

Design Standard

Video Management System

Purpose

ESUHSD's Video Management System (VMS) design standard is intended to achieve uniformity of functionality, operation, maintenance, training, parts availability, and warranty operations for its security camera systems. The overall design and function of the VMS shall be consistent throughout the District to provide easy and intuitive operating systems while realizing cost effective operational solutions.

This design standard also describes the descriptor protocol that shall be used by system programmers to designate cameras. This design standard is intended to establish and maintain a consistency in security camera systems from campus to campus and from building to building, thereby maximizing quick emergency response activities, minimizing staff and emergency response personnel training, and facilitating excellence in the quality of the educational and work facilities of East Side Union High School District.

Design Standard

1. Video Management System

- a. East Side Union High School District has standardized on a single IP based, enterprise level VMS: OnSSI. No other systems shall be considered equal, in order to make all systems compatible, which improves functionality while reducing maintenance and operating costs.
- b. In 2014, the District conducted an evaluation of VMS providers that could potentially meet the requirements for an IP based, enterprise level system, and selected OnSSI as the "basis of design" based on OnSSI scoring the highest against the District's evaluation criteria (refer to Appendix A).

2. Camera Descriptors

- a. Standardization of camera descriptors facilitates operator training and allows consistent, and therefore efficient, identification of camera locations by operating personnel. Most importantly, it facilitates faster response time in the event of emergencies. The security camera system design professional shall ensure that these descriptor requirements are incorporated into construction drawings and/or specifications, so that installing programmers have precise direction on how to label each camera in the software.
- b. East Side's standard camera descriptors are comprised of a string of 8 fields of information. Fields 1 through 4 help the end user / operator to understand "where" the camera image is. Fields 5 through 8 help the system technicians to understand the camera's technical components. Refer to the following table for detailed information and instructions.

Camera Descriptor Field	Descriptor Field Usage	Descriptor Field Description	Abbreviation
1	Site Name Abbreviation	<p>This field identifies the site.</p> <ul style="list-style-type: none"> • Andrew P. Hill • Calero • Education Center • Evergreen Valley • Foothill • Independence Adult Center • Independence • James Lick • Mt. Pleasant • Piedmont Hills • Oak Grove • Overfelt Adult Center • Santa Teresa • Silver Creek • W.C. Overfelt • Yerba Buena 	<ul style="list-style-type: none"> • AH • CAL • EC • EV • FH • IAC • IH • MP • JL • PH • OAC • OG • ST • SC • WCO • YB
2	Facility Name Abbreviation	<p>This field identifies the facility in the camera's field of view at the site.</p> <ul style="list-style-type: none"> • The Facilities Department maintains an inventory of the facilities at each site, along with the sanctioned designations of those facilities. Department representatives can provide to designers the sanctioned designation(s) of the facility(ies) affected by the project; the facility inventory listing is too exhaustive to include in this design standard. • For buildings, use "Bld" for Building abbreviation, followed by a space, followed by the building designator. • Non-building facilities will not be abbreviated. 	<p>e.g., Bld 100 e.g., Bld C e.g., Bld P2</p> <p>e.g., Stadium e.g., Tennis Court</p>
3	Sub-Location Abbreviation	<p>This non-mandatory field is used to further describe the camera's field of view. It may be used to facilitate understanding of the area the camera is viewing.</p> <p>Cardinal directions:</p> <p>Room/Space descriptors:</p>	<p>e.g., North e.g., South e.g., East e.g., West e.g., NorthEast e.g., NorthWest e.g., SouthEast e.g., SouthWest</p> <p>e.g., Lobby e.g., Rm 107</p>
4	Interior or Exterior Location	<p>This field is used to identify whether the camera is within a building, or an exterior camera.</p>	<ul style="list-style-type: none"> • INT • EXT
5	SC.XXX.XXX	<p>The "SC" clarifies that it is a security camera. The first set of information after SC is used to specify the MDF/IDF location to which the camera is connected. The second set of information is the camera cable number. Separate the three sets of information with a period (".").</p>	<p>e.g., SC.Q6.1 SC.D3.3 SC.210B.7</p>

6	Camera Type Abbreviation	This field is used to describe the type of camera. <ul style="list-style-type: none"> • Pan Tilt Zoom • Fixed 45° • Fixed 90° • Fixed 135° • Fixed 180° • Fixed 270° • Fixed 360° 	<ul style="list-style-type: none"> • PTZ • 45 • 90 • 135 • 180 • 270 • 360
7	Camera Manufacturer Abbreviation	Mobotix Panasonic Sony	<ul style="list-style-type: none"> • Mob • Pan • Son
8	Camera Model	This field is used to identify the camera model.	e.g., SW458 e.g., SW598 e.g., SFV631L e.g., SFV481 e.g., Q25

c. Examples:

1. AH Bld 100 Lobby North INT SC.103.1 PTZ Pan SW598
2. AH Bld 100 Lobby South INT SC.103.2 PTZ Mob Q25
3. MP Bld Gym Pool EXT SC.Gym/CustRm 90 Pan SFV631L
4. PH Solar PV Parking Lot EXT SC.C2.64 360 Pan SFV481
5. ST Bld 200 West EXT SC.210B.1 360 Pan SFV481

Approved Manufacturer:

- OnSSI

Substitutes Allowed?

- Camera Descriptor Protocol: No substitute to this descriptor protocol is allowed.
- VMS: No substitute to OnSSI VMS is allowed. Pursuant to Section 3400 of the Public Contract Code: the selected video management system is now in use on the particular public improvement described as East Side Union High School District. At each instance in these specifications that a designated material, product, thing or service is designated by the brand name “OnSSI”, “OnSSI” is designated to match the existing systems that are in place at each campus and the District Administration Building. The Contractor will furnish and install OnSSI video management system as required, and no substitutions shall be deemed to be “or equal” or allowed.

Associated Design Standards and Construction Specifications

- Division 27 Communications Design Standards
- Division 28 Electronic Safety and Security Design Standards

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