

STANDARD 14.6.10

ACCESS AND WATER FOR PUBLIC SCHOOLS

The information contained in this standard is provided solely for the convenience of the reader and was being enforced by the Ventura County Fire Protection District at the time of its publication. The District reserves the right to make changes and improvements to this standard as and when required by law, or otherwise, at any time. (The District's current standards will be posted and made available for downloading by the public at the following web site: <u>http://fire.countyofventura.org</u>.)

Please note that the District assumes no liability for any damages incurred directly or indirectly as a result of any errors, omissions, or discrepancies between this standard and any applicable law. It is the sole responsibility of the person or persons conducting any work pursuant to this standard to ensure their work complies with any and all applicable codes, ordinances, and regulations.

CHAPTER 1 ADMINISTRATION

1.1 Scope. This standard applies to the design and installation of access and water at public schools within the Jurisdiction of the Ventura County Fire Protection District (VCFPD). This standard shall be used in conjunction with California Code of Regulations Title 19, the Ventura County Fire Code (VCFC), the 2010 California Building Code (CBC) and other applicable standards.

1.2 Purpose. This standard is prepared for the use and guidance of those charged with designing and installing fire department access and water systems at public schools.

1.3 Responsibility. All individuals and companies who intend to engage in the installation or alteration of fire department access and water supply systems at public schools are subject to the requirements of this standard.

1.3.1 Design and Construction. DSA has authority over design and construction of public schools. Final approval of the plans and construction rests solely with DSA.

1.3.2 Code Development and Interpretation. The SFM is responsible for code development and interpretation with regards to fire and life safety in public schools.

1.3.3 Local Fire Authority. The local fire authority has no responsibility for approval of plans or construction. However, DSA directs the project architect to request the local fire authority to review site plans for public school projects assuring that proper fire department access roads, sufficient water supplies and fire hydrants are provided. To avoid delays, this is typically done during DSA's plan check process.

1.3.4 Private Buildings. DSA does not have authority over design and construction of privately owned buildings (whether permanent or relocatable) on public school property. The local fire authority would be responsible. An example would be a private day care on school property. If the school uses the building for any reason, DSA would be the agency with design and construction authority.

CHAPTER 2 DEFINITIONS

2.1 General. The following words and terms shall, for the purposes of this standard and permit requirements of the VCFC, have the meanings shown herein.

2.2 CCR. California Code of Regulations

2.3 DSA. Division of State Architect

2.4 HCD. Housing and Community Development

2.5 Long Term Relocatable Classroom. Relocatable classrooms used for more than 24 months. Examples are those added permanently to a site for class size reduction or increased enrollment.

2.6 Short Term Relocatable Classroom. Relocatable classrooms, including HCD trailers, used for periods not to exceed 24 months at any one school site. They are for temporary use by pupils and staff in the aftermath of a disaster (fire, flood, earthquake, etc.), during construction, modernizing projects or unexpected growth in enrollment.

2.7 Ventura County Fire Code (VCFC). The specified portions of the California Building Standards Codes known as California Code of Regulations, Title 24, Part 9, "California Fire Code (CFC)" as adopted by the State Fire Marshal (SFM) and; portions of The International Fire Code (IFC), 2009 Edition referenced by the California Building Standards Code and not adopted or modified by the SFM and; the VCFPD amendments contained in Ordinance 27 to the above-referenced codes.

CHAPTER 3 GENERAL REQUIREMENTS

3.1 Construction Type. Short and long term relocatables are typically Type VB construction and vary in size.

3.2 Short Term Relocatables. Short term relocatables shall meeting the following:

(1) Short term relocatables are not subject to water supply and fire hydrant requirements no matter where they are placed on the site. However, they must comply with access requirements.

(2) Short term relocatables later reclassified as long term shall comply with the requirements for water supply and fire hydrants upon reclassification.

3.3 Timing. Access roads, water supplies and fire hydrants shall be installed and in-service prior to construction of any building, including the installation of relocatable buildings.

CHAPTER 4 ACCESS ROADS

4.1 General. Access road requirements apply to all school buildings, including short and long term relocatable classrooms.

4.2 Access Width. Access roads shall be a minimum of 20 feet wide and unobstructed to a point within 150 feet of all exterior portions of each building or cluster of relocatables.

4.3 Access Road Rating. The access road shall be capable of supporting a 20 ton vehicle in a 10 year storm.

4.4 Turning Radius. A minimum 40 foot inside turn radius is required.

4.5 Turnarounds. Access roads greater than 150 feet in length shall be provided with a turnaround in accordance with Ventura County requirements. See Fire Prevention Standard 14.6.7.

4.6 Gates. Gates on access roads shall be a minimum of 12 feet in clear open width. If turning is required at the gate, additional width will be required. Chains and locks are permissible in accordance with CCR Title 19.

4.7 Signage. Signs will be required as necessary to prevent blocking gates and access roads. See Fire Prevention Standard 14.6.6 Fire Lanes.

CHAPTER 5 WATER SUPPLIES AND FIRE HYDRANTS

5.1 General. Many school sites are located within residential areas that do not have a water system designed to provide fire flow and fire hydrants for larger buildings. If this presents a problem, fire sprinklers can dramatically reduce the required fire flow, possibly increase hydrant spacing and may mitigate fire department access road requirements.

5.2 Buildings Located Within 1,000 feet of a Public Water Main.

5.2.1 Required Fire Flow. Fire flow shall be in accordance with VCFC Appendix B.

5.2.2 Hydrant Spacing. Hydrant spacing shall be in accordance with VCFC Appendix C.

5.2.3 Fire Area Calculation. The required fire flow shall be determined by the fire area of the new building. Existing buildings shall not be considered as part of the fire area if they are located at least 20 feet from the new area or separated in accordance with CBC Chapter 5. Areas of buildings separated by 4 hour area separation walls, without openings and provided with a minimum 30 inch parapet, may be considered as separate fire areas. Miscellaneous structures (lunch shelters, covered walkways, ball walls, back stops, non-combustible bleachers, utility towers, etc.) are not included in fire area calculations.

5.2.4 Fire Flow Certification. Certification of required fire flow from the water purveyor shall be provided at the time of application for Fire Department review.

5.2.5 Fire Flow Reduction. Local ordinance allows a maximum reduction of 50% in the required fire flow when the building is provided with an approved automatic fire sprinkler system. The resulting fire flow shall not be less than 1,250 gpm.

5.3 Buildings Located More Than 1,000 feet from a Public Water Main.

5.3.1 Required Fire Flow. If water supply and fire hydrants are provided from a public water supply, the alternatives listed in VCFC Appendix B shall be used.

5.3.2 Exemptions. Water supply and fire hydrants shall not be required for relocatable buildings if they are grouped in clusters not to exceed 9,100 square feet. No relocatable building shall exceed 2,000 square feet. Clusters shall be separated from other clusters or buildings by a minimum of 20 feet.

5.4 Hydrant Flow Certification. Any new fire hydrants provided for a school building shall have a certified flow test conducted after installation with a copy forwarded to the Fire Prevention Bureau.

CHAPTER 6 PLANS SUBMITTAL

6.1 General. Plans and specifications shall be submitted to VCFPD, Fire Prevention Bureau as indicated elsewhere in this document.

6.2 Building Permits. Obtain any applicable permits from the appropriate Building & Safety Department.

6.3 Plans and Specifications Submittal. Plans and specifications shall be submitted for review and approval at the time of building permit application for new structures. In addition to the information required by the applicable standard, the submittal shall include the information specified herein. Once approved, a copy of the approved plan shall be maintained on the premises.

6.4 Submittal Requirements. Submit a minimum of three sets of plans, Fire Prevention Bureau incoming transmittal form and the appropriate fees to the Ventura County Fire Prevention Bureau located at 165 Durley Avenue, Camarillo CA 93010. Fire Prevention Counter hours are Monday through Friday, 8:00 a.m. to 5:00 p.m.

6.5 Fees. Appropriate fees can be found in the Ventura County Fire Protection District's Fee Schedule at http://fire.countyofventura.org or by calling the Fire Prevention Counter at (805)389-9738. Fees can be paid by check/money order, Visa or MasterCard. Plan Check fees include the original plan check and one re-check. Please ensure that all corrections are made prior to re-submittal to avoid additional fees. All fees shall be paid at the time of plan submittal.

6.6 Plans Approval. Plans will be checked and if approved, will be stamped "**Acceptable**", signed and dated. The Fire Department will retain one set.

6.7 Case Number. The Fire Department has instituted the use of a "**Case Number**" for tracking all projects submitted for review. To provide faster customer service, please refer to your Case Number when contacting this Department. Your Case Number will also be listed on the Fire Department approved plans.

6.8 Field Changes. Excessive field changes may require re-submittal of plans along with additional plan check fees.

CHAPTER 7 PLAN SPECIFICATIONS

7.1 Specifications. With short term relocatables, provide a statement from the school district indicating use and length of time.

7.2 Size and Scale. Plans shall be drawn on a minimum of $24^{\circ}x36^{\circ}$ paper and shall be drawn to an indicated scale not less than 1 inch = 10 feet.

7.3 **Plans.** The following items shall be included in all access and water supply plan specifications.

- (1) School name and address
- (2) Location of all buildings (new and existing)
- (3) Certification of fire flow
- (4) Fire access roads (indicate type of surface)
- (5) All drive and walk through gates (include clear open width)

- (6) All fire hydrants within 500 feet of the school site (indicate location, type, number and size of outlets)
- (7) Where access roads cross school grounds, indicate the location of playground equipment, lunch shelters, back stops and other permanent structures
- (8) Area analysis of new building(s) and any existing building(s) within 20 feet
- (9) Assessor's Parcel Number

CHAPTER 8 VERBATIM NOTES

8.1 Verbatim Notes. A copy of the California Division of State Architects Form 810 shall be placed on the cover sheet of the submitted plans. (See Exhibit A)

CHAPTER 9 INSPECTIONS

9.1 General. The inspection fee that is paid at the time of plan submittal will provide you with two inspections to complete the project. For projects that exceed this limit, inspection requests will not be accepted unless additional fees are paid prior to scheduling an inspection.

9.2 Responsibility. It is the responsibility of the installing contractor, or their designated representative, to be on the job site during the inspection with approved plans. Failure to do so will result in the cancellation of the inspection. Cancelled inspections will be counted as one inspection.

9.3 Inspection requests. Inspection requests can only be taken from the installing contractor. Inspections shall be requested Monday through Friday prior to 3:00 p.m., one business day prior to inspection.

9.4 Inspection Schedule. It is the intent of the Ventura County Fire Prevention Bureau to perform inspections one business day after the inspection has been requested. However due to training requirements, meetings, emergency services and other scheduled and non-scheduled events it cannot be guaranteed that all inspections will be conducted the next business day.

9.5 Schedule by phone. Call (805) 389-9744 one business day prior to inspection for scheduling an inspection. The inspection request line is open Monday through Friday between 8:00 a.m. and 3:00 p.m.

9.6 Schedule by fax. Inspections can be scheduled via fax at (805) 388-4356. Ventura County Fire Prevention Bureau Form FP13.1.3, found at <u>http://fire.countyofventura.org</u>, must be used to request inspections. Faxed inspection requests must be received prior to 3:00 p.m.

9.7 Contact Information. Be sure to leave your phone number, when you schedule an inspection by phone or fax, where the inspector can call you back, after 7:30 a.m. the day of the inspection, to notify you of your inspection time.

9.8 Inspection times. Inspection times are approximate and may vary because of delays at previous inspections or emergency response by Fire Department personnel. Please allow time on either side of the inspection time for the inspector to arrive.

EXHIBIT A

DSA-810 - LOCAL FIRE AUTHORITY REVIEW TEMPLATE

For instructions, see DSA-810.INSTR

LOCAL FIRE AUTHORITY REVIEW Local Fire Authority to initial the items as applicable to this project and sign below.		
<u>Yes no n/a</u>	DSA Application #:	
	Elevators Where an Elevator does not meet medical emergency service cab size, per 2010 California Building Code (CBC), the Local Fire Authority approves the use of stairways for emergency rescue and patient transport. Access Roads	
	Access Roads and Gate Entrances are in accordance with Title 19, Calif. Code of Regulations & 2010 California Fire Code (CFC) Chapter 5. (Explain in comments section any "NO" answer)	
	Fire Flow Fire Hydrant location and distribution are in accordance with 2010 CFC or Local Fire Authority means for providing fire flow may vary from 2010 CFC with an approval signature of the School District Superintendent or Facilities Director. (See DSA Policy 09-01) (Explain in comments section any "NO" answer)	
	Hazard Severity Zone Area? (2010 CBC Chapter 7A)	
	Automatic Fire Sprinkler Systems (AFSS) The location(s) of the proposed Post Indicator Valve (PIV) and Fire Dept. Connection (FDC) meet the requirements of this jurisdiction.	
	The location(s) of the Detector Check Valve Assembly (DCVA) meet the	
	requirements of this jurisdiction. The fire pump assembly/backflow preventer and other valves meet the requirements of this jurisdiction.	
LOCAL FIRE AUTHORITY INFORMATION: School Superintendent or Facilities Director Signature when required above.		
AGENCY NAME (Print):		
-	,	
CITY/STATE/ZIP (Print) :		
	nt): DATE:	
	(Print näme and Sign)	
SCHOOL REPRESENT	ATIVE SIGNATURE(Print name and Sign)	
COMMENTS (Print):		
Initials and a signature above signify that the Local Fire Authority has reviewed the listed items and was consulted regarding their placement and design. The current configuration shown on this site plan, as of this date, meets with their current standards. Local Stamps w/signature indicates all items above have been reviewed.		

DSA-810 (rev 03-14-11)

Local Fire Authority Review Template

DGS CALIFORNIA DEPARTMENT OF GENERAL SERVICES

Note: Information called for on the DSA-810 template must appear on the site plan in some form. The DSA-810 template is not a mandatory form, but is provided for the convenience of the design professional and the local fire authority in reviewing and approving site plans. Use of the DSA-810 template is highly encouraged.

Procedure for completing the Local Fire Authority (LFA) Review Template:

- 1 Enter the DSA Application number in the space provided.
- 2 Place initials in the appropriate boxes using the following as a guideline:

Elevators:

- **Yes** indicates that the LFA approves the use of indicated stairways for use in medical rescue operations.
- **NO** indicates that the stair configuration is unacceptable to the LFA's medical rescue operations and elevator cab sizes must meet the requirements of CBC Chapter 30.
- N/A indicates that no new elevators are being submitted with this construction project.

Access Roads:

- YES indicates that Access Roads and Gates are acceptable.
- **NO** indicates that the conditions depicted do not meet requirements of the LFA. (Explain in comments what is not satisfactory or needed for compliance, or alternate means or methods approved.)
- **N/A** indicates that the items are not applicable to this project.

Fire Flow:

- **YES** indicates on-site water distribution system meets minimum requirements found in 2010 CFC or meets variation as described in DSA Policy 09-01.
- **NO** indicates on-site water distribution system does not meet minimum requirements found in 2010 CFC or meets variation as described in DSA Policy 09-01. (Explain in comments what is not satisfactory or needed for compliance.)

Hazard Severity Zone Area?:

- YES indicates that the site is in a **Hazard Severity Zone** area (Subject to the requirements of CBC Chapter 7A.) Indicate in comments area whether Moderate, High or Very High.
- NO indicates that the site is not in a Hazard Severity Zone area.
- N/A indicates that Hazard Severity Zone is not applicable to this project.
- <u>AFSS:</u>
 - YES in each corresponding block indicates that the LFA approves the equipment and/or location.
 - NO in each corresponding block indicates that the LFA desires a different or modified location or equipment. The AOR shall consult with the LFA to determine the appropriate requirements.
 - **N/A** in each corresponding block indicates that these items are not applicable to this project.
- **3** Fill out "Local Fire Authority Information" section as completely as possible. Sign and date.
- 4 If comments require more space than provided, add additional sheets.
- **5** Architect or Engineer noted on plans will obtain signature from the local School Superintendent or Facilities Director when required.

DSA-810.INSTR	Local Fire Authority
(rev.03-14-11)	Review Template Instructions