001.

4-206. Approval of New Essential Services Buildings. Plans and specifications shall be submitted to the appropriate enforcement agency for every new owned or leased essential services building before the plans are adopted by the governing board, authority, owner, corporation or other agency proposing to construct any essential services building.

Before any agency may convert an existing building into an essential services building, that agency shall submit plans and specifications for the alteration of the building to the appropriate enforcement agency for approval. The plans shall provide for the alterations necessary for compliance with the requirements of these rules and regulations.

Authority: Health & Safety Code Section 16022.
Reference: Health & Safety Code Section 16011.

4-207. Definitions. The words defined in this section shall have the meaning stated therein throughout the rules and regulations contained in Part I (Administrative), Title 24, CCR.

"Act" shall mean the Essential Services Buildings Seismic Safety Act of 1986, Sections 16000-16023, inclusive, of the Health and Safety Code.

"Addition" shall mean an increase in floor area or volume of enclosed space which is physically attached to an existing building by connections which are required for transmitting vertical or horizontal loads between the addition and the existing structure. The area exemption in Section 16010 of the Act does not apply to additions to essential services buildings when the total area of the

ADDED DELETED WITH

DELETED PUBLIC

DELETED STRUCTURAL SINGULAR DELETED H 25 CODE SEC

REMOVED INTERPRETED REMOVED STRUCTURAL INTEGRITY SINGULAR

DELETED STRUCTURAL SINGULAR DELETED H 25 CODE SEC

REPLACE STRINGENT

ADDED NAME AND SECTION

DELETED CODE SEC # REPLACED HAVE BEEN

REPLACED SHALL

REMOVED CITED GC 14608

ADDED

REPLACED INCLUDED

ADDED CITE

REPLACED APPLICATION

DELETED REQUIREMENTS STRUCTURES

REPLACED UNITS

existing building and the addition exceeds 2000 square feet. An "addition" which is not required to be physically attached either for its own support or for support of the existing building shall be separated as required by Part 2, Title 24, CCR, and shall be deemed to be the construction of a new essential services building.

"Alteration" shall mean changes within an existing building as defined in Part 2, Title 24, CCR. Alterations to existing essential services buildings shall conform to the requirements of Title 24, CCR. Major alterations will be permitted provided the entire essential services building as modified, including the structural alterations or additions, conform to the requirements of Title 24, CCR, if the area of the existing building, including additions, exceeds 2,000 square feet.

"Approved Plans and Specifications" shall mean plans, specifications, addenda and change orders which have been duly approved by the appropriate enforcement agency pursuant to Sections 16013 and 16016 of the Health and Safety Code and which are identified by a stamp bearing the name of the enforcement agency, the identification number, the date and the signature of the qualified reviewer as required in Section 16011 of the act.

"Complying Building" shall mean a building which has been constructed or reconstructed in accordance with these rules and regulations.

"Division of the State Architect," or "Division" or the initials "DSA" shall mean the Division of the State Architect in the Department of General Services, State of California.

"Enforcement Agency" shall mean the Division of the State Architect for state-owned or state-leased buildings and shall mean the enforcement agency of any city, county or city and county having jurisdiction over locally owned or locally leased essential services facilities.

"Essential Services Building" means any building, or any building a portion of which is used or designed to be used as a fire station, police station, emergency operations center, California Highway Patrol office, sheriff's office or emergency communication dispatch center.

"Equipment" shall mean all new or replacement equipment installed in any new or existing owned or leased building which is required for the functioning of the essential services operation. The installation of such equipment shall meet the support, bracing and anchorage requirements of Title 24, CCR. The area exemption in Section 16010 of the Act does not apply to the anchorage or bracing of equipment necessary to the operation of the essential services function.

"Fire Station" shall mean any building that contains the operational facilities, fire suppression, alarm and communications equipment necessary to respond to fire emergencies.

"Maintenance" shall mean and include ordinary upkeep or repair work such as replacement in kind, repainting, replastering and reroofing.

"New Essential Services Building" shall mean any newly erected essential services building or any existing building converted to essential services use subsequent to the effective date of the act regardless of whether the building is owned or leased by the public agency. Existing buildings housing essential services facilities owned or leased by the state, a city, a city and county or a county prior to the effective date of the act are exempt from these regulations except for the installation of new or replacement equipment. When a portion of a building is to be utilized for an essential services operation, the area so utilized and the utilities systems and components servicing the area shall be constructed according to these rules and regulations and shall be separated or protected from damage due to failures of other portions of the structure to the extent determined by the enforcement agency to

insure continued functioning after an earthquake or other disaster. Ancillary buildings and facilities related to the essential services building function may be exempt from these regulations if the enforcement agency determines that such buildings and facilities are not necessary to the functioning of the essential services operation after an earthquake or other disaster.

"Nonstructural Alterations" shall mean only such alterations which do not affect the safety of the essential services building and do not change, in any manner, its structural elements.

"Division of the State Architect," or "Division" or the initials "DSA" shall mean the Division of the State Architect in the Department of General Services, State of California.

"Owner" for the purposes of these regulations shall mean the public agency responsible for the essential services functions performed under its authority within an essential services building. The owner is responsible for applying for and obtaining the approvals and certifications required by these regulations.

"Plans" as used in these regulations shall mean the drawings associated with the project such as, but not limited to, vicinity maps, site plans, foundation plans, floor plans, ceiling plans, roof plans, cross-sections, interior elevations, exterior elevations and details which are used in conjunction with the project specifications and which are necessary to accomplish construction in conformance with the requirements of the act.

"Police Station" shall mean any building that contains the operational facilities and the alarm and communications equipment necessary to respond to police emergencies. This definition shall include the offices of local police departments, county sheriffs, California Highway Patrol and all offices necessary to the functioning of the essential services operation after an earthquake or other disaster.

"Project Inspector" shall mean any individual duly approved by the enforcement agency as the on-site inspector for a particular project. The project inspector shall be employed and paid by the owner and shall act under the general direction of the architect or registered engineer in general responsible charge of the project and under the supervision of the enforcement agency. The project inspector shall be responsible for inspecting all work included in the construction contract, except for work that must be inspected by an approved special inspector. (See Section 4-211 (c) for special inspection.)

"Reconstruction" is the repair of damage to an existing complying essential services building or an alteration of an existing non-complying building to bring it into conformance with the safety standards established by these regulations for essential services buildings.

"Registered Engineer" as used in these regulations shall mean a structural engineer, civil engineer, mechanical engineer or electrical engineer holding a valid certificate under Chapter 7, Division 3, of the California Business and Professions Code.

"Specifications" as used in these regulations shall mean the written document which is used in conjunction with the project plans to establish the job conditions, the quality and quantity of construction materials used in the project and the quality of workmanship required to accomplish the construction in conformance with the provisions of the act.

Authority: Health & Safety Code Section 16022.

Reference: Health & Safety Code Sections 16003, 16011, 16018 and 16019.

4-208. Application for Approval of Drawings and Specifications.

(a) Before adopting plans and specifications, the agency responsible for the essential services function shall submit an application to the appropriate enforcing agency for written approval of said plans and specifications except where the new construction is a Type V or Type II-N one-story structure which contains

DELETED SEC. *

DELETED SEC # II

ADDED II

ADDED II

ADDED II

ADDED II

DELETED REFERENCES TO DOCS II

DELETED CA ST. FIRE CODE

REPLACED "HIRED" DELETED "ACTING AS AGEN" DELETED "INDIVIDUALS" II

REMOVED HEADINGS "GENERAL" II

2000 square feet or less of floor area and is not located in a special studies zone as defined in Section 2622 of the Public Resources Code.

(b) An architect, structural engineer or civil engineer may act as the agent for the essential services agency when filing the application for approval of plans and specifications. /

Authority: Health & Safety Code Section 16022.
Reference: Health & Safety Code Sections 16010, 16011 and 16015.

4-209. Designation of Responsibilities.

(a) **General Responsible Charge.** For every essential services building project there shall be an architect, structural engineer or civil engineer in general responsible charge of plans, specifications and observation of construction, except that plans, specifications and observation of construction may be under the responsible charge of a registered mechanical or electrical engineer for work involving only those respective branches of engineering. A project may be divided into parts, provided that each part is clearly defined by a building or similar distinct unit. The part, so defined, shall include all portions and utility systems or facilities necessary to the complete functioning of that part. Separate assignments of general responsible charge may be made for the parts.

(b) **Delegation of Responsibility.** The architect, structural engineer or civil engineer in general responsible charge may delegate responsibility for any portion of the work to, or may employ, or retain other architects, structural engineers or civil engineers. Registered mechanical and electrical engineers may be delegated responsibility for the mechanical and electrical portions of the work, respectively.

(c) **Evidence of Responsibility.** The stamp and signature of the architect or registered engineer on a plan, specification, or other document shall be deemed evidence that full responsibility is assumed by the signator for the work shown thereon, including also those portions of the accompanying computations, specifications or plans which pertain to such work.

(d) **Alternates.** The applicant, or the architect or registered engineer having general or delegated responsibility, may name one or more persons to act as alternate(s) for the design and/or observations of the work of construction provided such persons are architects or registered engineers who themselves are qualified under these regulations to assume the responsibility assigned.

Authority: Health & Safety Code Section 16022.
Reference: Health & Safety Code Sections 16011, 16012 and 16015.

4-210. Plans, Specifications, Computations and Other Data.

(a) **General.** When an application is filed, it shall be accompanied by the required number of complete sets of the plans and specifications, the complete structural design calculations, site data and a fee as established by the enforcement agency.

(b) **Plans.** Plans shall show the use or occupancy of all parts of the essential services buildings and shall give such other information as may be required to indicate the nature of the work proposed and to show compliance with the act and these regulations. The drawings shall be legible and sufficiently detailed and cross-referenced to show clearly the pertinent features of the construction, and shall have sufficient dimensions to be readily interpreted. Where a project includes several buildings, the plans for each shall be drawn independently except that details common to all need not be repeated. Submitted plans and specifications, which are obviously incomplete or incorrect, shall be returned to the architect or registered engineer in general responsible charge with a request for compliance with these regulations before checking is begun or resumed by the enforcement agency.

(c) **Specifications.** Specifications shall completely set forth the requirements for the various types of materials that will enter into the permanent construction and shall describe the methods not covered in the technical regulations which are to be used to obtain the required quality of the work shown on the plans and described in the specifications.

(d) **Design Computations.** Computations, stress diagrams and other pertinent data shall accompany the plans and specifications and shall be sufficiently complete so that calculations for individual structural members can be readily interpreted. The computations shall be prefaced by a statement clearly and concisely outlining the basis for the structural design and indicating the manner in which the proposed essential services building will resist vertical loads and horizontal forces. The computations shall be sufficiently complete to establish that the structure will resist the loads and forces prescribed in Part 2, Title 24, CCR. Assumed safe bearing pressures on soils and specified strengths of concrete shall be given in the computations and noted on the plans. Where unusual conditions occur, such additional data as are pertinent to the work shall be submitted.

(e) **Site Data.** Site data for all essential services buildings covered by these regulations shall include a soil investigation report providing information on subsurface site work and laboratory testing, an evaluation of site soil conditions, a recommendation for the type of foundation to be used and an allowable design value for the soil bearing capacity. For all essential services building sites not exempted from the provisions of the act, a geologic and earthquake hazard report including an evaluation of both known and potentially active local and regional fault systems, slope stability, liquefaction potential and other hazards shall be prepared by competent persons and submitted with the application, plans and specifications. All or parts of the geologic and earthquake hazard investigation and report may be waived by the enforcement agency when in the judgment of the enforcement agency those requirements are unnecessary and would not be beneficial to public safety.

(f) **Signatures Required.** All plans and specifications submitted for approval shall bear the stamp and signature of the architect or professional engineer in general responsible charge of design. When responsibility for a portion of the work has been delegated, the plans and specifications covering that portion of design shall also bear the stamp and signature of the responsible registered engineer or architect.

Authority: Health & Safety Code Section 16022.
Reference: Health & Safety Code Sections 16009, 16011, 16012, 16013 and 16014.

4-211. Observation and Inspection of Construction.

(a) **Observation by Architect or Registered Engineer.** The Act provides that the observation of the work of construction, reconstruction, alteration or addition shall be under the general responsible charge of an architect, structural engineer, civil engineer or, under certain conditions, a registered mechanical or electrical engineer for work involving only those respective branches of engineering. A geotechnical engineer shall provide the observation for placement of fills and shall submit a verified report attesting to the compliance of the engineered fill.

(b) **Inspection by Project Inspector.** The owner must provide for and require competent, adequate and continuous inspection of all construction work by a project inspector approved for each individual project by the enforcement agency. The project inspector so approved shall cooperate with the architect or registered engineer in general responsible charge of the observation of the work of construction to ensure compliance with the approved drawings and specifications. The project inspector shall request interpretations and clarifications of the approved contract drawings and

DELETED
INDEPENDENT
STATUS

DELETED
A SENTENCE
STRUCTURE

ADDED
"AND STAMP"

REPLACED
"MANUAL"

SAME

REPLACED
"FULL"

ADDED

ADDED
ADDED

SP

DELETED REFERENCE TO ISSUANCE OF FINAL CERT
REPLACED "SECURE SAFETY"

DELETED REFERENCE TO CODE INTERPRETATIONS

REPLACED BY SENTENCE

DELETED REFERENCE TO CODE ADDED

specifications when necessary from the responsible architect or registered engineer.

For every project there shall be a project inspector who shall have personal knowledge as defined in Section 16021 of the Health and Safety Code of all work done on the project or its parts. On large projects adequate inspection may require the employment of one or more approved assistant inspectors. The employment of special inspectors or assistant inspectors shall not be construed as relieving the project inspector of his/her duties and responsibilities under Sections 4-214 and 4-219 of these regulations. The project inspector shall, under the direction of the architect or engineer, be responsible for monitoring the work of the special inspectors and testing laboratories to ensure that the special inspection and testing program is satisfactorily completed.

No work shall be carried out except under the inspection of the project inspector approved by the enforcement agency. The project inspector shall have had at least three years equivalent experience in construction work of a type similar to that for which he/she is proposed as inspector, shall have a thorough knowledge of building materials, and shall be able to read and interpret plans and specifications.

The cost of project inspection shall be paid for by the owner (see "Project Inspector" definition in Section 4-207).

(c) **Special Inspection.** Special inspection by inspectors specially approved by the enforcement agency may be required for masonry construction, glued laminated lumber fabrication, wood framing using timber connectors, concrete batching, shotcrete, prestressed concrete, structural steel fabrication, high strength steel bolt installations, welding, pile driving, electrical work or mechanical work. The cost of all special inspectors required by this section shall be paid for by the owner.

The project inspector may perform special inspections if the project inspector has been specially approved for such purposes and has the time available to complete the special inspections in addition to project inspection work.

The detailed inspection of all work covered by this section is the responsibility of the project inspector when special inspection is not provided. The enforcement agency may require special inspection for shop fabrication procedures that preclude the complete inspection of the work after assembly. The enforcement agency may require special inspection at the site in addition to those listed above if found necessary because of the special use of material or methods of construction.

Approved special inspectors shall submit verified reports as required by Section 4-214, for the special work covered. Special inspectors shall periodically submit reports of inspections to the enforcement agency, the architect, the registered engineer responsible for the observation of structural work, and the project inspector. Construction work that the special inspector finds not to be in compliance with the approved plans and specifications, and which is not immediately corrected upon notifying the contractor, shall be reported immediately to the project inspector, the enforcement agency, the architect and the registered engineer responsible for observation of the structural work.

Authority: Health & Safety Code Sections 16017 and 16022.
Reference: Health & Safety Code Sections 16015, 16017, 16020 and 16021.

4-212. Supervision of Construction by the Enforcement Agency. During the construction, reconstruction, repair, alteration of or addition to any essential services building, the enforcement agency as provided in the Act, shall make such site visits and observations as in its judgment is necessary or proper for enforcement of the Act and the protection of the safety of the occupants of the building and the public. If at any time as the work

progresses, it is found that modifications or changes are necessary to achieve compliance with building standards, the enforcement agency shall direct the architect or registered engineer in general responsible charge to prepare and submit documents covering such modifications or changes for the review and approval of the enforcement agency.

Authority: Health & Safety Code Section 16022.
Reference: Health & Safety Code Sections 16001, 16009 and 16020.

4-213. Tests.

(a) **General.** Tests of materials are required as set forth in the approved plans and specifications and in Part 2, Title 24, CCR. Where job conditions warrant, the architect or registered engineer may waive certain tests with the approval of the enforcement agency. A list of all required tests of materials and of all required special inspections shall be prepared and submitted by the architect, structural engineer, or civil engineer in general responsible charge of the project at the time the plans and specifications are stamped for identification by the enforcement agency.

(b) **Test Sampling.** Test samples or specimens of material for testing may be taken by the architect or registered engineer, the architect's or engineer's representative, the project inspector, or a representative of the testing agency. In no case shall the contractor, his employee or a vendor select the samples or specimens.

(c) **Test Reports.** One copy of all test reports shall be forwarded by the testing agency to the enforcement agency, the architect, the registered engineer responsible for observation of the structural work, and the project inspector. Such reports shall include all tests made, regardless of whether such tests indicate that the material is satisfactory or unsatisfactory. Records of special sampling operations shall also be reported. The reports shall show that the material or materials were sampled and tested in accordance with the requirements of these regulations and with the approved plans and specifications. In the case of masonry or concrete, test reports shall show the specified design strength. Test reports shall also state whether or not the material or materials tested comply with the requirements of the approved plans and specifications.

(d) **Verification of Test Reports.** Each testing agency shall submit to the enforcement agency a verified report, covering all tests and inspections which were required to be performed as of the date that work on the project is suspended or the services of the testing laboratory are terminated, and at the completion of the project, covering all of required tests and inspections. The verified report shall be signed, under penalty of perjury, by the professional engineer charged with engineering managerial responsibility for the laboratory. The verified report shall indicate that all tests and inspections were made as required by the approved plans and specifications, and shall list any noncompliant tests or inspections that have not been resolved by the date of the verified report. In the event that not all required tests or inspections were made by the laboratory making this verified report, those tests and inspections not made shall be listed on the verified report.

Authority: Health & Safety Code Section 16022.
Reference: Health & Safety Code Sections 16009, 16020 and 16021.

4-214. Verified Reports. Sections 16020 and 16021 of the Act require that from time to time as the work of construction progresses, the architect or registered engineer in charge of observation of the work, each architect or registered engineer delegated responsibility for observation of a portion of the work, the project inspector, approved special inspectors, and the contractor shall each make, and sign under penalty of perjury, a duly verified report to the enforcement agency upon a prescribed form or forms, showing that of his or her own personal knowledge the work during the period covered by the report has been performed

DELETED REFERENCE TO ADDITIONAL TESTS

ADDED

ADDED

DELETED "REACH" MOVED ADDED

DELETED "AS REQUIRED"

ADDED REPEATED "WHY" ADDED

DELETED "IN DUPLICATE" ADDED REPEATED "EACH TIME" ADDED ADDED ADDED

REPEATED REFERENCES TO APPENDIX

ADDED DELETED "OF CONSTRUCTION" ADDED ADDED ADDED

ADDED

REPEATED ON ALL

DELETED REPEATED "CONCRETE" REPEATED

"IMPORTANT" REPEATED "AND" ADDED REPEATED "BEUSED" ADDED

DELETED "ALSO" DELETED "ANY OTHER" ADDED

ADDED

and materials have been used and installed in every material respect in compliance with the duly approved plans and specifications, and setting forth such detailed statement of fact as shall be required.

The term "personal knowledge" as applied to an architect or registered engineer means the personal knowledge that is obtained from periodic visits of reasonable frequency to the project site for the purpose of general observation of the work, and that is obtained from the reporting of others on the progress of the work, testing of materials, inspection and superintendence of the work. The exercise of reasonable diligence to obtain the facts is required.

The term "personal knowledge" as applied to an inspector means the actual personal knowledge that is obtained from the inspector's personal continuous inspection of the work in all stages of its progress. For work performed away from the site, the project inspector may obtain personal knowledge from the reporting of testing or special inspection of materials and workmanship for compliance with approved plans, specifications and applicable standards. The exercise of reasonable diligence to obtain the facts is required.

The term "personal knowledge" as applied to the contractor means the personal knowledge gained from constructing the building. The exercise of reasonable diligence to obtain the facts is required.

See Article 2, Section 4-240 and Article 3, Section 4-249 for the reporting requirements to state and local enforcement agencies, respectively.

Authority: Health & Safety Code Sections 16020, 16021 and 16022.
Reference: Health & Safety Code Sections 16020 and 16021.

4-215. Changes in the Approved Drawings and Specifications.

(a) **General.** All work shall be executed in accordance with the approved plans and specifications except where documents authorizing changes have been submitted by the responsible architect or registered engineer to the enforcement agency for review and approval. These documents shall describe the authorized changes, show the increase or decrease in the contract cost involved and shall contain the signatures of the responsible architect or registered engineer and the owner and shall bear the approval stamp of the enforcement agency.

Authority: Health & Safety Code Section 16022.
Reference: Health & Safety Code Sections 16011, 16013 and 16015.

4-216. Final Certification of Compliance. The certification of compliance for the essential services building shall be issued by the enforcement agency when the project has been completed in accordance with the requirements as to safety of design and construction with Sections 16000-16023 of the Health and Safety Code (Essential Services Buildings Seismic Safety Act) and with the requirements of these regulations. The certification of compliance will be evidenced by a letter or a certificate of occupancy each of which shall contain a statement that the building design and review and the work of construction have been completed in accordance with the requirements of Sections 16000 through 16023 of the Health and Safety Code and of Part 1, Title 24, CCR. The certificate of compliance will be directed to the owner of the essential services building.

Local enforcement agencies shall forward one copy of the certification of compliance to the DSA Headquarters Office in Sacramento.

Authority: Health & Safety Code Section 16022.
Reference: Health & Safety Code Sections 16009 and 16022.

4-217. Duties of the Architect and Registered Engineers.

(a) **General.** The architect or registered engineer is responsible to the owner and to the enforcement agency to see that the completed work conforms in every material respect to these regulations and the approved plans and specifications. The architect or registered engineer may, if so authorized, act as agent for the owner in completing and submitting the application to the enforcement agency.

The architect or registered engineer, in no way, is relieved of any responsibility by the activities of the enforcement agency in the performance of its duties.

(b) **General Responsible Charge.** The architect or registered engineer in general responsible charge shall advise the owner in regard to filing of the application for approval of plans, the selection of a project inspector and the selection of a testing laboratory. The architect or registered engineer shall prepare the plans, specifications, design computations and other data and shall prepare documents authorizing changes in the approved drawings and specifications when so directed by the owner or as required by conditions on the project. The architect or registered engineer shall make, or cause to be made, the corrections required on the various documents to comply with the requirements of these regulations and shall provide the project inspector and testing agency with a complete set of stamped plans, specifications and documents authorizing changes.

The enforcement agency directs all technical correspondence to the architect or registered engineer in general responsible charge of the project.

(c) **Verified Reports.** All architects and registered engineers having responsibility for observation of the work of construction shall maintain such personal contact with the project as is necessary to assure themselves of compliance in every material respect with the approved plans and specifications and shall submit verified reports to the enforcement agency as required in Section 4-214. The architect or registered engineer in general responsible charge shall be responsible for the timely submittal of the required verified reports from the project inspector, the contractor and any other architects or engineers who have been delegated responsibility for observation of the work.

(d) **Testing Program.** The architect or registered engineer in general responsible charge shall establish the extent of the testing of materials consistent with the needs of the particular project and shall issue specific instructions to the testing agency. The architect or registered engineer shall also notify the enforcement agency as to the disposition of materials noted on laboratory reports as not conforming to the approved plans and specifications.

Authority: Health & Safety Code Section 16022.
Reference: Health & Safety Code Sections 16015 and 16020.

4-218. Duties of the Mechanical and Electrical Engineers. The architect, structural engineer or civil engineer in general responsible charge retains overall responsibility for the mechanical and electrical portions of the work when the design responsibility for that work has been delegated and the plans have been prepared by registered mechanical and electrical engineers.

Where plans, specifications, and estimates for alterations or repairs only involve mechanical or electrical work, said plans, specifications and estimates may be prepared and the work of construction observed by a registered mechanical or electrical engineer, respectively, who shall be in general responsible charge.

The mechanical or electrical engineer shall fulfill the duties outlined in Section 4-217 when assuming general responsible charge and shall submit verified reports as required in Section 4-214. When accepting delegated responsibility, the mechanical

REPLACED
REFER TO H&S
CODE
ADDED

ADDED

REPLACED
HE/SHE
||

REPLACED
HE/SHE
||
REPLACED
HE/SHE
||

ADDED
||
ADDED
||

REPLACED
HE/SHE
||

ADDED

DELETED
"ORS" >

REPLACED
"DO NOT"
||
ADDED
||

or electrical engineer shall comply with the requirements of Sections 4-209 and 4-210 insofar as these may relate to the delegated work.

Authority: Health & Safety Code Section 16022.
Reference: Health & Safety Code Section 16015.

4-219. Duties of the Project Inspector.

(a) **General.** The project inspector shall act under the general direction of the architect or registered engineer and under the supervision of the enforcement agency.

(b) **Duties.** The general duties of the project inspector in fulfilling project inspection responsibilities are as follows:

1. **Continuous Inspection Requirements.** The project inspector must have actual personal knowledge obtained by personal and continuous inspection of the work of construction in all stages of its progress that the requirements of the approved plans and specifications are being executed.

Continuous inspection means complete inspection of every part of the work. Work, such as concrete work or masonry work which can be inspected only as it is placed, shall require the constant presence of the project inspector. Other types of work which can be completely inspected after the work is installed may be carried on while the project inspector is not present. In any case, the project inspector must personally inspect every part of the work. In no case shall the project inspector have or assume any duties which will prevent him or her from providing continuous inspection.

The project inspector may obtain personal knowledge of the work of construction, either on-site or off-site, from the inspections performed by special inspectors or approved assistant inspectors and from the reporting of others on testing and inspection of materials and workmanship for compliance with the plans, specifications and applicable standards. The exercise of reasonable diligence to obtain the facts shall be required.

2. **Relations with the Architect or Engineer.** The project inspector shall work under the general direction of the architect or registered engineer. Any uncertainties in the inspector's comprehension of the plans and specifications shall be reported promptly to the architect or registered engineer for his/her interpretation and instructions. In no case shall the instructions of the architect or registered engineer be construed to cause work to be done which is not in conformity with the approved plans, specifications and documents authorizing changes.

3. **Job File.** The project inspector shall keep a file of approved plans and specifications (including all approved documents authorizing changes) on the job at all times.

4. **Construction Procedure Records.** The project inspector shall keep a record of certain construction procedures including, but not limited to the following:

- A. Concrete pouring operations. The records show the time and date of placing concrete and the time and date of removal of forms in each portion of the structure.
- B. Welding operations. The record shall include identification marks of welders, lists of defective welds, manner of correction of defects, etc.
- C. Penetration under the last ten (10) blows for each pile when piles are driven for foundations. All such records of construction procedures shall be kept on the job until the completion of the work. These records shall be made a part of the permanent records of the owner.

5. **Deviations.** The project inspector shall notify the contractor, in writing, of any deviations from the approved plans and

specifications which are not immediately corrected by the contractor when brought to the contractor's attention. Copies of such notice shall be forwarded immediately to the architect or registered engineer and to the enforcement agency.

Failure on the part of the project inspector to notify the contractor of deviations from the approved plans and specifications shall in no way relieve the contractor of any responsibility to complete the work covered by his or her contract in accordance with the approved plans and specifications and all laws and regulations.

6. **Verified Reports.** The project inspector shall submit to the enforcement agency verified reports as required in Section 4-214.

(c) **Violations.** Failure, refusal or neglect on the part of the project inspector to notify the contractor of any work that does not comply with the requirements of the approved plans and specifications, or failure, refusal or neglect to report immediately, in writing any such violation to the architect or registered engineer, to the owner and to the enforcement agency shall constitute a violation of the Act and shall be cause for the enforcement agency to take action, which may result in withdrawal of the inspector's approval.

Authority: Health & Safety Code Section 16022.
Reference: Health & Safety Code Sections 16017 and 16021.

4-220. Duties of the Contractor.

(a) **Responsibilities.** It is the duty of the contractor to complete the work covered by his or her contract in accordance with the approved plans and specifications therefore. The contractor in no way is relieved of any responsibility by the activities of the architect, registered engineer, project inspector or the enforcement agency in the performance of their duties.

(b) **Performance of the Work.** The contractor shall study carefully the approved plans and specifications and shall plan his schedule of operations well ahead of time. If at any time it is discovered the work is being done that is not in accordance with the approved plans and specifications, the contractor shall correct the work immediately.

All inconsistencies or items which appear to be in error in the plans and specifications shall be promptly called to the attention of the architect or registered engineer, through the project inspector, for interpretation or correction. In no case, however, shall the instruction of the architect or registered engineer be construed to cause work to be done that is not in conformity with the approved plans, specifications and change orders, and standards.

The contractor must notify the project inspector, in advance, of the commencement of construction of each and every aspect of the work.

(c) **Verified Reports.** The contractor shall make and submit to the enforcement agency from time to time, verified reports as required in Section 4-214.

If work on the building is being done by independent contractors having contracts with the owner, verified reports shall be submitted by each contractor regardless of the type of work involved.

Authority: Health & Safety Code Section 16022.
Reference: Health & Safety Code Section 16021.

4-221. **Records.** DSA shall maintain a record of the approved plans, specifications, addenda, change orders and letters of certification for state-owned or state-leased essential services buildings which have been certified as complying with the provisions of the Act. DSA shall also maintain a record of the letters of compliance for essential services buildings built under the jurisdiction of local enforcement agencies which have been submitted to DSA by those agencies.

Authority: Health & Safety Code Section 16022.
Reference: Health & Safety Code Section 16022.

REPLACED HIS/HER REPHRASE

DELETED "AN AGENT"

REPLACED HIS/HER REPHRASE HE/SHE

REPLACED "BRICK"

ADDED

REPLACED "ALL INCONSISTENCIES OR SEEMING ERRORS"

DELETED AND SHALL IMMEDIATELY RETURN ANY UNAPPROVED DOCUMENTS TO THE ARCHITECT OR REGISTERED ENGINEER FOR ACTION

DELETED PHASES OF

REPHRASE HIS/HER

ADDED

DELETED "LOCAL CONDITIONS WHICH MAY AFFECT THE STRUCTURE SHALL BE BROUGHT TO THE ARCHITECT'S ATTENTION AT ONCE. REPHRASE

DELETED ORS REPHRASE DELETED ORS SAME

4-222. Advisory Board.

(a) **General.** The State Architect may appoint an advisory board whose duty it is to serve in an advisory capacity to DSA in connection with administrative matters and with reference to regulations and requirements pertaining to the administration of the Act. This board shall also act as a board of review to which appeal can be made by owners, architects, engineers or other interested parties in case of disagreement with the interpretation by the local enforcement agencies and/or local appeals board of the Essential Services Buildings Seismic Safety Act or the regulations adopted pursuant thereto. For state agencies, the Advisory Board shall act as an appeals board for disagreements with the rulings, decisions, interpretations or acts of DSA.

(b) **Membership.** The said board shall consist of nine members appointed by the State Architect and four ex-officio members who are: State Architect, the Chief Structural Engineer of DSA, the California State Fire Marshal, the Executive Director of the Building Standards Commission and the Chairman of the Seismic Safety Commission. The ex-officio board members may appoint alternates to serve on the board as their representatives. Of the appointive members, one shall be an architect, one shall be a structural engineer, one shall be a civil engineer, one shall be a mechanical engineer or an electrical engineer, one shall be a representative of the League of California Cities, one shall be a representative of the County Supervisors Association, one shall be a representative of the California Building Officials, one shall be a representative of the California Fire Chiefs Association and one shall be a representative of a law enforcement agency.

The appointive members shall serve at the pleasure of the State Architect. The State Architect will select appointive members from nominations solicited from the California Council, American Institute of Architects, the Structural Engineers Association of California, the Consulting Engineers and Land Surveyors Association of California, the California Building Officials, the League of California Cities, the County Supervisors Association, the California Peace Officers Association and from the California Fire Chiefs Association. The State Architect may also appoint additional ex-officio members. Ex-officio members are not entitled to vote in board actions.

(c) **Meetings.** The board shall elect its own chairperson and vice-chairperson and shall convene upon the call of the chairperson or the State Architect whenever it may be necessary in the chairperson's or State Architect's judgment for the board to meet. ~~The board shall adopt such rules of procedure as are necessary to enable it to perform the obligations delegated to it.~~ The chairperson of the board shall at his or her discretion or upon the instruction of the board designate subcommittees to study and report back to the board on any technical subject or matter for which an independent study is desired or regarding appeals which are made to the board from interpretations of the enforcement agencies. The board members will be reimbursed for their reasonable expenses in attending meetings but shall receive no compensation for their services.

Authority: Health & Safety Code Section 16022.
Reference: Health & Safety Code Section 16022.

DELETED
'ORS' >

ADDED ||

DELETED
'ORS' >

DELETED
'ORS' >

REDALED
'THE' ||

REDALED
HE/SHE ||

SAME ||

Article 2. State Buildings

4-223. General. The provisions of Article 1 and Article 2 of these regulations shall apply to state-owned or state-leased essential services buildings. Article 2 requirements do not apply to essential services buildings under the jurisdiction of local enforcement agencies.

Authority: Health & Safety Code Section 16022.
Reference: Health & Safety Code Section 16001.

4-224. Application for DSA Approval of Drawings and Specifications.

(a) The written approval of drawings and specifications shall consist of a letter issued by DSA when the procedures of Section 4-229 of these regulations are completed.

(b) The agency responsible for the essential services function shall submit an application, for the approval of drawings and specifications to DSA. A separate application shall be submitted for each essential services building or group of buildings on each site. Applications shall be submitted to DSA on Form DSA-1, Application for Approval of Plans and Specifications. DSA forms are available on the Internet at www.dgs.ca.gov/dsa, or at any of the DSA regional offices.

(c) The application shall contain a project name and location of the essential services building or buildings, the name of the architect or registered engineer in general responsible charge of the work, the names of the architects or registered engineers who have been delegated responsibility for portions of the work (see Section 4-209), the estimated cost of the project and all such other information as is requested on Form DSA-1 Application for Approval of Plans and Specifications.

Authority: Health & Safety Code Section 16022.
Reference: Health & Safety Code Sections 16001 and 16011.

4-225. Designation of Responsibility. In addition to the requirements of Section 4-209, Article 1 of these regulations, the following provisions shall apply;

(a) **Delegation of Responsibility.** The architect, structural engineer or civil engineer in general responsible charge shall employ or retain, under his/her supervision, registered mechanical and electrical engineers to design and observe the construction of the mechanical and electrical portions of the work when these elements are significant to the safety of the building or its occupants or the continuing functioning of the building. The requirement for observation of construction of the mechanical and electrical portions of the work by the mechanical and electrical engineers may be waived where the mechanical and electrical elements are not considered to be significant to the safety of the building or its occupants or its continuing functioning and when special mechanical and electrical inspection in accordance with Section 4-211 is provided.

No delegation to or employment or retention of others shall be construed as relieving the architect, structural engineer or civil engineer in general responsible charge of his/her rights, duties and responsibilities under Section 16015 of the Act and Section 4-217 of these regulations.

(b) **Assumption of Responsibility.** The architect, structural engineer or civil engineer who submits for approval plans and specifications for any project or any portion of any project which have been prepared by others shall assume responsibility for the safety of design of the completed construction and for the interpretation of and any necessary amplification of the plans and specifications of the project. He/she shall stamp and sign all plans submitted for approval to indicate his/her assumption of responsibility or may in lieu thereof, stamp and sign, and submit plans prepared under his/her own charge. (See Section 4-210 for other signatures.) When an architect, structural engineer or civil engi-

samples and tests shall be in accordance with the standards as provided in the approved plans and specifications and in the applicable building regulations. Where a sample has failed to pass the required tests, the architect or registered engineer, subject to the approval of the enforcement agency, may permit retest of the sampled material.

(b) **Payments.** The owner shall pay for all tests. When in the opinion of the architect or registered engineer additional tests are required because of the manner in which the contractor executes his work, such tests shall be paid for by the owner but the amount paid may be collected from the contractor. Examples of such tests are: Tests of materials substituted for previously approved materials, retests made necessary by the failure of materials to comply with the requirements of the specifications and load tests necessary because certain portions of the structure have not fully met specification or plan requirements.

Authority: Health & Safety Code Section 16022.
Reference: Health & Safety Code Sections 16009, 16020 and 16021.

4-240. Required Filing of Verified Reports. Project inspectors, approved special inspectors and contractors shall file verified reports on Form DSA-6. Architects and engineers shall file verified reports on Form DSA-6A/E. DSA forms are available on the Internet at www.dgs.ca.gov/dsa, or at any of the DSA regional offices.

Verified reports shall be filed with DSA as follows:

- (a) By each contractor having a contract with the owner, at the completion of the contract.
- (b) By the architect, registered engineers, project inspector, and approved special inspectors at the completion of the essential services building.
- (c) By the architect, registered engineers, project inspector and contractor at the suspension of all work for a period of more than one month.
- (d) By the architect, registered engineer, project inspector, approved special inspector, or contractor whose services in connection with the project have been terminated for any reason.

(e) At any time a verified report is requested by DSA.

Authority: Health & Safety Code Sections 16020, 16021 and 16022.
Reference: Health & Safety Code Sections 16020, 16021 and 16022.

4-241. Project Inspector's Semimonthly Reports. In addition to the verified reports required in Section 4-214, the project inspector shall make semimonthly reports of the progress of construction to the architect or registered engineer in general responsible charge. A copy of each such report shall be sent to the owner, the architect or engineer in general responsible charge, and DSA. Semimonthly reports shall state the name, location and owner of the essential services building and shall contain the application number and file number of the project for identification purposes. The reports shall include a list of official visitors to the project and whom they represent, a brief statement of the work done, instructions received from the architect or registered engineer during the period covered by the report and pertinent information regarding any unusual conditions or questions that may have arisen at the job. Forms are not provided by DSA for semimonthly reports. Failure to comply with this section will be cause for withdrawal of the approval of the project inspector.

Authority: Health & Safety Code Section 16022.
Reference: Health & Safety Code Section 16017.

4-242. Notifications by the Project Inspector. The project inspector shall notify DSA at the following times:

- (a) When construction work on the project is started, or restarted, if previously suspended per Item (d) below.
- (b) At least 48 hours in advance of the time when foundation trenches will be complete and ready for footing forms.
- (c) At least 48 hours in advance of the first placement of foundation concrete and 24 hours in advance of any subsequent and significant concrete placement.
- (d) When all work on the project is suspended for a period of more than two weeks.

Authority: Health & Safety Code Section 16022.
Reference: Health & Safety Code Section 16017.

Article 3. Local Buildings

4-243. General.

(a) The provisions of Article 1 and Article 3 of these regulations shall apply to essential services buildings owned or leased by a city, city and county or county or a special fire district within these jurisdictions. The Division of the State Architect shall observe the implementation and administration of the provisions of the Essential Services Buildings Seismic Safety Act and these regulations pertaining to local jurisdictions under the authority granted in the Act.

(b) Local jurisdictions shall establish such administrative procedures as they deem necessary and proper for the enforcement of the provisions of the Act so long as those procedures do not conflict with the requirements of Articles 1 and 3 of these regulations. The enforcement of these regulations is the responsibility of an authorized official of the local enforcement agency.

Authority: Health & Safety Code Section 16022.
Reference: Health & Safety Code Section 16001.

4-244. Approval of Drawings and Specifications.

(a) The required written approval of drawings and specifications may consist of either a building permit or other document as established by the enforcing agency.

(b) Written notification ^{ADDED} by the local enforcement agency to DSA shall be required when the written approval of the drawings and specifications is issued by the local enforcement agency. The written notification shall contain a project name and location for the essential services building, the name of the architect or registered engineer in general responsible charge of the work, the estimated cost of the project, the name of the qualified plan reviewer (the licensed architect or registered engineer responsible for the design review) and if available the name of the project inspector. The written notification shall also include a statement signed by an official of the enforcement agency that the plans and specifications and the review thereof has been accomplished in compliance with the provisions of the Act and of these regulations.

Authority: Health & Safety Code Section 16022.
Reference: Health & Safety Code Sections 16001 and 16011.

4-245. Voidance of Application. Any change, erasure, alteration or modification of any plans or specifications bearing the identification or approval stamp of the enforcement agency may result in voidance of the approval of the application. However, the "written approval of the plans" may be extended by the enforcement agency to include revised plans and specifications after documents are submitted for review and approved.

DELETED ORS

REPHRASED
DEFINITE

ADDED

ADDED
REPHRASED
AUTO-
MATICALLY
VOIDS

REPHRASE 25

Authority: Health & Safety Code Section 16022.
Reference: Health & Safety Code Sections 16009, 16011 and 16013.

4-246. Time of Beginning of Construction and Partial Construction. Construction work whether for a new essential services building, or for a reconstruction, alteration or addition project for an essential services building, shall not be commenced nor shall any contract be let until the owner has applied for and obtained from the enforcement agency the required written approval of plans and specifications.

All work done and materials used and installed must be in accordance with and in conformity to the approved plans and specifications. The enforcement agency shall be notified whenever work is being carried on and failure to give such notice may result in voidance of the approval of the plans and specifications.

An uncompleted building shall not be considered as having been constructed under the provisions of the Essential Services Buildings Seismic Safety Act.

Authority: Health & Safety Code Section 16002.
Reference: Health & Safety Code Section 16016.

4-247. Notice of Start of Construction. The architect or registered engineer responsible for the project shall give written notification to the enforcement agency before construction is to be started. The architect or registered engineer shall furnish the name of the contractor, the contract price and the date of starting of construction.

Authority: Health & Safety Code Section 16022.
Reference: Health & Safety Code Section 16016.

4-248. Approval of the Project Inspector, Assistant Inspector, and Special Inspectors by the Enforcement Agency. **ADDED**

(a) The enforcement agency shall review, for each individual project, the qualifications of the project inspector, any assistant

ADDED

inspector, and special inspectors proposed for an essential services buildings projects to determine the inspector's competency to do the inspection required for that particular project. The qualification review shall include, for the project inspector and any assistant inspector, an appraisal of the candidate's education and experience and a personal interview which may include a written examination if deemed appropriate by the enforcement agency.

(b) The approval of the project inspector by the enforcement agency shall include information to the project inspector of the "personal knowledge" provisions of the Act and of the additional requirement that the project inspector shall not assume other duties which would preclude the inspector from obtaining personal knowledge required of all work of construction.

(c) Representatives of the enforcement agency shall from time to time visit the construction site to observe the work of construction and to monitor the performance of the project inspector. The construction work is subject to any inspections required by the enforcement agency.

Authority: Health & Safety Code Sections 16017 and 16022.
Reference: Health & Safety Code Sections 16017 and 16021.

4-249. Verified Reports. The verified reports required by the Act to be filed by any architects, engineers, inspectors and contractors having responsibility for all or any portion of the construction work of the project shall be filed on a form prescribed by the enforcement agency. Original manual signatures of the architect, engineer, inspector and contractor are required on the verified report. Refer to Section 4-214 of these regulations for verified report requirements. **ADDED**

Authority: Health & Safety Code Sections 16020, 16021 and 16022. **SHALL CONTAIN ALL**
Reference: Health & Safety Code Sections 16020 and 16021. **ALL THE INFORMATION**

AND STATEMENTS CONTAINED IN THE FACSIMILE VERIFIED REPORT FORMS SHOWN IN THE APPENDIX

ADDED
REPLACED
IN THE
REPLACED
EACH
ADDED

REPHRASE

REPLACED
HE/SHE
REPLACED
HIM/HER

REPLACED
ALL

REPLACED
"THE"

REPLACED
ESTABLISHED

DELETED:
THE FORM

REPLACED
AUTOMATICALLY
VOIDS

DELETED:
THE NAMES
AND ADDRESSES
OF THE SUB-
CONTRACTORS
SHALL ALSO
BE REPORTED
AS SOON AS
THEY ARE
AVAILABLE