San Bernardino County Superintendent of Schools

760 East Brier Drive San
Bernardino, CA 92408

BID NO. 25.26.1100
SURVEILLANCE SYSTEM INSTALLATION

MANDATORY JOB WALK:

TUESDAY, MAY 5, 2026, AT 8:00 A.M

BID DEADLINE:

WEDNESDAY, MAY 20, 2026, AT 2:00 P.M.

PLEASE SUBMIT SEALED BIDS TO:
San Bernardino County Superintendent of Schools
ATTN: Front Desk Receptionist
760 E. Brier Drive
San Bernardino, CA 92408

No faxed or emailed submissions will be accepted.

NOTICE INVITING BIDS

BID NO. 25.26.1100
SURVEILLANCE SYSTEM INSTALLATION

BID DEADLINE: Wednesday, May 20, 2026, at 2:00 p.m.

SUBMIT BIDS TO: San Bernardino County Superintendent of Schools
Attn: Front Desk Receptionist
760 East Brier Drive
San Bernardino, CA 92408

Interested parties may request the Virtual Bid Opening link by emailing Bids@sbcss.net
The virtual bid opening will take place promptly at 2:15 p.m. on Wednesday, May 20, 2026.

The San Bernardino County Superintendent of Schools (**SUPERINTENDENT**) is seeking a qualified vendor (VENDOR) to provide professional installation and provisioning services for an owner-furnished cloud-based video surveillance system at eight (8) sites within San Bernardino County. The SUPERINTENDENT has procured Verkada cameras, accessories, and software licenses. The selected VENDOR shall furnish all labor, structured cabling, conduit, pathways, and incidental materials necessary for a complete and operational installation in accordance with project requirements. Trenching between buildings to add required network pathways may be required at select locations to be determined.

The successful bidder shall commence work on or about June 8, 2026. All work for each site shall be completed by September 30, 2026. The SUPERINTENDENT will meet with the successful Bidder to provide milestones for prioritized work to be completed, which will be agreed to in the project schedule.

A mandatory pre-bid job walk will be held on Tuesday, May 5, 2026, at 8:00 a.m. The job walk will begin at the Mountain View Administration Building, located at 144 North Mt. View Ave., San Bernardino, CA 92408, and will conclude at the Norma Covert County Education Center, located at 14079 Meadow Grove Dr., Victorville, CA 92392. Bidders must attend all seven (7) scheduled site locations in their entirety and sign in at each site to be eligible to submit a bid. Late arrivals will not be admitted. Any bidder who fails to attend and sign in at all required locations will be deemed non-responsive. The project consists of a total of eight (8) sites for camera installation. The job walk will include seven (7) sites. Two (2) of the project sites are identical in layout and scope; therefore, only one of these sites will be visited during the job walk. Contractor shall assume that both sites require identical equipment, installation, and configuration, unless otherwise noted in the bid documents.

All bids must be directed to Front Desk Receptionist, 760 East Brier Drive, San Bernardino, CA 92408. Bids shall be clearly marked on the outside of the sealed envelope with the vendor's name and the BID information as follows: **"BID ENCLOSED: BID NO. 25.26.1100 – SURVEILLANCE SYSTEM INSTALLATION"**. It is the sole responsibility of the contractor to deliver their bid to the Brier Receptionist where it will be dated, and time-stamped. Bids shall remain open, valid, and subject to acceptance anytime within ninety (90) days after the BID opening date and time.

Each proposer shall be a licensed contractor at the time the BID pursuant to the Business and Professions Code and such license(s) shall remain in active and good standing for the duration of the contract. The proposer shall be licensed in one or more of the following:

LICENSE CLASSIFICATION:
C-7 - Low Voltage Systems Contractor

Each bid must be accompanied by a Security Bond in the amount of Ten percent (10%) of the total bid amount. In accordance with the provision of Public Contract Code Section 20111, substitution of eligible and equivalent securities under this contract will be permitted at the request and expense of the proposer. The awarded vendor will be required to furnish Performance and Payment Bonds for 100% of the Total Project Cost.

Pursuant to Labor Code Section 1725.5, a contractor and all subcontractors must be registered with the Department of Industrial Relations in order to quote, bid on, be listed in a bid, or engage in the performance of any defined Public Works contract. The project is subject to all requirements pursuant to Labor Code sections 1720 through 1815. Accordingly, payment of prevailing wages is mandatory. Proof of a valid Contractor/Specialty license, DIR Registration, worker's compensation, and liability insurance is required before any work begins. No contractor or subcontractor may be listed on a bid or awarded a contract for public work unless currently registered with the DIR pursuant to Labor Code section 1725.5. This project is subject to compliance monitoring and enforcement by the DIR.
To request a copy of the BID document, please visit https://www.sbcss.net/business/business-support-services/procurement-and-warehouse-services/bids-upcoming

All questions regarding this bid shall be submitted in writing via email to: Maria Aldaco, Procurement Specialist at Bids@sbcss.net. All questions must be submitted no later than 2:00 pm on May 7, 2026.

UNSEALED, FAXED, OR EMAILED SUBMISSIONS WILL NOT BE ACCEPTED.

Sincerely,
Maria Aldaco
Maria Aldaco, Procurement Specialist
Procurement Services

CALENDAR OF EVENTS

BID NO. 25.26.1100
SURVEILLANCE SYSTEM INSTALLATION

Event	Details	Date	Time (PST)
1st Publication	The Sun Newspaper & SBCSS Procurement page Bids - Upcoming - San Bernardino County Superintendent of Schools	April 23, 2026	
2nd Publication	The Sun Newspaper & SBCSS Procurement page Bids - Upcoming - San Bernardino County Superintendent of Schools	April 30, 2026	
MANDATORYJOB WALK	**A mandatory site walk will be conducted at Seven (7) of the eight (8) locations. Please review the JOB WALK SCHEDULE (next page) for site addresses.**	**Tuesday, May 5, 2026**	**8:00 am**
Last day to submit RFI/ Questions for Clarification or Explanations	E-mail to: Bids@sbcss.net	May 7, 2026	**2:00 pm**
Response to RFI/Questions for Clarification	Addenda posted to SBCSS Procurement page Bids - Upcoming - San Bernardino County Superintendent of Schools	May 12, 2026	
BID DEADLINE	San Bernardino County Superintendent of Schools Attn: Front Desk Receptionist 760 East Brier Drive San Bernardino, CA 92408	**Wednesday, May 20, 2026**	**NO LATER THAN 2:00 pm**
Project Start Date		June 8, 2026	
Project End Date		September 30, 2026	

JOB WALK SCHEDULE

BID NO. 25.26.1100
SURVEILLANCE SYSTEM INSTALLATION

PLEASE BE ADVISED THAT A JOB WALK FOR THIS PROJECT IS MANDATORY.
All prospective bidders must attend ALL sites listed below at the date and time listed.
Vendors are required to sign in on the sign-in sheet provided by the superintendent and must be present for the entire walk at each of the specified locations.

SITE	ADDRESS	DATE & TIME
Mountain View Administration	144 North Mt. View Ave. San Bernardino, CA 92408	**Tuesday, May 5, 2026,** **8:00 a.m.**
Live Oak Early Education Center	2547 E. Riverside Drive Ontario, CA 91761	***Immediately following*** Mountain View Administration
Mulberry Early Education Center	8435 Archibald Ave Rancho Cucamonga, CA 9173	***Immediately following*** Live Oak Early Education Center
Lucy Siegrist Preschool	8435 Archibald Ave Rancho Cucamonga, CA 9173	***Immediately following*** Mulberry Early Education Center
AVC Education Center (VALA)	12555 Navajo Road Apple Valley, CA 92308	***Immediately following*** Lucy Siegrist Preschool
AVC Early Education Center	18415 Nakash Road Apple Valley, CA 92307	***Immediately following*** AVC Education Center (VALA)
Norma Covert County Education Center	14079 Meadow Grove Dr. Victorville, CA 92392	***Immediately following*** AVC Early Education Center

Please Note: The project includes a total of eight (8) sites for camera installation. The scheduled job walk will include seven (7) sites. The Frost EEC and Mulberry EEC sites are identical in layout and scope; therefore, only one of these sites will be visited during the job walk. Contractors shall assume both sites require identical equipment, installation, and configuration unless otherwise noted.

1.0 SCOPE OF WORK

1.1. OVERVIEW

The San Bernardino County Superintendent of Schools (**SUPERINTENDENT**) has purchased Verkada cameras, accessories, and requisite five-year Command licenses to deploy a comprehensive cloud-based video surveillance system across eight (8) district sites. This bid solicits qualified security systems integrators to provide professional installation and provisioning services for the Verkada video surveillance equipment at the specified locations. See Section 1.2 for Alternate 1.

The scope of this bid is limited to installation and provisioning services only. Owner-furnished materials include all Verkada cameras, mounting accessories, software licenses, and related Verkada equipment as specified in the site-specific materials lists herein. Contractor-furnished materials shall be limited to structured cabling (Category 6A, plenum-rated), conduit, pathways, consumables, and other materials as necessary to professionally and securely install the cameras per plans, specifications, and manufacturer requirements. **For a detailed scope of work, please refer to the Technical Volume section attached to this bid.**

SERVICE SITES:

1. AVC Early Education Center - 18415 Nakash Road, Apple Valley, CA 92307
2. AVC Education Center (VALA) - 12555 Navajo Road, Apple Valley, CA 92308
3. Frost County Early Education Center - 12860 Banyan Street, Etiwanda, CA 91739
4. Live Oak Early Education Center - 2547 E. Riverside Drive, Ontario, CA 91761
5. Mulberry Early Education Center - 8435 Archibald Ave, Rancho Cucamonga, CA 91730
6. Lucy Siegrist Preschool - 8435 Archibald Ave, Rancho Cucamonga, CA 9173
7. Norma Covert County Education Center - 14079 Meadow Grove Dr., Victorville, CA 92392
8. Mountain View Administration - 144 North Mt. View Ave., San Bernardino, CA 92408

All installation work shall comply with Division 28 00 00 specifications included herein, all applicable codes and standards, and Verkada manufacturer installation requirements. The Contractor shall hold current Verkada Certified Engineer (VCE) certification and maintain all required state and local licenses for the performance of this work.

1.2. ALTERNATE 1 OVERVIEW

Provide all labor, equipment, and materials required to trench between buildings and install required underground conduit pathways at select sites, as directed by the **SUPERINTENDENT**.

1.3. SCOPE OF WORK (ALTERNATE):

Upon written authorization by the **SUPERINTENDENT**, the **VENDOR** shall:

- Perform trenching between designated buildings to accommodate network conduit required for the video surveillance system.
- Furnish and install underground conduit, and related fittings in accordance with applicable codes and manufacturer requirements.
- Restore all disturbed areas, including concrete, asphalt, landscaping, turf, and soil, to equal or better condition than existed prior to excavation.
- Provide all necessary traffic control, fencing, and site safety measures.
- Comply with all local, state, and county regulations related to excavation and restoration.

The successful bidder shall commence work on June 8, 2026. All work for each site shall be fully completed no later than September 30, 2026. Acceptance of Alternate No. 1 shall not extend the project completion date unless expressly authorized in writing by the **SUPERINTENDENT**.

2.0 INSTRUCTIONS TO VENDORS

2.1 General Information

All responses shall conform to the instructions provided in the bid.

2.1.1 Sealed bids must be directed to the Front Desk Receptionist and be clearly marked on the outside of the envelope in the lower left-hand corner **"BID ENCLOSED: BID NO. 25.26.1149 - ROOFING SYSTEM REPLACEMENT"**

2.1.2 Delivery Address

San Bernardino County Superintendent of Schools
ATTN: Front Desk Receptionist
760 East Brier Drive
San Bernardino, CA 92408

2.1.3 BID Submission

It is the sole responsibility of the **CONTRACTOR** to ensure that their bid is received by the Front Desk Receptionist prior to **2:00 P.M**. on **Thursday, May 20, 2026**. Responses received after the deadline will be returned unopened due to the response not meeting the BID requirements. All bids shall be complete and final, and no additional information will be accepted after the close of the submittal date unless specifically requested by **SUPERINTENDENT**.

2.1.4 No faxed or emailed submissions will be accepted.

All bids must be under sealed cover. **SUPERINTENDENT** will not accept any unsealed bids or bid modifications submitted by fax or email transmission.

2.1.5 BID Preparation Cost

Costs for preparing responses and any other related material are the responsibility of the **CONTRACTOR** and shall not be chargeable in any manner to the **SUPERINTENDENT**.

2.1.6 Acceptance or Rejection of Responses

Responses shall remain valid and subject to acceptance anytime within ninety (90) days after the submission deadline unless the parties mutually agree to a longer period of time. The **SUPERINTENDENT** reserves the right to reject any or all responses or may waive any informality in a response.

2.2 Background Review

SUPERINTENDENT reserves the right to conduct a background inquiry into a selected **CONTRACTOR**, which may include a collection of contractual and business associations and practices, employment histories, and reputation in the business community. By submitting a bid, **CONTRACTOR** consents to such an inquiry and agrees to make available such books and records deemed necessary to conduct the inquiry.

2.3 Questions (RFIs)

Questions should be in writing and emailed to Maria Aldaco, Procurement Specialist at Bids@sbcss.net. **Questions may be submitted until 2:00 p.m. May 7, 2026.**

2.4 BID Submission Requirements

2.4.1 Required Documentation:

Bid Form / Signature Page
Bid Bond
Non-Collusion Certification
Workers Compensation Certification
Division of Industrial Relations (DIR) Registration Certification of Contractor and Subcontractor
Certification Regarding Debarment, Suspension, Ineligibility, and Voluntary Exclusion
Drug-Free Workplace Certificate
Alcohol and Tobacco-Free School Policy
Designation of Subcontractors
DVBE Participation Statement

All bid signatures must be original wet handwritten signatures executed in blue ink on the original document.
Digital signatures, electronic signatures, photocopies, scanned copies, stamped signatures, or reproduced signatures of any kind will not be accepted. Failure to comply with this requirement may result in the bid being deemed non-responsive.

3.0 QUALIFICATION OF BIDDERS

CONTRACTOR must possess a valid business license and any other required license or certificates. **CONTRACTOR** shall possess at the time of bid a current contractor's license, pursuant to Public Contract Code Section 3300 and Business and Professions Code Section 7028-15, for the applicable work proposed to be furnished. The successful **CONTRACTOR** must maintain the license throughout the duration of this contract. **CONTRACTOR'S** responding to this bid must possess a California **C-7 - Low Voltage Systems Contractor**

CONTRACTOR must provide a list of contact names and phone numbers of professional references for at least three (3) different completed projects on the BID FORM /SIGNATURE PAGE.

4.0 BID SECURITY (BOND)

Each bid shall be accompanied by cash or cashier's check payable to the San Bernardino County Superintendent of Schools or a satisfactory bid bond in favor of the San Bernardino County Superintendent of Schools executed by the bidder as principal and a satisfactory surety company as surety, in the amount of **ten percent (10%) of the maximum amount of the bid**.

Such cash, cashier's check or bond shall be given as a guarantee that the bidder will enter into a contract if given the award and in the case of refusal or failure to enter into a contract within seven (7) days after being requested to do so by the **SUPERINTENDENT**, the cash, check or bond, as the case may be, shall be forfeited to the **SUPERINTENDENT**. If the bid is not accepted within ninety (90) days after the time set for the opening of bids, or if the successful bidder executed and delivers said contract within the specified time, the cash, cashier's checks, or bonds will be returned.

5.0 WORKERS

CONTRACTOR shall at all times enforce strict discipline and good order among his employees and shall not employ or work any unfit person or anyone not skilled in work assigned to him. If **SUPERINTENDENT** considers the workmanship of an employee to be of poor quality, **SUPERINTENDENT** reserves the right to request replacement of **CONTRACTOR'S** employee within five (5) business day's notice of the initial request.

CONTRACTOR must use an adequate number of skilled workmen thoroughly trained and experienced in necessary crafts who are completely familiar with specified requirements and methods needed for proper performance of work.

6.0 INTERPRETATION OF DOCUMENTS

Any interpretation or correction of the contract documents will be made only by addendum duly issued and a copy of such addendum will be delivered to each person receiving a set of the contract documents. No person is authorized to make any oral interpretation of any provision in the contract documents to any bidder and no bidder is authorized to rely on any such unauthorized oral interpretation.

Changes in, or additions to, the bid form, recapitulations of work bid upon, alternative proposals or any other modification of the bid form which is not specifically called for in the bid documents may result in the **SUPERINTENDENT'S** rejection of the bid as not being responsive. No oral or telephonic modification of any bid submitted will be considered.

7.0 AWARD OF CONTRACT

SUPERINTENDENT reserves the right to reject any or all responses and to waive any irregularities or informalities in any response or in the bid process. The award, if made by the SUPERINTENDENT, shall be made to the CONTRACTOR determined to be the lowest responsive and responsible bidder, based on the combined price of the base bid and Alternate No. 1, inclusive of all taxes, fees, bond premiums, and allowances.

8.0 PERFORMANCE AND PAYMENT BONDS

Performance Bond and Materials Bond will be required from the awarded contractor for 100% of the awarded site(s) for the duration of the award. In accordance with the provisions of Public Contract Code Section, the substitution of eligible and equivalent securities for any monies withheld to ensure performance under this contract will be permitted at the request and expense of any contractor.

9.0 CONTRACTOR INTERESTED IN MORE THAN ONE BID

No person, firm or corporation shall be allowed to make, file, or be interested in more than one bid for the same project unless alternate bids are specifically called for. A person, firm, or corporation that submits a sub proposal to a bidder or that has quoted prices for materials to a bidder is not thereby disqualified from submitting a sub proposal or quoting prices to other bidders.

10.0 LENGTH OF CONTRACT

The awarded bidder shall commence work on June 8, 2026, and all work shall be completed by September 30, 2026.

11.0 PRICES

Prices shall remain firm for the entire term of the contract.

12.0 TAXES

If under federal excise tax law, any transaction hereunder constitutes a sale on which a federal excise tax is imposed and the sale is exempt from such excise tax because it is a sale to a state or local government for its exclusive use, the **SUPERINTENDENT** upon request will execute a certificate of exemption which will certify that the **SUPERINTENDENT** is a political subdivision of the State for the purposes of such exemption and that the sale is for the exclusive use of the **SUPERINTENDENT**. No excise tax for such materials shall be included in any bid price.

13.0 INVOICES AND PAYMENTS

Invoices shall be submitted under the same firm name as shown on the purchase order. Invoice format shall be approved by the **SUPERINTENDENT'S** authorized representative. Each invoice shall reflect "One Job" that includes materials, supplies, and services. Each invoice shall clearly indicate the location/site name where work was accomplished. The **SUPERINTENDENT** shall make payment for materials, supplies or services furnished under the purchase order within a reasonable and proper time after acceptance thereof and approval of the invoices by the authorized representative.

13.1 Payments Withheld

SUPERINTENDENT may withhold a sufficient amount of any payment otherwise due to **CONTRACTOR** as in its judgment may be necessary to cover:

a. Payments which may be past due and payable for just claims against **CONTRACTOR** or any subcontractor for labor and/or materials furnished in and about the performance of work on the project under this contract.
b. Defective work not remedied.
c. Failure of **CONTRACTOR** to make proper payments to subcontractor or for material or labor.
d. Completion of contract if there exists a reasonable doubt that contract can be completed for balance then unpaid.
e. Damage to another contractor.

When the above grounds are removed, payment shall be made for amounts withheld because of them.

SUPERINTENDENT may apply such withheld amount to payment of such claims or obligations at his discretion. In so doing, **SUPERINTENDENT** shall be deemed as agent of **CONTRACTOR** and any payment so made by **SUPERINTENDENT** shall be considered as a payment made under contract by **SUPERINTENDENT** to **CONTRACTOR** and **SUPERINTENDENT** shall not be liable to **CONTRACTOR** for such payments made in good faith. Such payments may be made without prior judicial determination of claim or obligations. **SUPERINTENDENT** will render **CONTRACTOR** a proper accounting of such funds disbursed on behalf of **CONTRACTOR**.

14.0 SAFETY REQUIREMENTS

The areas in which the services are to be performed may be operational at the time service is provided. Therefore, precaution shall be exercised at all times for the protection of persons, including employees, students and property. The safety provisions of applicable laws shall be observed. The **CONTRACTOR** shall maintain sufficient safeguards against the occurrence of accidents, injuries, damage or hurt to any person or property and **CONTRACTOR** shall be responsible for the same if such occurs. No children accompanying the **CONTRACTOR** will be permitted on any **SUPERINTENDENT** site.

All services proposed in response to this bid must conform to the Safety Order of the State of California, Division of Industrial Safety and CAL-OSHA regulations in effect at the time of bid. Bidders receiving awards of items subject to Chapter 4 (Industrial Safety Orders) California Administrative Code, Title 8, Division of Industrial Relations, must submit to the **SUPERINTENDENT'S** Purchasing/Contracts office, Material Safety Data Sheets (MSDS) for those items, when requested.

15.0 PATENTS AND ROYALTIES

The **CONTRACTOR**, without exception, shall indemnify and hold harmless the **SUPERINTENDENT** and its employees from any liability of any nature or kind, including cost and expenses for or on account of any trademarked, copyrighted, patented, or non-patented inventions, process, or article manufactured or used in the performance

of the contract, including its use by the **SUPERINTENDENT**. If the **CONTRACTOR** or subcontractor uses any design, device, or materials covered by letters, patent, trademark, or copyright, it is mutually understood and agreed without exception that the proposal prices shall include any royalties or cost arising from the use of such.

16.0 LAWS AND REGULATIONS

CONTRACTOR shall give all notices and comply with all laws, ordinances, rules and regulations bearing on conduct of work as indicated and specified. If **CONTRACTOR** performs any work knowing it to be contrary to such laws, ordinances, rules and regulations, he shall bear all costs arising there from.

17.0 SUBCONTRACTORS

Each bidder shall submit a list of proposed subcontractors, if applicable, as required by the Subletting and Subcontracting Fair Practices Act (Public Contract Code Section 4100 and following). Forms for this purpose are furnished with the bid documents.

CONTRACTOR agrees to bind every subcontractor by terms of the contract as far as such terms are applicable to subcontractor's work. If **CONTRACTOR** shall subcontract any part of this contract, **CONTRACTOR** shall be as fully responsible to **SUPERINTENDENT** for acts and omissions of his subcontractor and of persons either directly or indirectly employed by subcontractor as he is for acts and omissions of person directly employed by him. Nothing contained in contract documents shall create any contractual relation between any subcontractor and **SUPERINTENDENT**.

SUPERINTENDENT'S consent to or approval of any subcontractor under this contract shall not in any way relieve **CONTRACTOR** of his obligations under this contract and not such consent or approval shall be deemed to waive any provisions of this contract.

Substitution or addition of subcontractors shall be permitted only as authorized by California Public Contract Code Section 4100 through Section 4114.

18.0 HOLD HARMLESS

The **CONTRACTOR** shall hold harmless and indemnify the **SUPERINTENDENT**, its officers and employees from every claim or demand that may be made by reason of:

18.1 Any injury to person or property sustained by the **CONTRACTOR** or by any person, firm or corporation employed directly or indirectly by him upon or in connection with his performance under the purchase order however caused.

18.2 Any injury to person or property sustained by any person, firm or corporation caused by any act, neglect, default or omission of the **CONTRACTOR** or of any person, firm or corporation, directly or indirectly employed by him upon or in connection with his performance under the purchase order.

18.3 Any liability that may arise from the furnishing or use of any copyrighted composition, secret process or patented or unpatented invention under the purchase order.

19.0 INDEPENDENT CONTRACTOR

In all matters relating to this Agreement, **CONTRACTOR** shall be acting as an Independent Contractor. The employees of the **CONTRACTOR** and its subcontractors are not employees of the **SUPERINTENDENT** under the meaning or application of any Federal or State unemployment insurance laws, other social security law or any workers' compensation law, industrial law, or otherwise. **CONTRACTOR** shall assume and pay all liabilities and perform all obligations implied by any such laws with respect to the performance of services awarded under this bid. **CONTRACTOR** shall not have any right, power, or authority to create any obligation, express or implied, on behalf of the **SUPERINTENDENT** and shall not have any authority to represent itself as an agent of the **SUPERINTENDENT**.

20.0 DEFAULT BY CONTRACTOR

20.1 If the successful bidder fails or neglects to furnish, deliver, provide or install any of the equipment, materials, supplies or services at the prices quoted, or at the times and places agreed upon, or otherwise fails to comply with the terms, conditions and specifications of this bid document in its entirety, the **SUPERINTENDENT** reserves the right to cancel existing orders of any items affected by such default; and procure the equipment, materials, supplies or services from other sources and deduct from any unpaid balance due to the successful bidder or collect against his sureties, if any, excess costs so paid. The price paid shall be considered the prevailing market price at the time such purchase is made.

20.2 If the workmanship, in the opinion of the **SUPERINTENDENT**, is poor and **CONTRACTOR** has failed to correct the situation within a reasonable time after written notification of said poor workmanship, the **SUPERINTENDENT** may terminate the agreement with a two (2) day written notice.

21.0 DAMAGES

Should any litigation be commenced between the parties to a contract concerning this bid, or the rights and duties of either in relation thereto, the party prevailing in such litigation shall be entitled, in addition to such other relief as may be granted, a reasonable sum for its attorneys' fees which shall be determined by the Court or in separate action brought for that purpose.

22.0 INSURANCE REQUIREMENTS

CONTRACTOR shall take out and maintain during the life of the contract such insurance as shall protect him and **SUPERINTENDENT** and Southern California Schools Risk Management from all claims for property damage arising from operations under the contract. **CONTRACTOR** shall require his subcontractors, if any, to take out and maintain similar insurance.

CONTRACTOR shall not commence work nor shall he allow any subcontractor to commence work under this contract until he has obtained all required insurance and certificates have been delivered to and approved by the **SUPERINTENDENT**.

a. Certificates and insurance policies shall include the following clause: "This policy shall not be canceled or reduced in required limits of liability or amounts of insurance until notice has been mailed to **SUPERINTENDENT** stating date of cancellation or reduction and may not be less than ten (10) days after date of receipt of notice."
b. Certificates of insurance shall state in particular those insured, the extent of insurance, the location and operation to which insurance applies, the expiration date, and the cancellation and reduction notice.
c. Certificates of insurance shall clearly state that the **SUPERINTENDENT** and Southern California Schools Risk Management are named as additional insureds under the policy described and that such insurance policy shall be primary to any insurance or self-insurance maintained by the **SUPERINTENDENT**.
d. Insurance shall be written for not less than the following limits, or greater if required by law:

1. Workers' Compensation

a. State	Statutory
b. Applicable Federal	Statutory

CONTRACTOR's Workers' Compensation insurance shall include a waiver of subrogation.

2. Comprehensive general liability, including premises operations, independent contractors' protection, products and completed operations, broad form property damage:

a. Bodily Injury	$1,000,000 each occurrence
b. Property Damage	$1,000,000 each occurrence
	$1,000,000 aggregate

3. Employer's Liability per accident for bodily injury or disease $1,000,000 per accident

4. Comprehensive Automobile Liability (owned, non-owned, hired)

a. Bodily Injury	$1,000,000 each occurrence
b. Property Damage	$1,000,000 each occurrence

23.0 CERTIFICATES OF INSURANCE

Within five (5) days after notice of intent to award and prior to award, **CONTRACTOR** must furnish the **SUPERINTENDENT**, at no cost or obligation to the **SUPERINTENDENT**, certificates of insurance from all companies as evidence of the amounts and types of insurance required as per Section 22.0.

24.0 GUARANTEE OF MATERIALS AND WORKMANSHIP

Contractor shall guarantee all such work that may prove to be defective in workmanship or material together with any other adjacent work which may be displaced in connection with such replacement within a period of one (1) year from the date of acceptance of the above-mentioned project by the **SUPERINTENDENT**; ordinary wear and tear, unusual abuse or neglect are exempt.
In the event of the contractor's failure to comply with the above-mentioned conditions within one week after having been notified in writing by the **SUPERINTENDENT**, the contractor authorizes the **SUPERINTENDENT** to proceed to have said repairs made good at the contractor's expense.

25.0 WAGE RATES

Pursuant to the provisions of Article 2 (commencing at Section 1770), Chapter 1, Part 7, Division 2 of the California Labor Code, the **SUPERINTENDENT** has ascertained the general prevailing rate of per diem wages in the locality in which this public work is to be performed for each craft, classification or type of workmen needed to execute the contract. These prevailing rates so determined are available online at www.dir.ca.gov/dlsr/pwd/

Holiday and overtime work when permitted by law shall be paid for at a rate of at least one and one-half (1 ½) times the above-specified rate of per diem wages, unless otherwise specified.

There shall be paid each worker of the **CONTRACTOR** or any of his subcontractors engaged in work on the project not less than the general prevailing wage rate regardless of any contractual relationship which may be alleged to exist between the **CONTRACTOR** or any subcontractors and such worker.

The **CONTRACTOR** shall as a penalty to the **SUPERINTENDENT**, forfeit fifty dollars ($50.00) for each calendar day or portion thereof for each worker paid less than the stipulated prevailing rates for such work or craft in which such worker is employed for any public work done under the contract by him or any subcontractor under him. The amount of this forfeiture shall be determined by the Labor Commissioner and shall be based on consideration of **CONTRACTOR'S**, mistake, inadvertence or neglect in failing to pay the correct rate of prevailing wages. A mistake, inadvertence or neglect in failing to pay the correct rate of prevailing wages is not excusable if **CONTRACTOR** had knowledge of his obligations under Part 7 of Division 2 of the Labor Code. The difference between such stipulated prevailing wage rate shall be paid to each workman by the **CONTRACTOR**.

Any worker employed to perform work on the project which is not covered by a classification listed in "Wage Rates" shall be paid not less than the minimum rate of wages specified herein for the classification which most nearly corresponds to work to be performed by him, and such minimum wage rate shall be retroactive to time of initial employment of such person in such classification.

Pursuant to Labor Code Section 1773.1, per diem wages are deemed to include employer payments for health and welfare, pension, vacation, travel time, and subsistence pay as provided in Section 1773.8 of the Labor Code, apprenticeship or other training programs authorized by Section 3093 of the Labor Code and similar purposes when the term "per diem wages" is used herein. Apprentices of any of the above crafts may be employed provided they are properly indentured to **CONTRACTOR** in full compliance with the provision of Section 1777.5 of the Labor Code.

CONTRACTOR and each subcontractor shall keep or cause to be kept an accurate record showing the name, occupation, actual hours worked and actual per diem wages paid to each workman employed by him in connection with this public work. Such record shall be open at all reasonable hours to inspection by **SUPERINTENDENT**, its officers and agents and to Chief, Division of Labor Law Enforcement of the State Department of Industrial Relations, State of California, his deputies and agents.

CONTRACTOR shall post at appropriate conspicuous points on the site of work, a schedule showing all determined minimum wage rates and all authorized deductions, if any, from unpaid wages actually earned.

26.0 DEPARTMENT OF INDUSTRIAL RELATIONS REGISTRATION

As of March 1, 2015, all contractors bidding on a public works project must be registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5. http://www.dir.ca.gov/Public-Works/PublicWorks.html

27.0 HOURS OF WORK

As provided in Article 3 (commencing at Section 1810), Chapter 1, Part 7, Division 7 of the California Labor Code, eight hours of labor constitutes a legal day's work. The time of service of any workman employed at any time by the **CONTRACTOR** or by the work or upon any part of the work contemplated by this contract is limited and restricted to eight hours during any one calendar day and forty (40) hours during any one calendar week, except as hereinafter provided.

CONTRACTOR shall, as a penalty, forfeit twenty-five dollars ($25) for each workman employed in the execution of the contract by the **CONTRACTOR** or by any subcontractor for each calendar day during which such workman is required or permitted to work more than eight hours in any one calendar day and forty (40) hours in any one calendar week. Notwithstanding the provisions hereinabove set forth, work performed by employees of **CONTRACTOR** in excess of eight hours per day and forty (40) hours during any one week upon this public work shall be permitted compensation of all hours worked in excess of eight hours per day at not less than one and one-half times the basic rate of pay. Any work necessary to be performed after regular working hours or on Sundays or other

holidays shall be performed in accordance with all California labor codes and without additional expense to **SUPERINTENDENT**.

28.0 PROTECTION OF WORK AND PROPERTY

CONTRACTOR shall be responsible for all damages to persons or property that occur as a result of his fault or negligence in connection with the prosecution of this Contact and shall be responsible for the proper care and protection of all materials delivered and work performed until completion and final acceptance by the **SUPERINTENDENT**. All work shall be solely at the **CONTRACTOR'S** risk. He shall adequately protect adjacent property from loss or damage as provided by law and contract documents. **CONTRACTOR** shall take all necessary precautions for safety of employees on the work and shall comply with all applicable safety laws and building codes to prevent accidents or injury to persons on, about or adjacent to premises where work is being performed. He shall erect and properly maintain at all times, as required by conditions and progress of work, all necessary safeguards, signs, barriers, light and watchmen for protection of workmen and the public and shall post danger signs warning against hazards created by such features in the course of work. He shall designate a responsible member of his organization on the work whose duty shall be prevention of accidents. Name and position of person so designated shall be reported to the **SUPERINTENDENT** by **CONTRACTOR**.

In an emergency affecting safety of life, work or adjoining property, **CONTRACTOR**, without special instruction or authorization from **SUPERINTENDENT**, is hereby permitted to act at his discretion to prevent such threatened loss or injury, and he shall so act, without appeal, if so authorized or instructed by **SUPERINTENDENT**. Any compensation claimed by **CONTRACTOR** on account of emergency work shall be determined by agreement.

CONTRACTOR shall provide such heat, covering, and enclosures as are necessary to protect all work, materials, equipment, appliances and tools against damage by weather conditions.

CONTRACTOR shall take adequate precautions to protect existing sidewalks, curbs, pavements, utilities, adjoining property and structures, and to avoid damage thereof and repair any damage thereto caused by work operations.

CONTRACTOR shall (unless the requirements are waived by the **SUPERINTENDENT**) enclose working area with a substantial barricade and arrange work to cause minimum amount of inconvenience and danger to students and faculty in their regular school activities. Deliver materials to site over route designated by **SUPERINTENDENT**.

Confine the storage of materials and the operations of his workmen to limits indicated by law, ordinances, permits or directions of **SUPERINTENDENT. CONTRACTOR** shall not unreasonably clutter premises with his materials and enforce all instructions of **SUPERINTENDENT** regarding signs advertising, fires, danger signals, barricades and smoking and require that all persons employed on work comply with all regulations while on site.

Should the **CONTRACTOR** encounter material reasonably believed to be asbestos or polychlorinated biphenyl (PCB) on the site which has not been rendered harmless, the **CONTRACTOR** shall immediately stop work in the affected area and notify the **SUPERINTENDENT** of the condition in writing. Work in the affected area shall not be resumed except by written agreement of the **SUPERINTENDENT** and **CONTRACTOR** if the material is asbestos or PCB and has not been rendered harmless. The work in the affected area shall be resumed in the absence of asbestos or PCB or when it has been rendered harmless. The **CONTRACTOR** shall not be required to perform, without consent, any work relating to asbestos or PCB.

It is further expected and understood that the **CONTRACTOR** will perform all repairs, maintenance and installation in accordance with generally accepted safety practices and shall be solely and completely responsible for conditions of the job site, including safety of all persons and property during the performance of work. This requirement will apply continuously and not be limited to normal working hours.

It is further expected and understood that extra precaution will be taken for the safety of all children at all times and at all locations.

29.0 PERMITS

Any permits required for the prosecution of the work called for in the bid shall be secured and paid for by the **CONTRACTOR** unless otherwise specified.

30.0 ASSIGNMENT

CONTRACTOR shall not assign this contract or any part thereof without prior written consent of the **SUPERINTENDENT**. Any assignment of money to become due under this contract shall be subject to a prior lien for services rendered or materials supplied for performance of work called for under said contract by all persons, firms or corporations

rendering such services or supplying such materials to the extent that claims are filed pursuant to the Code of Civil Procedure and the Government Code.

31.0 TERMINATION

Without limiting any rights or remedies which **SUPERINTENDENT** may have in the event of any default by **CONTRACTOR**, **SUPERINTENDENT** shall have the right, upon ten (10) days prior written notice to **CONTRACTOR**, to terminate this Agreement at any time and without cause prior to complete delivery. Such termination shall be without any obligation or liability to **CONTRACTOR** other than payment of charges for the value of work performed and for necessary expenditures which can be established by **CONTRACTOR** as having been reasonably incurred prior to the time that notice of termination is given.

32.0 NOTICE AND SERVICE THEREOF

Any notice from one party to the other under the contract shall be in writing and shall be dated and signed by party giving such notice or by duly authorized representative of such party. Any such notice shall not be effective for any purpose whatsoever unless serviced in one of the following manners:

32.1 If notice is given to **SUPERINTENDENT**, by personal delivery to **SUPERINTENDENT** or by depositing same in United States mail, enclosed in a sealed envelope, addressed to **SUPERINTENDENT**, postage prepaid and registered.

32.2 If notice is given to **CONTRACTOR**, by personal delivery to said **CONTRACTOR**, or by depositing same in United States mail, enclosed in a sealed envelope, addressed to said **CONTRACTOR** at his regular place of business or at such other address as may have been established for the conduct of work under this contract, postage prepaid and registered.

32.3 If notice is given to surety or other persons, by personal delivery to such surety or other person/s or by depositing same in United States mail, enclosed in a sealed envelope, addressed to such surety or person at the address of such surety or person last communicated by him to the party giving notice, postage prepaid and registered.

33.0 SEVERABILITY

If any provision of the Agreement shall be unlawful, void, or for any reason, unenforceable, it shall be deemed severable from and shall in no way effect the validity or enforceability of the remaining provisions of this Agreement, which shall remain valid and enforceable according to its term.

34.0 GOVERNING LAW

This Agreement shall be governed and interpreted in accordance with the laws of the State of California.

35.0 PROVISIONS REQUIRED BY LAW DEEMED INSERTED

Each and every provision of law and clause required by law to be inserted in this contract shall be deemed to be inserted herein and the contract shall be read and enforced as though it were included herein, and if through mistake or otherwise any such provision is not inserted, or is not correctly inserted, then upon application of either party the contract shall forthwith be physically amended to make such insertion or correction.

36.0 AMENDMENTS

No amendment to this Agreement shall be effective unless it is in writing and signed by duly authorized representatives of both parties.

37.0 ENTIRE AGREEMENT

This Agreement contains all the agreements and understandings between the parties with respect to the subject matter hereof. No agreement or other understanding in any way modifying the terms hereof will be binding unless made in writing as a modification or amendment to this Agreement and executed by both parties. The failure of the **SUPERINTENDENT** to insist on strict performance shall not constitute a waiver of the provisions of this Agreement or a waiver of any other default by the **CONTRACTOR**. All prior agreements, representations, statements, negotiations, and undertakings, whether oral or written, are superseded hereby.

38.0 EFFECT OF WAIVER

No term or provision hereof shall be deemed waived and no breach excused, unless such waiver of consent shall be in writing and signed by the party claimed to have waived or consented. Any consent by any party to, or waiver of, a breach by the other, whether express or implied, shall not constitute consent to, waiver of, or excuse of any other or subsequent breach.

39.0 COVENANT AGAINST GRATUITIES

CONTRACTOR warrants by signing hereon that no gratuities (in the form of entertainment, gifts, or otherwise) were offered or given by the **CONTRACTOR** or any agent or representative of **CONTRACTOR**, to any officer or employee of the **SUPERINTENDENT** with a view toward securing the contract or securing favorable treatment with respect to any determinations concerning the performance of the contract. For breach or violation of this warranty, **SUPERINTENDENT** shall have the right to terminate the contract, either in whole or in part, and any loss or damage sustained by the **SUPERINTENDENT** in procuring on the open market any items, which **CONTRACTOR** agreed to supply, shall be borne and paid for by the **CONTRACTOR**. The rights and remedies of **SUPERINTENDENT** provided in the clause shall not be exclusive and are in addition to any other rights and remedies provided by law or under the contract.

40.0 PROTEST

Bidders may protest the recommended award, provided the protest is in writing, contains the bid number, is delivered to the address listed for submission of bid documents, and is submitted within five (5) calendar days from the date on which the bid was opened.

The grounds for a protest are that the **SUPERINTENDENT** failed to follow the selection procedures and adhere to requirements specified in the bid documents or any addenda or amendments; there has been a violation of conflict of interest as provided in California Government Code Section 87100 et. Seq.; or violation of any State or Federal law. Protests will not be accepted on any other grounds. All protests will be handled by a panel comprised of **SUPERINTENDENT** staff.

SUPERINTENDENT will consider only these specific issues addressed in the written protest. A written response will be directed to the protesting bidder within seven (7) calendar days of receipt of the protest, advising of the decision with regard to the protest and the basis for the decision.

41.0 CONFLICT OF INTEREST

SUPERINTENDENT hereby finds that the duties in this contract are limited in scope and thus do not necessitate compliance with disclosure requirements as stated in the Fair Political Practices Commission, Regulation Title 2, California Code of Regulations §18351.

42.0 RESOURCE CONSERVATION

SUPERINTENDENT is fully committed to providing a safe and healthy school or work environment for students, families, and staff. **SUPERINTENDENT** will promote the conservation of resources through "Green Practices" and take a proactive and preventative approach in the areas of purchasing, new construction, maintenance, and operations. Forms for this purpose will be furnished to the successful bidder.

43.0 NON-COLLUSION

Any efforts to restrain competition and the making of false sworn statements in connection with the submission of bids are unlawful. Public Contract Code 7106 requires all bidders to submit a non-collusion affidavit. Forms for this purpose are furnished with the bid documents.

44.0 LIQUIDATED DAMAGES

CONTRACTOR shall not be charged liquidated damages because of any delay in completion of work due to unforeseeable causes beyond his control including, but not restricted to, acts of God or public enemy, acts of Government, acts of **SUPERINTENDENT** or anyone employed by him or acts of another contractor in performance of a contract with **SUPERINTENDENT**, fires, floods, epidemics, quarantine restrictions, strikes, freight and embargoes or delays of subcontractor due to such causes. Exceptions to work commencing would be for notifications received that would cause work to start on a Saturday or Sunday. Such notification and work commencing start dates should be coordinated with the **SUPERINTENDENT** or his authorized representative. The amount of liquidated damages for failure to comply shall be **Two Hundred Fifty Dollars ($250.00)** per calendar day, unless mutually agreed to by **SUPERINTENDENT** and **CONTRACTOR**.

45.0 FINGERPRINTING REQUIREMENTS

This bid is subject to the provisions of Education Code Section 45125.1 and 45122.1. **CONTRACTORS'** employees are required to submit fingerprints to the Department of Justice where an employee may come into contact with students at any site. The Department of Justice will ascertain whether the employee has a pending criminal proceeding for a violent or serious felony or has been convicted of a violent or serious felony as they are defined in Penal Code Sections 667.5c) and 1192.7c), respectively. **CONTRACTOR** shall not permit an employee to come in contact with students until the Department of Justice has ascertained that the employee has not been convicted of a felony. **SUPERINTENDENT** may request the removal of an employee from a site at any time. Failure to comply with this provision may result in termination of the contract. **46.0 MATERIALS**

Except as otherwise specifically stated in the Contract, **CONTRACTOR** shall provide and pay for all materials, labor, tools, equipment, and all other services and facilities of every nature whatsoever necessary to execute and complete this Contract within specified time. Unless otherwise specified, all materials shall be new and the best of their respective kinds and grades as noted and/or specified and workmanship shall be of good quality.

No materials, supplies or equipment for work under this contract shall be purchased subject to any chattel mortgage, under a conditional sale or other agreement by which an interest therein, or in any part thereof, is retained by seller or supplier. Contractor warrants good title to all material, supplies and equipment installed or incorporated in work and agrees upon completion of all work to deliver, together with all improvements and appurtenances constructed or placed thereon by him, to **SUPERINTENDENT** free from any claim, liens or charges.

46.0 CLEAN UP

CONTRACTOR shall at all times keep premises free from debris such as waste, rubbish and excess materials and equipment caused by this work. Debris shall be removed from premises as specified in Specifications. **CONTRACTOR** shall not leave debris under, in or about the premises. Upon completion of work, **CONTRACTOR** shall clean exterior of building including, equipment, walls, floors, windowsills and ledges, horizontal projections and any areas where debris has collected to surfaces. **CONTRACTOR** shall remove temporary fencing, barricade, planking and construction toilet and similar temporary facilities from site.

47.0 CONDUCT RULES

CONTRACTOR shall at all times enforce strict discipline and good order among his employees and shall not employ or work any unfit person or anyone not skilled in the work assigned to him. If **SUPERINTENDENT** considers the workmanship of an employee to be of poor quality, **SUPERINTENDENT** reserves the right to request replacement of Contractor's employee within five (5) business days' notice of the initial request. Forms for this purpose are furnished with the bid documents and shall be submitted by the successful bidder.

48.0 BYRD ANTI-LOBBYING AMENDMENT (31 U.S.C. 1352)

Byrd Anti-Lobbying Amendment (31 U.S.C. 1352) – **CONTRACTOR**(S) that apply or bid for an award exceeding $100,000 must file the required certification. Each tier certified to the tier above that It will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant or any other award covered by 31 U.S.C. 1352. Each tier must also disclose any lobbying with non-Federal funds that take place in connection with obtaining any Federal award. Such disclosures are forwarded from tier to tier up to the non-Federal award.
Pursuant to Federal Rule (F) above, when federal funds are expended by San Bernardino County Superintendent of Schools, the **CONTRACTOR**(s) certifies that during the term and after the awarded term of an award for all contracts by San Bernardino County Superintendent of Schools resulting from this procurement process, the **CONTRACTOR**(s) certifies that it is in compliance with all applicable provisions of the Byrd Anti-Lobbying Amendment (31 U.S.C. 1352). The undersigned further certifies that:

a. No Federal appropriated funds have been paid or will be paid for on behalf of the **CONTRACTOR**, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of congress, or an employee of a Member of Congress in connection with the awarding of a Federal contract, the making of a Federal grant, the making of a Federal loan, the entering into a cooperative agreement, and the extension, continuation, renewal, amendment, or modification of a Federal contract, grant, loan, or cooperative agreement.

b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of congress, or an employee of a Member of Congress in connection with this Federal grant or cooperative agreement, the undersigned shall complete and submit Stand Form-LLL, "Disclosure Form to Report Lobbying", in accordance with its instructions.

c. The **CONTRACTOR**(S) shall require that the language of this certification be included in the award documents for all covered sub-awards exceeding $100,000 in Federal funds to all appropriate tiers and that all sub-recipients shall certify and disclose accordingly.

49.0 FORCE MAJEURE

The parties to the bid will be excused from performance during the time and to the extent that they are prevented from obtaining, delivering, or performing by "Act of God", fire, strike, loss or shortage of transportation, facilities, lockout, or commandeering of materials, products, plants, or facilities by the government, when satisfactory evidence thereof is presented to the other party provided that it is satisfactorily established that the non-performance is not due to the fault or negligence of the party not performing.

50.0 IRAN CONTRACTING ACT OF 2010

If applicable, the proposer hereby certifies that he or she or it is, and at all times during the work performance hereunder shall be, in full compliance with the provisions of the Iran Contracting Act of 2010. The proposer shall indemnify, hold harmless and defend the **SUPERINTENDENT** against any and all actions, proceedings, penalties or claims arising out of the proposer's failure to comply strictly with the Iran Contracting Act of 2010.

51.0 DRUG-FREE WORKPLACE CERTIFICATION

In accordance with the Drug-Free Workplace Act of 1990 and California Government Code sections 8350 et seq., the successful proposer will be required to execute a Drug-Free Workplace Certification concurrently with the execution of the Agreement. The successful proposer will be required to implement and take the affirmative measures outlined in such provisions. Failure of the successful proposer to comply with the measures outlined in such provisions may result in penalties, including without limitation, the termination of the Agreement, the suspension of any payment of the Contract Price otherwise due under the Contract Documents and/or debarment of the successful proposer.

52.0 WAGE RATES, PAYROLL RECORDS AND DEBARMENT

a. The **CONTRACTOR** is aware of the requirements of California Labor Code sections 1720 et seq. and 1770 et seq., as well as California Code of Regulations, Title 8, sections 16000 et seq. ("Prevailing Wage Laws"), which require the payment of prevailing wage rates and the performance of other requirements on certain "public works" and "maintenance" projects. Since this Project involves an applicable "public works" or "maintenance" project, as defined by the Prevailing Wage Laws, and since the total compensation is $1,000 or more, **CONTRACTOR** agrees to fully comply with such Prevailing Wage Laws. The **CONTRACTOR** shall obtain a copy of the prevailing rates of per diem wages at the commencement of this Agreement from the website of the Division of Labor Statistics and Research of the Department of Industrial Relations located at www.dir.ca.gov/dlsr/. In the alternative, the **CONTRACTOR** may view a copy of the prevailing rates of per diem wages at the **SUPERINTENDENT**'s Facilities Department. **CONTRACTOR** shall make copies of the prevailing rates of per diem wages for each craft, classification or type of worker needed to perform work on the Project available to interested parties upon request and shall post copies at the **CONTRACTOR**'s principal place of business and at the Project site. **CONTRACTOR** shall defend, indemnify, and hold the **SUPERINTENDENT**, its elected officials, officers, employees, and agents free and harmless from any claims, liabilities, costs, penalties or interest arising out of any failure or allege failure to comply with the Prevailing Wage Laws.

b. The **CONTRACTOR** and each Subcontractor shall forfeit as a penalty to the **SUPERINTENDENT** not more than Two Hundred Dollars ($200) for each calendar day, or portion thereof, for each worker ,paid less than the stipulated prevailing wage rate for any work done by him, or by any subcontract under him, in violation of the provisions of the California Labor Code. The difference between such stipulated prevailing wage rate and the amount paid to each worker for each calendar day or portion thereof for which each worker was paid less than the stipulated prevailing wage rate shall be paid to each worker by the **CONTRACTOR**.

c. As a further material part of this Contract, **CONTRACTOR** agrees to hold harmless and indemnify the **SUPERINTENDENT**, its officers, employees and agents from any and all claims, liability, loss, costs, damages, expenses, fines and penalties, of whatever kind or nature, including all costs of defense and attorneys' fees, arising from any alleged failure of **CONTRACTOR** or its Subcontractors to comply with the Prevailing Wage Laws of the State of California. If the **SUPERINTENDENT** or any of the indemnified parties are named as a party in any dispute arising from the failure of **CONTRACTOR** or its Subcontractors to pay prevailing wages, **CONTRACTOR** agrees that the **SUPERINTENDENT** and the other indemnified parties may appoint their own independent counsel, and **CONTRACTOR** agrees to pay all attorneys' fees and defense costs of the **SUPERINTENDENT** and the other indemnified parties as billed, in addition to all other damages, fines, penalties and losses incurred by the **SUPERINTENDENT** and the other indemnified parties as a result of the action.

d. Accurate payroll records shall be kept by the **CONTRACTOR** and each Subcontractor, showing the name, address, social security number, work classification, straight time and overtime hours worked each day and week, and the actual per diem wages paid to each journeyman, apprentice, worker, or other employee employed by him or her in connection with the Work.

e. It shall be the responsibility of **CONTRACTOR** to comply with Labor Code section 1776 as it may be amended by the Legislature from time to time with respect to each payroll record. Labor Code section 1776 provides in relevant part,

(a) Each **CONTRACTOR** and Subcontractor shall keep accurate payroll records, showing the name, address, social security number, work classification, straight time and overtime hours worked each day

and week, and the actual per diem wages paid to each journeyman, apprentice, worker, or other employee employed by him or her in connection with the public work. Each payroll record shall contain or be verified by a written declaration that it is made under penalty of perjury, stating both of the following:

(1) The information contained in the payroll record is true and correct.
(2) The employer has complied with the requirements of Sections 1771, 1811, and 1815 for any work performed by his or her employees on the public works project.

(b) The payroll records enumerated under subdivision (a) shall be certified and shall be available for inspection at all reasonable hours at the principal office of the **CONTRACTOR** on the following basis:

(1) A certified copy of an employee's payroll record shall be made available for inspection or furnished to the employee or his or her authorized representative on request.

(2) A certified copy of all payroll records enumerated in subdivision (a) shall be made available for inspection or furnished upon request to a representative of the body awarding the contract, the Division of Labor Standards Enforcement, and the Division of Apprenticeship Standards of the Department of Industrial Relations.

(3) A certified copy of all payroll records enumerated in subdivision (a) shall be made available upon request by the public for inspection or for copies thereof. However, a request by the public shall be made through either the body awarding the contract, the Division of Apprenticeship Standards, or the Division of Labor Standards Enforcement. If the requested payroll records have not been provided pursuant to paragraph (2), the requesting party shall, prior to being provided the records, reimburse the costs of preparation by the **CONTRACTOR**, Subcontractors, and the entity through which the request was made. The public shall not be given access to the records at the principal office of the **CONTRACTOR.**

(c) The certified payroll records shall be on forms provided by the Division of Labor Standards Enforcement or shall contain the same information as the forms provided by the division. The payroll records may consist of printouts of payroll data that are maintained as computer records, if the printouts contain the same information as the forms provided by the division and the printouts are verified in the manner specified in (a) above.

(d) A **CONTRACTOR** or subcontractor shall file a certified copy of the records enumerated in subdivision (a) with the entity that requested the records within 10 days after receipt of a written request.

(e) Except as provided in subdivision (f), any copy of records made available for inspection as copies and furnished upon request to the public or any public agency by the awarding body, the Division of Apprenticeship Standards, or the Division of Labor Standards Enforcement shall be marked or obliterated to prevent disclosure of an individual's name, address, and social security number. The name and address of the **CONTRACTOR** awarded the contract or the subcontractor carrying out the contract shall not be marked or obliterated. Any copy of records made available for inspection by, or furnished to, a multiemployer Taft-Hartley trust fund (29 U.S.C. Sec. 186(c)(5)) that requests the records for the purposes of allocating contributions to participants shall be marked or obliterated only to prevent disclosure of an individual's full social security number but shall provide the last four digits of the social security number. Any copy of records made available for inspection by, or furnished to, a joint labor-management committee established pursuant to the federal Labor Management Cooperation Act of 1978 (29 U.S.C. Sec. 175a) shall be marked or obliterated only to prevent disclosure of an individual's social security number.

(f) (1) Notwithstanding any other provision of law, agencies that are included in the Joint Enforcement Strike Force on the Underground Economy established pursuant to section 329 of the Unemployment Insurance Code and other law enforcement agencies investigating violations of law shall, upon request, be provided non-redacted copies of certified payroll records. Any copies of records or certified payroll made available for inspection and furnished upon request to the public by an agency included in the Joint Enforcement Strike Force on the Underground Economy or to a law enforcement agency investigating a violation of law shall be marked or redacted to prevent disclosure of an individual's name, address, and social security number.

(2) An employer shall not be liable for damages in a civil action for any reasonable act or omission taken in good faith in compliance with this subdivision.

(g) The **CONTRACTOR** shall inform the body awarding the contract of the location of the records enumerated under subdivision (a), including the street address, city and county, and shall, within five working days, provide a notice of a change of location and address.

(h) The **CONTRACTOR** or subcontractor shall have 10 days in which to comply subsequent to receipt of a written notice requesting the records enumerated in subdivision (a). In the event that the **CONTRACTOR** or subcontractor fails to comply within the 10-day period, he or she shall, as a penalty to the state or political subdivision on whose behalf the contract is made or awarded, forfeit One Hundred Dollars ($100) for each calendar day, or portion thereof, for each worker, until strict compliance is effectuated. Upon the request of the Division of Apprenticeship Standards or the Division of Labor Standards Enforcement, these penalties shall be withheld from progress payments then due. A **CONTRACTOR** is not subject to a penalty assessment pursuant to this section due to the failure of a subcontractor to comply with this section.

(i) The body awarding the contract shall cause it to be inserted in the contract stipulations to effectuate this section." The **CONTRACTOR** or any subcontractor working under the **CONTRACTOR** may not perform work on a public works project with a subcontractor who is ineligible to perform work on a public project pursuant to California Labor Code sections 1777.1 or 1777.7. Any contract on a public works project entered into between the **CONTRACTOR** and a debarred subcontractor is void as a matter of law. A debarred subcontractor may not receive any public money for performing work as a subcontractor on a public works contract. Any public money that is paid or may have been paid to a debarred subcontractor by the **CONTRACTOR** on the project shall be returned to the **SUPERINTENDENT**. The **CONTRACTOR** shall be responsible for the payment of wages to workers of a debarred subcontractor who has been allowed to work on the project.

53.0 LABOR COMPLIANCE MONITORING AND ENFORCEMENT

a. **CONTRACTOR**/subcontractor Registration. A **CONTRACTOR** or subcontractor shall not be qualified to bid on, be listed on an bid proposal (subject to the requirements of Public Contract Code section 4104) or engage in the performance of any contract for public work unless currently registered and qualified to perform public work pursuant to Labor Code section 1725.5, except under the limited circumstances set forth in Labor Code section 1771.1(a). The **SUPERINTENDENT** may not accept a bid or enter into a contract for a public works project with an unregistered **CONTRACTOR**.

b. Compliance Monitoring and Enforcement. Pursuant to Labor Code section 1771.4, this Contract is subject to compliance monitoring and enforcement by the Department of Industrial Relations. Each **CONTRACTOR** and subcontractor performing work on the Project shall be required to comply with the provisions of the California Labor Code, beginning with section 1720, and the regulations of the Department of Industrial Relations Division of Labor Standards Enforcement (i.e., the Labor Commissioner), including, but not limited to, the standard provisions requiring payment of prevailing wages, maintenance and submission of certified payroll records, and the hiring of apprentices as appropriate. Unless otherwise specified, the **CONTRACTOR** shall be required to post job site notices regarding the requirements of this paragraph, as prescribed by regulation. **CONTRACTOR** and each subcontractor shall be required to furnish the records specified in Labor Code section 1776 directly to the Labor Commissioner at least monthly, or more frequently if specified in the Contract Documents, and in a format prescribed by the Labor Commissioner.

c. **CONTRACTOR** shall be required to post a notice at the Project site in accordance with Title 8 of the California Code of Regulations, section 16451.

54.0 DOCUMENTS ON WORK

a. **CONTRACTOR** shall keep one copy of all Contract Documents, including addenda, change orders, Division I, Title 21 of the California Code of Regulations, Parts 1-5 and 12 of Title 24 of the California Code of Regulations, and the prevailing wage rates applicable at the time of the Contract, which are a part of Contract Documents, on the job at all times. Said documents shall be kept in good order and shall be available to the **SUPERINTENDENT** and **SUPERINTENDENT** representatives. **CONTRACTOR** shall be acquainted with and comply with the provisions of said Titles 21 and 24 as they relate to this Project. (See particularly Duties of the CONTRACTOR, Title 24 California Code of Regulations, section 4-343.) **CONTRACTOR** shall also be acquainted with and comply with all California Code of Regulations provisions relating to this project, particularly Titles 17, 19, 21 and 24.)

b. **CONTRACTOR** shall also make available all books, records, accounts, contracts, bids, etc. upon request from the **SUPERINTENDENT**.

BID FORMS CHECKLIST

BID NO. 25.26.1100
SURVEILLANCE SYSTEM INSTALLATION

- ☐ Bid Form / Signature Page (2 pages)
- ☐ Bid Bond
- ☐ Non-Collusion Certification
- ☐ Worker's Compensation Certification
- ☐ DIR Registration, Certification of Contractor and Subcontractor
- ☐ Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion
- ☐ Drug-Free Workplace Certification
- ☐ Alcohol and Tobacco-Free School Policy
- ☐ Designation of Subcontractors
- ☐ Byrd Anti-Lobbying Amendment Certification
- ☐ DVBE Participation Statement

ALL BID SIGNATURES MUST BE ORIGINAL WET HANDWRITTEN SIGNATURES EXECUTED IN BLUE INK ON THE ORIGINAL DOCUMENT.

Digital signatures, electronic signatures, photocopies, scanned copies, stamped signatures, or reproduced signatures of any kind will not be accepted. Failure to comply with this requirement may result in the bid being deemed non-responsive.

BID FORM / SIGNATURE PAGE

PAGE 1 OF 2

(COMPLETED FORM MUST BE SUBMITTED WITH BID)

The undersigned Bidder, having carefully examined the Bid Documents, Technical Volume, and all Addenda thereto, hereby proposes to furnish all labor, materials, equipment, supervision, and services necessary to complete the Work in accordance with the Bid Documents for the following prices:

BASE BID* Price for work described in the Base Scope of Work.

ALLOWANCE: $30,000.00, (Thirty Thousand Dollars and 00/100 Cents)

Unused allowance will be returned in the form of a deductive change order.

BASE BID (INCLUDING $30,000.00 CASH ALLOWANCE):

$ _____

(AMOUNT WRITTEN IN NUMBERS)

_____

(AMOUNT WRITTEN IN WORDS)

Including all applicable taxes, bond premiums, and licenses.

BID ALTERNATE NO. 1: Total price for the work described under Alternate No. 1.

ALTERNATE 1 COST

$ _____

(AMOUNT WRITTEN IN NUMBERS)

_____

(AMOUNT WRITTEN IN WORDS)

Including all applicable taxes, bond premiums, and licenses.

TOTAL COMBINED BID: Total amount representing the combined sum of the Base Bid *and* Alternate No. 1 (above totals combined).

The final bid price must include all costs, including but not limited to allowance, bond premiums, applicable taxes, required licenses, and all associated fees.

$ _____

(AMOUNT WRITTEN IN NUMBERS)

_____

(AMOUNT WRITTEN IN WORDS)

BID FORM / SIGNATURE PAGE

PAGE 2 OF 2

(COMPLETED FORM MUST BE SUBMITTED WITH BID)

Acknowledgment of Bid Addenda: In submitting this bid, the undersigned acknowledges receipt of all Addenda to Bid 25.26.1100 issued by the **SUPERINTENDENT**, as set forth below. **VENDOR** confirms that this bid incorporates and is inclusive of all items required by **SUPERINTENDENT'S** Bid and Addenda thereto.

Receipt and acceptance of the following Addenda is hereby acknowledged:

Addendum Number						
Date						

Furthermore, Bidder hereby certifies to the **SUPERINTENDENT and DISTRICT** that all representations, certifications, and statements made by Bidder, as set forth in this bid form, are true and correct and are made under penalty of perjury.

Dated this_____day of _____, 20____

REFERENCES: Provide the names and phone numbers of three (3) accounts you have previously serviced.

1. _____
2. _____
3. _____

COMPANY INFORMATION

Company Name: _____

Company Address: _____

Telephone Number (_____)_____ Fax Number (_____)_____

E-mail address: _____

Contractor's license number: _____ Classification _____ License expiration date: _____

Authorized Representative_____

Signature of Authorized Representative _____

BID BOND

(COMPLETED FORM MUST BE SUBMITTED WITH BID)

KNOW ALL MEN BY THESE PRESENTS, that we _____, as "**Principal**", and _____ as "**Surety**", an admitted **Surety** insurer pursuant to Code of Civil Procedure, Section 995.120, legally doing business in California at _____, are held and firmly bound unto the San Bernardino County Superintendent of Schools, hereinafter referred to as **SUPERINTENDENT**, in the penal sum of Five Hundred and 00/100 Dollars ($500.00) of the **Principal** submitted to the said **SUPERINTENDENT** for the work described below for the payment of which sum is lawful money of the United States, well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH that whereas the **principal** has submitted the accompanying BID dated _____, 20_____, for the construction of:

BID NO. 25.26.1100
SURVEILLANCE SYSTEM INSTALLATION

NOW THEREFORE, the **Principal** shall not withdraw said bid within 90 days after said opening; and the **Principal**, when given Notice of Intent to Award, shall within seven (**7**) calendar days after the prescribed forms are presented to him for signature, return executed copies of the Agreement to the **SUPERINTENDENT**, in accordance with the bid as accepted and give bond with good and sufficient **surety**(ies), as may be required, for the faithful performance and proper fulfillment of such contract and for the payment for labor and materials used for the performance of the contract, or in the event of the withdrawal of said bid within the period specified or the failure to enter into such contract and give such bonds within the time specified, the **Principal** shall pay the **SUPERINTENDENT** the difference between the amount specified in said bid and the amount for which the **SUPERINTENDENT** may procure the required work and/or supplies if the latter amount be in excess of the former, together with all costs incurred by the **SUPERINTENDENT** in again calling for bids, then the above obligation shall be void and of no effect, otherwise to remain in full force and virtue.

Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract on the call for bids, or to the work to be performed thereunder, or the specifications accompanying the same, shall in any way affect its obligation under this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of said contract or the call for bids, or to the work, or the specifications.

In the event, a suit is brought upon this bond by the **SUPERINTENDENT**, and judgment is recovered, the **Surety** shall pay all costs incurred by the **SUPERINTENDENT** in such suit, including reasonable attorney's fee to be fixed by the court.

IN WITNESS WHEREOF the above-bound parties have executed this instrument under their several seals this _____ day of _____, 20_____, the name and corporate seal of each corporate party being hereto affixed and these presents duly signed by its undersigned representative, pursuant to authority of its governing body.

(Corporate Seal)

_____
Principal

_____
By

_____
Title

(Corporate Seal)

_____
Surety

_____
By

_____
Title

(Attach Attorney-in-Fact Certificate)

_____
Telephone

NON-COLLUSION DECLARATION

(COMPLETED FORM MUST BE SUBMITTED WITH BID)

I, _____, declare as follows:

That I am the _____ of _____, the party making the attached Bid; that the attached Bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation; that the Bid is genuine and not collusive or sham; that the Bidder has not directly or indirectly induced or solicited any other Bidder to put in a false or sham Bid, or that anyone shall refrain from Bidding; that the Bidder has not in any manner, directly or indirectly, sought by agreement, communication, or to fix any overhead, profit, or cost element of the Bid price, or of that of any other Bidder, or to secure any advantage against the public body awarding the contract of anyone interested in the proposed contract; that all statements contained in the Bid are true; and further, that the Bidder has not, directly or indirectly, submitted his or her Bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, or paid, and will not pay, any fee to any corporation, partnership, company association, organization, Bid depository, or to any member or agent thereof to effectuate a collusive or sham Bid.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

Executed this ____ day of _____, 20___, at _____, California

_____
Name of Contractor (Print or Type)

By: _____
Signature

_____
Print Name

_____
Title

_____
Date

WORKERS' COMPENSATION CERTIFICATION

(COMPLETED FORM MUST BE SUBMITTED WITH BID)

Labor Code Section 3700:

Every employer except the State of California shall secure the payment of compensation in one or more of the following ways:

(a) By being insured against liability to pay compensation in one or more insurers duly authorized to write compensation insurance in the state.
(b) By securing from the Director of Industrial Relations a certificate of consent to self-insure, which may be given upon furnishing proof satisfactory to the Director of Industrial Relations of ability to self-insure and to pay any compensation that may become due to his employees.

I am aware of the provisions of Section 3700 of the Labor Code which require every employer to be insured against liability for worker's compensation or to undertake self-insurance in accordance with the provisions of that code, and I will comply with such provisions before commencing the performance of the work of this contract.

Date: _____ _____

Contractor

By: _____

Signature

(In accordance with Article 5 (commencing at Section 1860), Chapter 1, Part 7, Division 2 of the Labor Code, the above certificate must be signed and filed with the awarding body prior to performing any work under this contract.)

DIVISION OF INDUSTRIAL RELATIONS (DIR) REGISTRATION

CERTIFICATION OF CONTRACTOR AND SUBCONTRACTOR

(COMPLETED FORM MUST BE SUBMITTED WITH BID)

Pursuant to Labor Code Section 1725.5, a contractor and all subcontractors must be registered with the Department of Industrial relations in order to quote, bid on, to be listed in a bid proposal or to engage in the performance of any defined "Public Work" contract. If the total project cost exceeds $1,000, the project is considered a "Public Work" and is subject to all requirements pursuant to Labor Code sections 1720 through 1815. Accordingly, the payment of prevailing wages is mandatory – Proof of a valid Contractor/Specialty license, DIR Registration, worker's compensation and liability insurance is required before any work begins. Refer to the Public Work Information link: **http://www.dir.ca.gov/Public-Works/PublicWorks.html** for further information. If selected for a project over $1,000 you will be required to enter certified payroll reports (electronically) into the Department of Industrial Relations (DIR) eCPR website located at: **http://www.dir.ca.gov/Public-Works/Certified-Payroll-Reporting.html**

I, _____
(Name) (Title)

certify that _____is currently registered with the Department of Industrial Relations (DIR).
(Contractor Name)

Contractor's DIR Registration Number: _____ Expiration date: _____

Contractor further acknowledges:

1. Contractor shall maintain DIR registered status for the duration of the project without a gap in registration.
2. Contractor shall note in its invitation to bid the DIR's registration requirement for all subcontractors and their subcontractors.
3. Contractor shall ensure that all subcontractors are registered at the time of bid opening and maintain registered status for the duration of the project.
4. Contractor is to furnish DIR Registration Number for all subcontractors on the project within 24 hours of the bid opening.
5. Contractor shall substitute any subcontractor with a DIR registered contractor if listed subcontractor is unable to perform the work.

Failure to comply with any of the above may result in a determination of non-responsiveness.
I declare under penalty of perjury under California law that I understand the foregoing, that it is true and correct and that I am a legal and authorized representative of the aforementioned firm.

By: _____
Signature

_____
Print Name

_____
Title

_____
Date

CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY, AND VOLUNTARY EXCLUSION

(COMPLETED FORM MUST BE SUBMITTED WITH BID)

I am aware of and hereby certify that neither _____nor its principals are presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency. I further agree that I will include this clause without modification in all lower-tier transactions, solicitations, proposals, contracts, and subcontracts. Where the bidder/offeror/ contractor or any lower participant is unable to certify this statement, it shall attach an explanation to this solicitation bid.

IN WITNESS WHEREOF, this instrument has been duly executed by the principal of the above-named bidder on the _____day of_____, 20____ for the purposes of submission of this bid.

(Corporate Seal)

_____
Name of Contractor (Print or Type)

By: _____
Signature

_____
Print Name

_____
Title

As the awardee under this Bid, I hereby certify that the above certification remains valid as of the date of contract award, specifically, as of the ____ day of _____, 20____, for the purposes of award of this contract.

(Corporate Seal)

_____
Name of Contractor (Print or Type)

By: _____
Signature

_____
Print Name

DRUG-FREE WORKPLACE CERTIFICATION

(COMPLETED FORM MUST BE SUBMITTED WITH BID)

This Drug-Free Workplace Certification is required pursuant to Government Code Sections 8350, et seq., the Drug-Free Workplace Act of 1990. The Drug-Free Workplace Act of 1990 requires that every person or organization awarded a contract for the procurement of any property or services from any State agency must certify that it will provide a drug-free workplace by doing certain specified acts. In addition, the Act provides that each contract awarded by a State agency may be subject to suspension of payments or termination of the contract and the contractor may be subject to debarment from future contracting, if the state agency determines that specified acts have occurred.

Pursuant to Government Code Section 8355, every person or organization awarded a contract from a State agency shall certify that it will provide a drug-free workplace by doing all of the following:

a) Publishing a statement notifying employees that the unlawful manufacture, distribution, dispensation, possession or use of a controlled substance is prohibited in the person's or organization's workplace and specifying actions which will be taken against employees for violations of the prohibition;

b) Establishing a drug-free awareness program to inform employees about all of the following:

1.) The dangers of drug abuse in the workplace;

2.) The person's or organization's policy of maintaining a drug-free workplace;

3.) The availability of drug counseling, rehabilitation and employee-assistance programs;

4.) The penalties that may be imposed upon employees for drug abuse violations;

c) Requiring that each employee engaged in the performance of the contract be given a copy of the statement required by subdivision **(a)** and that, as a condition of employment on the contract, the employee agrees to abide by the terms of the statement.

I, the undersigned, agree to fulfill the terms and requirements of Government Code Section 8355 listed above and will publish a statement notifying employees concerning **(a)** the prohibition of controlled substances at the workplace, **(b)** establishing a drug-free awareness program, and **(c)** requiring that each employee engaged in the performance of the contract be given a copy of the statement required by Section 8355(a) and requiring that the employee agree to abide by the terms of that statement.

I also understand that if the **SUPERINTENDENT** determines that I have either **(a)** made a false certification herein, or **(b)** violated this certification by failing to carry out the requirements of Section 8355, that the contract awarded herein is subject to suspension of payments, termination, or both. I further understand that, should I violate the terms of the Drug-Free Workplace Act of 1990, I may be subject to debarment in accordance with the requirements of Section 8350, et seq.

I acknowledge that I am aware of the provisions of Government Code Section 8350, et seq. and hereby certify that I will adhere to the requirements of the Drug-Free Workplace Act of 1990.

_____
Name of Contractor (Print or Type)

By: _____
Signature

_____
Print Name

_____
Title

_____
Date

ALCOHOL AND TOBACCO-FREE SCHOOL POLICY

(COMPLETED FORM MUST BE SUBMITTED WITH BID)

In the interest of public health, the San Bernardino County Superintendent of Schools provides an alcohol and tobacco-free environment. Smoking or the use of any tobacco products and/or alcoholic beverages are prohibited in buildings and vehicles and on any property owned, leased, or contracted for, by the **SUPERINTENDENT**. Failure to abide by this requirement could result in the termination of this contract.

I acknowledge that I am aware of the Alcohol and Tobacco-Free School Policy and hereby certify that my employees and I will adhere to the requirements of the policy.

_____
Name of Contractor

_____
Signature

_____
Date

DESIGNATION OF SUBCONTRACTORS

(COMPLETED FORM MUST BE SUBMITTED WITH BID)

In compliance with the Subletting and Subcontracting Fair Practices Act (Public Contract Code Section 4100 et. seq.) and any amendments thereof, each bidder shall set forth below: (**a**) the name and the location of the place of business of each subcontractor who will perform work or labor or render service to the bidder (prime Contractor) in or about the construction of the work or improvement to be performed under this contract or a subcontractor licensed by the State of California who, under subcontract to the bidder (prime contractor), specially fabricates and installs a portion of the work or improvement according to detailed drawings contained in the plans and specifications in an amount in excess of one-half of one percent of the bidder's (prime contractor's) total bid and (**b**) the portion of the work which will be done by each subcontractor. The bidder (prime contractor) shall list only one subcontractor for each such portion as is defined by the bidder (prime contractor) in this bid.

If a bidder (prime contractor) fails to specify a subcontractor or if a bidder (prime contractor) specifies more than one subcontractor for the same portion of work to be performed under the contract in excess of one-half of one percent of the bidder's (prime contractor's) total bid, bidder shall be deemed to have agreed that bidder is fully qualified to perform that portion, and that bidder alone shall perform that portion.

No bidder (prime contractor) whose bid is accepted shall (**a**) substitute any subcontractor, (**b**) permit any subcontractor to be voluntarily assigned or transferred or allow work to be performed by anyone other than the original subcontractor listed in the original bid, or (**c**) sublet or subcontract any portion of the work in excess of one-half of one percent of the bidder's (prime contractor's) total bid to which the original bid did not designate a subcontractor, except as authorized in the Subletting and Subcontracting Fair Practices Act. Subletting or subcontracting of any portion of the work in excess of one-half of one percent of the bidder's (prime contractor's) total bid as to which no subcontractor was designated in the original bid shall only be permitted in cases of public emergency or necessity, only after a finding reduced to writing as a public record of the **SUPERINTENDENT** awarding this contract setting forth the facts constituting the emergency or necessity. If alternate bids are called for and bidder intends to use different or additional subcontractors on the alternates, a separate list of subcontractors must be provided for each alternate. Identify additional list of subcontractors by Alternate Bid No.

Portion of work:	Portion of work:
Subcontractor:	Subcontractor:
Address:	Address:
City, State, Zip:	City, State, Zip:
CSLB #:	CSLB #:
DIR Registration:	DIR Registration:
Portion of work:	Portion of work:
Subcontractor:	Subcontractor:
Address:	Address:
City, State, Zip:	City, State, Zip:
CSLB #:	CSLB #:
DIR Registration:	DIR Registration:

Proper Name of Contractor _____

Signature _____

Printed Name _____ Title _____

Address _____ City, State, Zip _____

Phone _____ Fax: _____ Date _____

BYRD ANTI-LOBBYING AMENDMENT CERTIFICATION

(COMPLETED FORM MUST BE SUBMITTED WITH BID)

(To be submitted with each bid or offer exceeding $100,000)

The undersigned, _____ of _____ (the "Company") hereby certifies, to the best of his or her knowledge, that:

1. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

2. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form - LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

3. The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31, U.S.C. § 1352 (as amended by the Lobbying Disclosure Act of 1995). Any person who fails to file the required certification shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

The Company certifies or affirms the truthfulness and accuracy of each statement of its certification and disclosure, if any. In addition, the Contractor understands and agrees that the provisions of 31 U.S.C. § 3801 et seq., apply to this certification and disclosure, if any.

_____
Signature of Company Official

_____ _____
Name and Title of Company Official Date

DVBE PARTICIPATION STATEMENT

(DISABLED VETERAN BUSINESS ENTERPRISE)

(COMPLETED FORM MUST BE SUBMITTED WITH BID)

Each bidder must complete this form in order to comply with the San Bernardino County Superintendent of Schools ("**SUPERINTENDENT**") policy for participation of disabled veteran business enterprises **SUPERINTENDENT** projects funded in whole or in part by the State of California pursuant to the Leroy F. Greene School Facilities Act of 1998.(Education Code §17070.10, et seq.)

BID NO. 25.26.1100
SURVEILLANCE SYSTEM INSTALLATION

The undersigned, on behalf of the Trade Contractor named below, certifies that the Trade Contractor has made reasonable efforts to secure participation by DVBE in the Contract to be awarded for the above-referenced Bid number, including participation by DVBE subcontractors and/or material suppliers.

Check only one of the following:

☐ The Trade Contractor was unable after reasonable efforts to secure DVBE participation in the Trade Contract for the above-referenced Project/Bid. However, the Trade Contractor will use DVBE services if the opportunity arises at any time during construction of the Project. Upon completion of the Project, the Trade Contractor will report to the **SUPERINTENDENT** the total dollar amount of DVBE participation in any Contract awarded to Trade Contractor, and in any change orders, for the above-referenced Project.

☐ The Trade Contractor has secured DVBE participation in the Contract for the above-referenced Bid No., and anticipates that such DVBE participation will equal approximately _____dollars ($_____), which represents approximately _____percent (___%) of the total Contract for such Project. Upon completion of the Project, Trade Contractor will report to the **SUPERINTENDENT** the actual total dollar amount of DVBE participation in the Contract awarded to Trade Contractor, and in any change orders, for such Project.

_____
Company

_____
Name

_____
Title

_____
Signature

_____
Date

TECHNICAL VOLUME

San Bernardino County Superintendent of Schools

Verkada Video Surveillance System

Installation and Provisioning Services

The Full Specifications and Technical Volume continue on the following pages…

TECHNICAL VOLUME

San Bernardino County Superintendent of Schools

Verkada Video Surveillance System

Installation and Provisioning Services

March 23, 2026

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Section 1: Introduction

The San Bernardino County Superintendent of Schools (SBCSS) has purchased Verkada cameras, accessories, and requisite five-year Command licenses to deploy a comprehensive cloud-based video surveillance system across eight (8) district sites. This Request for Proposals (RFP) solicits qualified security systems integrators to provide professional installation and provisioning services for the Verkada video surveillance equipment at the specified locations.

The scope of this RFP is limited to installation and provisioning services only. Owner-furnished materials include all Verkada cameras, mounting accessories, software licenses, and related Verkada equipment as specified in the site-specific materials lists herein. Contractor-furnished materials shall be limited to structured cabling (Category 6A, plenum-rated), conduit, pathways, consumables, and other materials as necessary to professionally and securely install the cameras per plans, specifications, and manufacturer requirements.

The eight (8) project sites are as follows:

1. AVC Early Education Center
2. AVC Education Center
3. Frost County Early Education Center
4. Live Oak Early Education Center
5. Mulberry Early Education Center
6. Lucy Siegrist Preschool
7. Norma Covert County Education Center
8. Mountain View Administration

All installation work shall comply with the Division 28 00 00 specifications included herein, all applicable codes and standards, and Verkada manufacturer installation requirements. The Contractor shall hold current Verkada Certified Engineer (VCE) certification and maintain all required state and local licenses for the performance of this work.

Section 2: Overview of Division 28 00 00 Requirements

Division 28 00 00, part of the CSI Master Format classification system, covers Electronic Safety and Security. This division encompasses all electronic security and safety systems used in building construction and design, including access control systems, surveillance and monitoring systems (CCTV), intrusion detection and alarm systems, fire alarm and detection systems, mass notification systems, and other integrated electronic security solutions. It serves as a standardized framework for organizing construction specifications, product information, and technical documentation related to building security and safety infrastructure, making it easier for architects, engineers, and contractors to communicate about and specify these complex systems.

2.1 General Requirements

All work performed under this contract shall conform to Division 28 00 00 - Electronic Safety and Security, specifically Section 28 20 00 - Video Surveillance. The following summarizes the key requirements from the project specifications. Refer to the complete Division 28 20 00 specification document for full details.

2.2 Applicable Standards and References

The Contractor shall comply with all published specifications, standards, codes, and recommended practices of the following organizations as applicable to the work:

- ADA – Americans with Disabilities Act
- ANSI – American National Standards Institute
- ASTM – American Society for Testing and Materials
- IBC – International Building Code
- IEEE – Institute of Electrical and Electronics Engineers
- ISO/IEC – International Organization for Standardization / International Electrotechnical Commission
- NEC – National Electrical Code
- NEMA – National Electrical Manufacturers' Association
- NFPA – National Fire Protection Association
- TIA/EIA – Telecommunications Industry Association / Electronic Industries Alliance
- UL – Underwriters Laboratories, Inc.

2.3 Submittals

The Contractor shall provide the following submittals for review and approval:

- Product Data and Shop Drawings: Manufacturer data, wiring diagrams, device legends, dimensioned floor plans, bill of materials, and MSDS for firestopping materials.
- System Programming: Proposed programming including nomenclature conventions, device names, timings, and sequence of operations.
- Operation and Maintenance Manuals: Updated product data, warranty documentation, troubleshooting information, and system administration instructions.
- As-Built Record Drawings: Complete set maintained at project site and delivered in CAD and PDF formats upon completion.

2.4 Contractor Qualifications

The Contractor shall meet the following minimum qualifications:

Licensing and Certification:

- The Contractor shall hold a valid and active California State Contractors License, Classification C-7 (Low Voltage Systems) at minimum, issued by the California Contractors State License Board (CSLB). The license must be in good standing and remain active for the duration of the project.
- The Contractor shall be a Verkada Certified Engineering Partner. Proof of current Verkada partnership status must be submitted with the proposal.
- All installation technicians shall hold current Verkada Certified Engineer (VCE) certification. Proof of VCE certification for all assigned technicians must be submitted with the proposal.
- The Contractor shall be registered with the California Department of Industrial Relations (DIR) as a public works contractor per Labor Code Section 1725.5. DIR registration number shall be included in the proposal.
- The Contractor shall comply with all California prevailing wage requirements per Labor Code Sections 1720 et seq. for public works projects.

Local Presence:

- The Contractor shall maintain a permanent local office within San Bernardino County or an immediately adjacent county (Riverside, Los Angeles, or Orange County). The local office shall be staffed by trained technicians and must be adequately equipped to provide emergency phone service within 24 hours on a 24-hour, 365 days per year basis.
- The Contractor shall demonstrate the ability to dispatch a technician to any project site within four (4) hours of an emergency service request.

Experience and Qualifications:

- Minimum of two years of experience in security system design, engineering, supervision, and installation.
- Maintain adequate inventory of spare parts and items critical to system operation.
- Provide a dedicated project manager who shall remain the same individual throughout the project duration. The Owner reserves the right to approve the Contractor’s project manager.
- Maintain an in-house engineering and project management capability consistent with the requirements of this project.
- Comply with all Drug Free School Zone laws and maintain a drug-free workplace program.

SBCSS Policies and Compliance:

The Contractor shall comply with all conditions, policies, and requirements established by the San Bernardino County Superintendent of Schools (SBCSS), including but not limited to:

- SBCSS Policy 3311 – Bids: The Contractor shall comply with all SBCSS competitive bidding policies and procedures, including requirements established under the California Public Contract Code.
- SBCSS Policy 3312 – Contracts: All contract terms shall conform to SBCSS standards. Contracts must be approved prior to services being rendered and shall be prepared under the direction of the SBCSS Chief Business Officer.
- SBCSS Policy 3530 – Insurance and Risk Management: The Contractor shall provide proof of insurance meeting SBCSS requirements, including but not limited to: Commercial General Liability insurance with minimum limits of $1,000,000 per occurrence and $2,000,000 aggregate; Commercial Automobile Liability insurance with minimum limits of $1,000,000 combined single limit; Workers’ Compensation insurance as required by the State of California; and Employer’s Liability with minimum limits of $1,000,000 per accident. SBCSS shall be named as an additional insured on all applicable policies. Certificates of insurance shall be submitted with the proposal.

- The Contractor shall not discriminate on the basis of race, color, creed, sex, religion, ancestry, national origin, age, or disability in accordance with SBCSS non-discrimination policies.
- The Contractor shall comply with all SBCSS facility access policies, background check requirements, and security protocols applicable to work performed on school district property.
- All Contractor personnel working on SBCSS sites shall submit to and pass a Department of Justice (DOJ) background check and fingerprint clearance as required for work on K–12 school campuses per California Education Code.

For complete SBCSS policy requirements, refer to the SBCSS Policies and Procedures manual available at www.sbcss.net/human-resources/policies-and-proced.

2.5 Installation Requirements

Installation shall be performed in the following sequence unless otherwise directed by the Owner:

1. Installation of cables and network infrastructure
2. Installation of new cameras and mounting hardware
3. Installation of front-end equipment
4. Commissioning of new system components
5. End-user training

Additional installation requirements include:

- All exposed cables shall be installed in rigid conduit, EMT raceway, or wire mold as approved by the Owner.
- All concealed cables routed in j-hook pathways shall be fastened to the structure at minimum every four feet.
- All components shall be anchored securely, plumb, level, and accurately aligned.
- Equipment and product labels shall be printed self-adhesive labels. Handwritten labels are not acceptable.
- All networked equipment shall be labeled with IP address. Cables shall be individually labeled at origin and termination.

2.6 Acceptance Testing

The Contractor shall develop a Final Test and Acceptance Plan identifying each system component, test intent, test method, and expected results. The plan shall be submitted to the Owner at least 30 days prior to the scheduled system acceptance test. System acceptance shall not occur until all deficiencies have been corrected, all submittals accepted, all close-out documentation delivered, and training successfully completed.

2.7 Training

The Contractor shall provide comprehensive training to Owner personnel including:

- On-site operator training: Minimum of two four-hour sessions covering operations for each system installed, provided to supervisors, end-user staff, security staff, maintenance personnel, IT personnel, and other designated personnel across all work shifts.
- On-site administrator training: Minimum of two four-hour sessions covering all administrative and management functions for each system installed.

Section 3: Site-Specific Verkada Materials List

The following tables identify the Owner-furnished Verkada equipment and materials allocated to each project site. These materials will be provided to the Contractor for installation. The Contractor shall verify receipt of all materials prior to commencing work at each site.

3.1 AVC Early Education Center

Item	Part Number	Qty
Exterior Camera CB62 Telephoto	CB62-512TE-HW	2
Exterior Camera CD63E	CD63-512E-HW	2
Exterior Camera CF83 180-Degree	CF83-512E-HW	2
Verkada CY63 Dual Sensor	CY63-1TBE-HW	6
Verkada CY Junction Box Mount	ACC-MNT-YJBOX-1	6
Verkada Angle Mount	ACC-MNT-ANGLE-1	2

3.2 AVC Education Center

Item	Part Number	Qty
Exterior Camera CD63E	CD63-512E-HW	6
Exterior Camera CH63 4-Sensor	CH63-2TBE-HW	1
Verkada CY63 Dual Sensor	CY63-1TBE-HW	8
Verkada PTZ Arm Mount	ACC-MNT-XLARM-1	1
Verkada Corner Mount	ACC-MNT-CORNER-1	1
Verkada Pendant Cap Mount	ACC-MNT-PEND-1	1
Verkada CY Junction Box Mount	ACC-MNT-YJBOX-1	8

Note: This site may require additional infrastructure and additional switches – to be determined by the District.

3.3 Frost County Early Education Center

Item	Part Number	Qty
Exterior Camera CD63E	CD63-512E-HW	6
Exterior Camera CF83 180-Degree	CF83-512E-HW	4
Verkada CY63 Dual Sensor	CY63-1TBE-HW	3
Verkada CY Junction Box Mount	ACC-MNT-YJBOX-1	3
Verkada Angle Mount	ACC-MNT-ANGLE-1	4

3.4 Live Oak Early Education Center

Item	Part Number	Qty

Exterior Camera CD63E	CD63-512E-HW	2
Exterior Camera CF83 180-Degree	CF83-512E-HW	3
Exterior Camera CH63 4-Sensor	CH63-2TBE-HW	1
Verkada CP63 4K PTZ	CP63-1TBE-HW	1
Verkada CY63 Dual Sensor	CY63-1TBE-HW	5
Verkada PTZ Arm Mount	ACC-MNT-XLARM-1	1
Verkada Corner Mount	ACC-MNT-CORNER-1	3
Verkada Arm Mount	ACC-MNT-ARM-1	2
Verkada Pendant Cap Mount	ACC-MNT-PEND-1	1
Verkada 2-Camera Pendant Cap Mount	ACC-MNT-YPEND-1	1
Verkada CY Junction Box Mount	ACC-MNT-YJBOX-1	4

3.5 Mulberry Early Education Center

Item	Part Number	Qty
Exterior Camera CD63E	CD63-512E-HW	1
Exterior Camera CF83 180-Degree	CF83-512E-HW	4
Exterior Camera CH63 4-Sensor	CH63-2TBE-HW	1
Verkada CY63 Dual Sensor	CY63-1TBE-HW	3
Verkada Corner Mount	ACC-MNT-CORNER-1	1
Verkada Arm Mount	ACC-MNT-ARM-1	1
Verkada Pendant Cap Mount	ACC-MNT-PEND-1	1
Verkada CY Junction Box Mount	ACC-MNT-YJBOX-1	3
Verkada Angle Mount	ACC-MNT-ANGLE-1	4

3.6 Lucy Siegrist Preschool

Item	Part Number	Qty
Exterior Camera CD63E	CD63-512E-HW	5
Exterior Camera CH63 4-Sensor	CH63-2TBE-HW	1
Verkada CY63 Dual Sensor	CY63-1TBE-HW	3
Verkada Corner Mount	ACC-MNT-CORNER-1	1
Verkada Arm Mount	ACC-MNT-ARM-1	1
Verkada CY Junction Box Mount	ACC-MNT-YJBOX-1	3

Note: This site may require additional infrastructure and additional switches – to be determined by the District.

3.7 Norma Covert County Education Center

Item	Part Number	Qty
Exterior Camera CD63E	CD63-512E-HW	3
Verkada CY63 Dual Sensor	CY63-1TBE-HW	2
Verkada CY Junction Box Mount	ACC-MNT-YJBOX-1	2
Lift Rental	—	1

Note: This site requires a lift rental for camera installation at elevated mounting locations.

3.8 Mountain View Administration

Item	Part Number	Qty
Exterior Camera CD63E	CD63-512E-HW	3
Verkada CY63 Dual Sensor	CY63-1TBE-HW	3
Verkada CY Junction Box Mount	ACC-MNT-YJBOX-1	3
Parapet Camera Mount	AX-Parapet	2

Section 4: Site Installation and Deployment Plans

The scope of work for cabling and installation of the Verkada cameras at each site generally includes several key components and tasks. These typically involve running new structured cabling to support the camera units, terminating and testing all data connections to ensure reliable performance, and mounting the owner-furnished Verkada cameras in designated locations according to the site layout. Additionally, the work often encompasses connecting the cameras to the network infrastructure, verifying system integration with existing security platforms, and conducting functional tests to confirm proper operation. Documentation and coordination with the site owner are also essential to ensure compliance with project requirements and timelines.

When integrating Verkada Video Surveillance Cameras into the existing data network at each location, it is critical to follow industry best standards and practices to ensure security, reliability, and optimal performance:

- **Network Segmentation:** Place surveillance cameras on a dedicated VLAN (Virtual Local Area Network) to isolate camera traffic from other network data. This enhances security, minimizes broadcast traffic, and allows for easier management and troubleshooting.
- **Structured Cabling:** Install high-quality, plenum-rated Category 6 or higher cabling in accordance with ANSI/TIA-568 standards. All cables should be properly labeled, neatly routed, and supported to prevent physical damage.
- **Power over Ethernet (PoE):** Use PoE-enabled switches to provide reliable power and network connectivity to each camera, reducing the need for separate power supplies and simplifying installation.
- **Secure Network Access:** Enable strong authentication and encryption for device management interfaces. Restrict administrative access to authorized personnel only and use strong, unique passwords for all devices.
- **Firmware and Software Updates:** Ensure all cameras and network devices are running the latest manufacturer-approved firmware and software to protect against vulnerabilities.
- **Bandwidth Planning:** Calculate the anticipated network load from all camera streams and ensure that the existing infrastructure (switches, routers, firewalls, and available bandwidth) can support the additional traffic without impacting other services.
- **System Integration Testing:** Perform comprehensive integration testing to verify compatibility and communication between the Verkada cameras and the site's existing security platforms, including access control systems and video management software.
- **Documentation:** Maintain updated network diagrams, camera placement maps, and configuration records. Provide clear documentation to the site owner for ongoing maintenance and troubleshooting.
- **Compliance and Privacy:** Ensure the installation aligns with all applicable privacy laws, data protection regulations, and organizational policies regarding video surveillance and network security.
- **Ongoing Monitoring and Maintenance:** Set up network monitoring tools to track camera connectivity, performance, and security events. Schedule regular maintenance checks and update procedures as necessary.

By adhering to these best practices, the integration of Verkada Video Surveillance Cameras will be secure, efficient, and scalable, supporting the safety and operational needs of each site while maintaining compliance with industry standards.

Contractor Scope of Work Summary

The Contractor shall be responsible for the complete installation and commissioning of the Verkada video surveillance system at each of the eight (8) project sites identified in this document. The scope of work encompasses all labor, materials, coordination, and documentation required to deliver a fully operational surveillance system at each location. All Verkada cameras, mounting accessories are Owner-furnished; the Contractor shall furnish all other materials and equipment necessary to complete the installation.

All Sites (inclusive) Contractor Responsibilities

Structured Cabling: Furnish and install all structured cabling infrastructure required to connect each camera to the designated network termination point. All cable runs shall be home-run from camera locations to the Main Distribution Frame (MDF) or designated Intermediate Distribution Frame (IDF) at each site. Cabling shall be neatly routed, properly supported, and installed in accordance with ANSI/TIA-568 standards. All cables shall be tested with a calibrated cable tester, and test results shall be documented and provided to the Owner.

Camera Installation: Receive, inspect, and verify all Owner-furnished Verkada equipment upon delivery. Mount all cameras at Owner-approved locations per the IPVM site plans included in the appendices of each site scope. Ensure all mounting is structurally sound, weatherproof where required, and compliant with manufacturer specifications. Provide weatherproof cable entry seals at all exterior penetrations.

Camera Aiming and Configuration: Aim and adjust all installed cameras to achieve the coverage areas identified in the IPVM Designer site plans. Configure image settings for each camera, including zoom, focus, wide dynamic range (WDR), and night vision performance. Apply privacy masks at any locations required by the Owner. Conduct a final walkthrough with the Owner's representative to verify coverage and correct any pointing, focus, or obstruction issues.

Verkada Command Integration: Claim all cameras into the SBCSS Verkada Command organization. Assign each camera to the correct site and apply the Owner-approved camera naming convention. Verify that all cameras report online and are streaming properly in the Verkada Command portal prior to final acceptance.

Site Creation and User Setup: The Contractor shall create new sites within the existing Verkada Command organization for each project location. For every site, the Contractor is responsible for adding designated users as specified by the Owner and configuring appropriate permissions for each user according to their roles and access requirements. User permissions must ensure secure, role-based access to live and recorded video, device management, and administrative functions as directed by the Owner. The Contractor shall verify successful user onboarding and provide documentation of user roles and access levels upon completion.

Advanced Video Alarm Setup: The Contractor shall set up the Verkada Advanced Video Alarm feature for each site, ensuring that alarm zones, detection settings, and notification protocols are configured according to the security requirements of the location. Coordination with the site Owner is required to determine optimal alarm parameters, escalation contacts, and integration with existing security procedures. The Contractor will verify alarm functionality through live testing and provide documentation of the final configuration for Owner approval.

Documentation: Provide complete as-built documentation for each site, including annotated floor plans showing all camera locations, a cable schedule with cable ID, run length, and termination port for every run, and a completed camera inventory list with serial numbers, MAC addresses, and installed locations. All documentation shall be delivered in both digital and printed formats.

Serial Number Recording: Record the serial number, MAC address, and model number of every Verkada device installed at each site. This information shall be compiled into a master equipment inventory and submitted to the Owner as part of the project closeout deliverables.

End-User Training: The Contractor is responsible for conducting comprehensive end-user training sessions at each site upon completion of installation. Training shall include system operation, accessing live and recorded video, basic troubleshooting, and proper procedures for requesting technical support. The Contractor shall provide training materials and ensure that designated Owner personnel are confident in the day-to-day use of the Verkada video surveillance system.

Acceptance Testing Procedures: The Contractor shall coordinate all acceptance testing procedures with the Owner to ensure that testing aligns with project requirements and Owner expectations. The Contractor is responsible for conducting comprehensive acceptance testing for each site, including verification of camera functionality, network connectivity, and system integration. All acceptance tests must be thoroughly documented, and the results submitted to the Owner as part of the project closeout package. Such testing procedures will be authored by the contractor and reviewed with the owner for requirements.

Contractor-Furnished Materials

The Contractor is responsible for furnishing all materials required to complete the installation that are not listed as Owner-furnished in the individual site scopes. Contractor-furnished materials shall include, but are not limited to:

- Category 6A structured cabling (plenum-rated, UL listed) for all camera runs
- Conduit, fittings, and EMT raceway for all exposed cable runs (interior and exterior)
- Junction boxes, back boxes, and surface raceways as required for a complete and clean installation
- Weatherproof conduit fittings, seals, and duct seal compound for all exterior penetrations
- Patch panels, keystone jacks, and cable management as needed at network termination points
- Mounting hardware: screws, anchors, toggle bolts, masonry anchors, and structural backing as required
- Cable labels, permanent markers, and documentation materials
- Consumables: wire ties, lacing, split loom, and protective materials
- Aerial lifts, ladders, scaffolding, or other access equipment as required for safe installation at elevated mounting locations

⚠ NOTICE: No roof penetrations are permitted at any project site. The Contractor shall route all cabling and conduit without penetrating any roofing membrane, flashing, or rooftop surface. Any proposed deviation from this requirement must be submitted in writing to SBCSS for prior approval.

SCOPE OF WORK

Site 1: AVC Early Education Center

San Bernardino County Superintendent of Schools • Verkada Video Surveillance System

Project	Owner	Camera Units	Document Date
SBCSS Verkada Video Surveillance	San Bernardino County Superintendent of Schools	12 camera units (owner-furnished)	March 2026

1. Scope Overview Summary

This Scope of Work describes the labor, materials, and services to be provided by the Contractor for the installation and commissioning of the Verkada video surveillance system at AVC Early Education Center, a facility of the San Bernardino County Superintendent of Schools (SBCSS). All Verkada cameras, mounting accessories are Owner-furnished. The Contractor shall furnish structured cabling, conduit, pathways, consumables, and all other materials required to complete the installation.

The AVC Early Education Center campus comprises two structures, the interiors of which feature predominantly drop-ceiling construction. The facility is served by one Main Distribution Frame (MDF) and three Intermediate Distribution Frame (IDF) locations; refer to the site-specific documentation provided for exact locations.

The contractor shall home-run all camera cabling to the most appropriate and nearest network location for each respective structure.

The contractor shall furnish and install patch panels, keystones, and patch cables throughout. All infrastructure shall be clearly and consistently labeled in accordance with industry best practices.

2. Owner-Furnished Equipment

The following Verkada equipment will be provided by the Owner (SBCSS) for installation at this site. The Contractor shall acknowledge receipt of all materials prior to beginning work and report any discrepancies or damage in writing within 48 hours of delivery.

Item Description	Part Number	Qty	Category
Exterior Camera CB62 Telephoto	CB62-512TE-HW	2	Camera
Exterior Camera CD63E	CD63-512E-HW	2	Camera
Exterior Camera CF83 180-Degree	CF83-512E-HW	2	Camera
Verkada CY63 Dual-Sensor Camera	CY63-1TBE-HW	6	Camera
Verkada CY Junction Box Mount	ACC-MNT-YJBOX-1	6	Mount
Verkada Angle Mount	ACC-MNT-ANGLE-1	2	Mount

Note: Owner-furnished equipment is provided for installation only. Contractor shall not substitute, modify, or return any Owner-furnished items without prior written authorization from SBCSS.

3. Contractor-Furnished Materials

The Contractor is responsible for furnishing all materials required to complete the installation that are not listed above as Owner-furnished. Contractor-furnished materials shall include, but are not limited to:

- Category 6A structured cabling (plenum-rated, UL listed) for all camera runs
- Conduit, fittings, and EMT raceway for all exposed cable runs (interior and exterior)
- Junction boxes, back boxes, and surface raceways as required for a complete and clean installation
- Weatherproof conduit fittings, seals, and duct seal compound for all exterior penetrations
- Patch panels, keystone jacks, and cable management as needed at network termination points
- Mounting hardware: screws, anchors, toggle bolts, masonry anchors, and structural backing as required
- Cable labels, permanent markers, and documentation materials
- Consumables: wire ties, lacing, split loom, and protective materials

4. Scope of Installation Services

The Contractor shall provide the following services for this site:

- Receive, inspect, and verify all Owner-furnished Verkada equipment upon delivery. Report discrepancies or damage to the Owner in writing within 48 hours.
- Perform a pre-installation site walk with the Owner’s representative to confirm camera mounting locations, cabling routes, and any site-specific access requirements.
- Install 2 Verkada CD63E exterior dome cameras at Owner-approved locations. Mount at approved height using furnished hardware. Provide weatherproof cable entry seals at all exterior penetrations.
- Install 2 Verkada CB62 Telephoto exterior cameras at Owner-approved locations. Position to achieve optimal long-distance and perimeter coverage angles as directed.
- Install 2 Verkada CF83 180-degree wide-angle cameras at Owner-approved ceiling or eave locations. Confirm full 180° coverage of intended area during installation.
- Install 6 Verkada CY63 Dual-Sensor cameras using furnished CY Junction Box Mounts (ACC-MNT-YJBOX-1).
- Install Verkada Angle Mounts (ACC-MNT-ANGLE-1) at locations where the mounting surface does not provide adequate downward camera tilt. Adjust angle prior to final camera positioning.
- Furnish and install all structured cabling (minimum Cat6A, plenum-rated where required). Run cabling from each camera location to the designated network closet or PoE switch. Test all runs with a calibrated cable tester and document results. Label both ends of all cables to match the camera naming convention established by the Owner.
- Claim all cameras into the SBCSS Verkada Command organization. Assign each camera to the correct site and apply the approved camera naming convention. Confirm all cameras report online in the Command portal.
- Configure image settings for each camera: adjust zoom and focus (varifocal cameras), enable WDR where required, verify night vision performance, and apply privacy masks at any locations required by Owner.
- Conduct a final walkthrough with the Owner’s representative to verify coverage at all camera locations. Correct any pointing, focus, or obstruction issues identified during the walkthrough.

- Provide as-built documentation including: annotated floor plan showing all camera locations, cable schedule with cable ID, run length, and termination port, and a completed camera inventory list with serial numbers.

5. Work Not Included

The following items are explicitly excluded from this Scope of Work:

- Procurement or replacement of Owner-furnished Verkada cameras, accessories, or software licenses
- Network switching infrastructure (PoE switches, routers, firewalls) unless listed as Owner-furnished or specifically included by addendum
- Internet service, broadband, or cellular data services
- Structural modifications to walls, ceilings, or roofing systems
- Painting, patching, or cosmetic restoration beyond standard cable pathway patching
- Verkada Command organizational setup beyond camera claiming, site assignment, and naming (user management and advanced configuration to be performed by SBCSS IT or authorized Verkada partner)
- Ongoing maintenance, service contracts, or warranty response after system acceptance

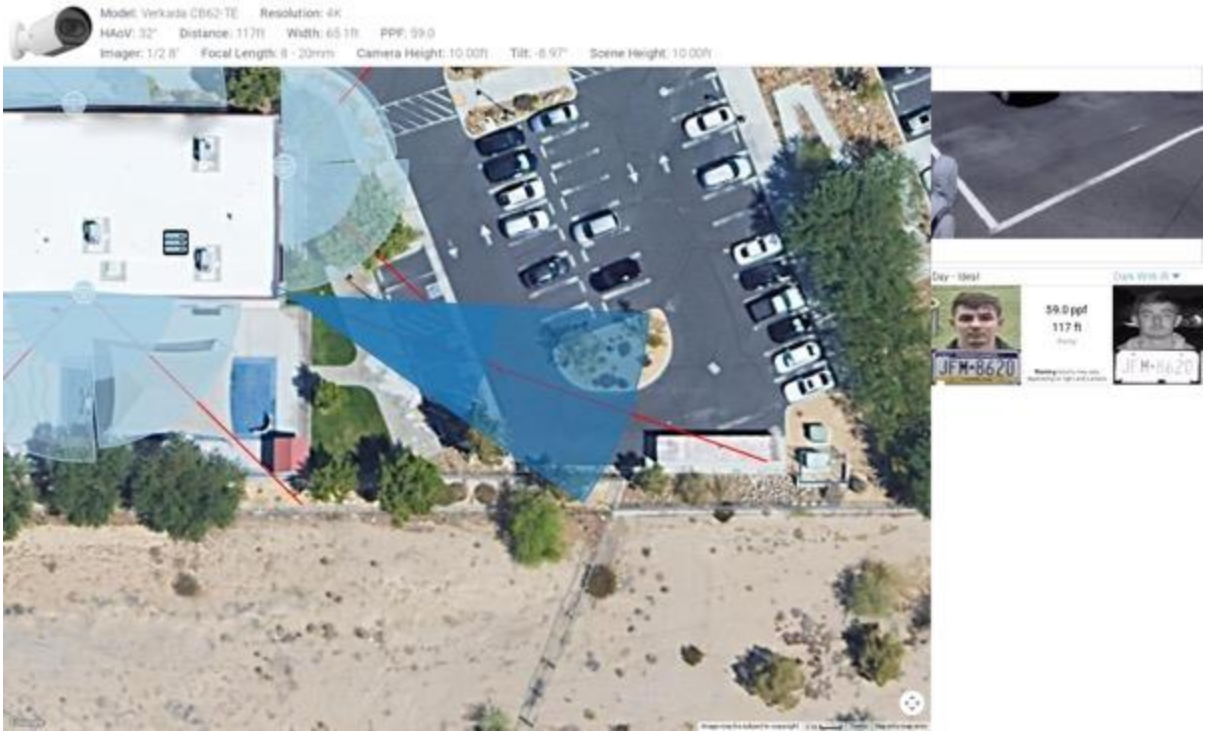
AVC Early Education Site Survey & Camera Layout

IPVM Camera Coverage Analysis

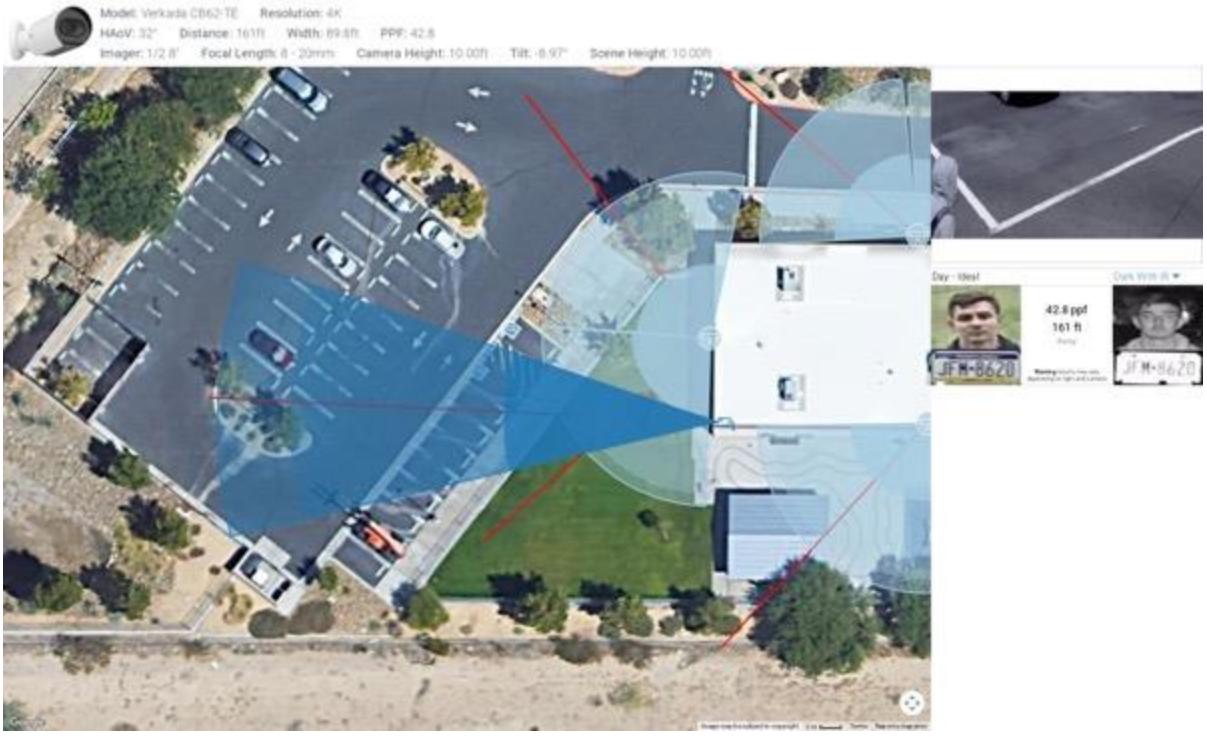
IPVM Designer Calculation — March 2026. This output is the work product of the individual who created it. IPVM does not guarantee nor warranty the work therein nor its implementation.



Overview



CB62TE 1



CB62TE 2



CD63E 1



CD63E 2


Model: Verkada CF83-E Resolution: 3520x3520
HAoV: 180° Distance: 48ft Width: 152.1ft PPF: 23.1
Image: 1/1.6" Focal Length: 1.7mm Camera Height: 10.00ft Tilt: -90.00° Scene Height: 10.00ft
Day - Ideal
23.1 ppf
48 ft

CF83 1


Model: Verkada CF83-E Resolution: 3520x3520
HAoV: 180° Distance: 45ft Width: 142.0ft PPF: 24.8
Image: 1/1.6" Focal Length: 1.7mm Camera Height: 10.00ft Tilt: -90.00° Scene Height: 10.00ft
Day - Ideal
24.8 ppf
45 ft

CF83 2



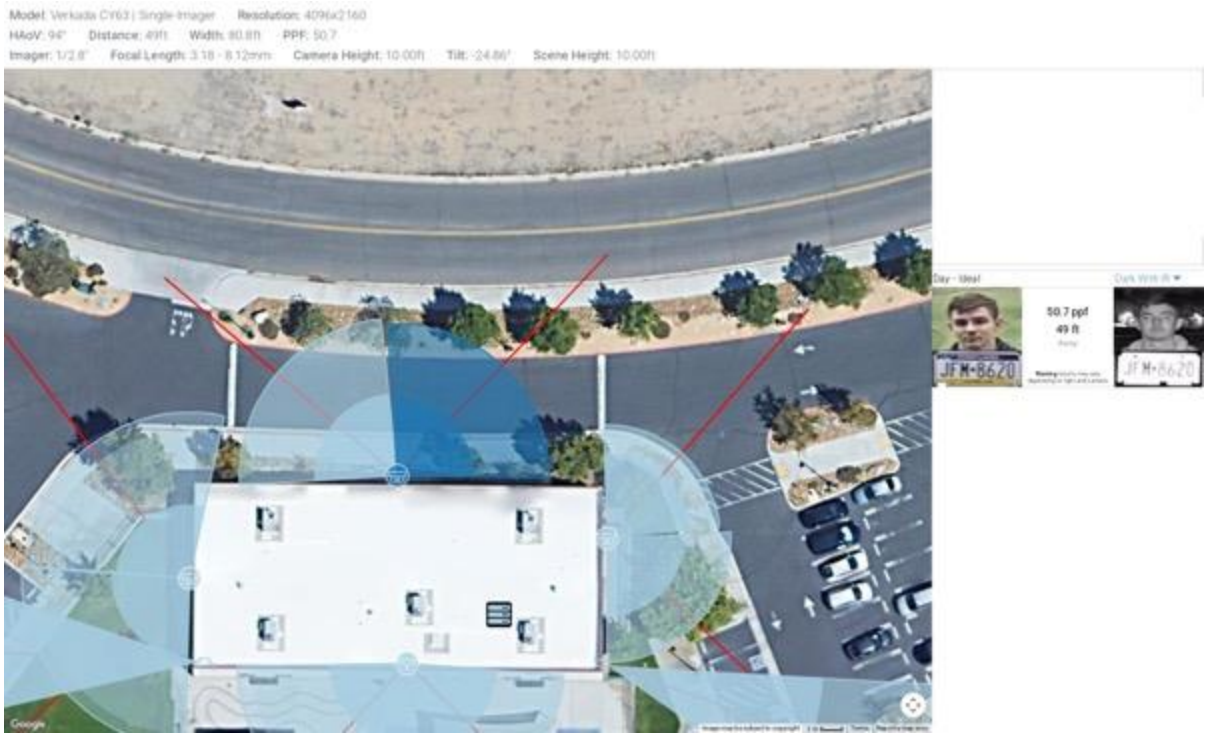
CY63 1: Imager 1



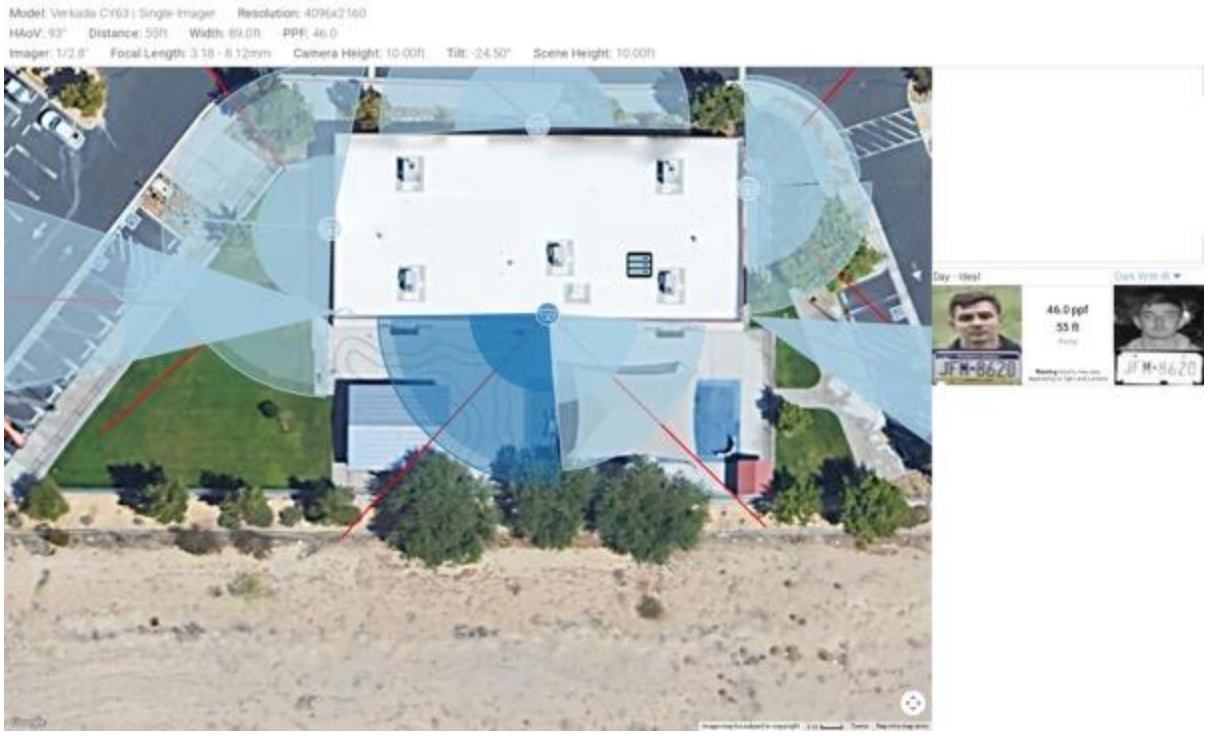
CY63 1: Imager 2



CY63 2: Imager 1



CY63 2: Imager 2



CY63 3: Imager 1



CY63 3: Imager 2



CY63 4: Imager 1



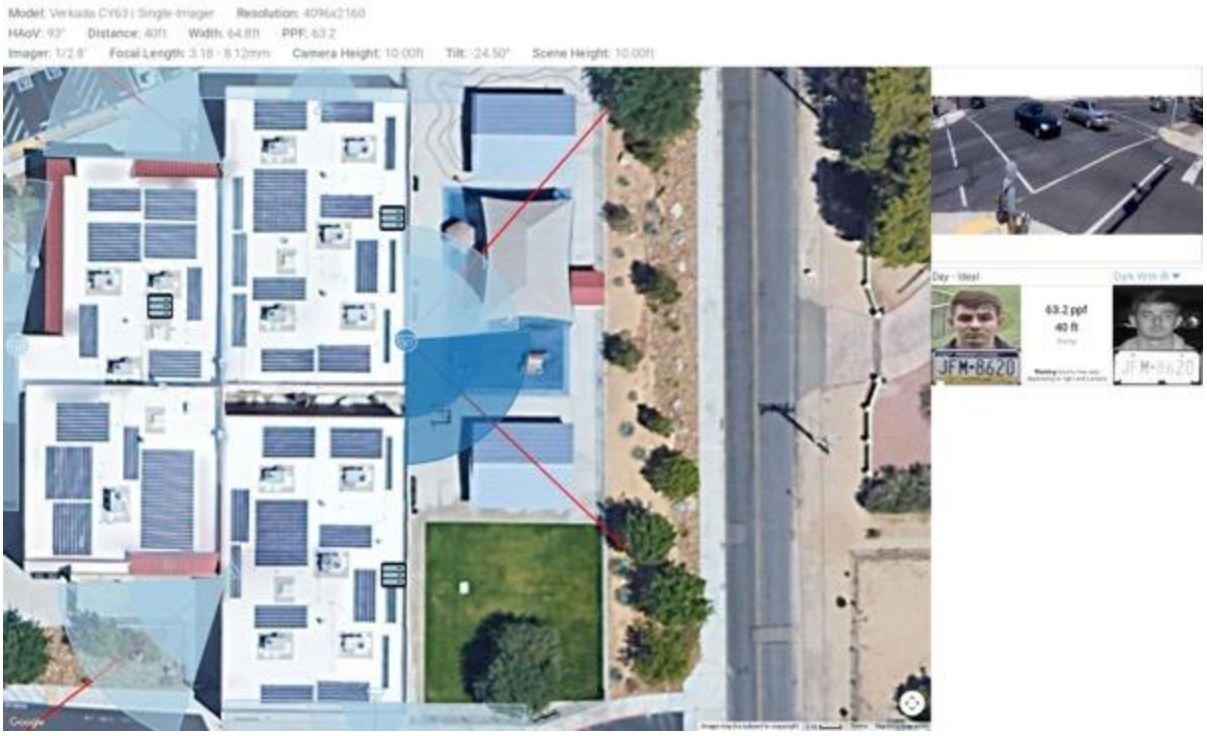
CY63 4: Imager 2



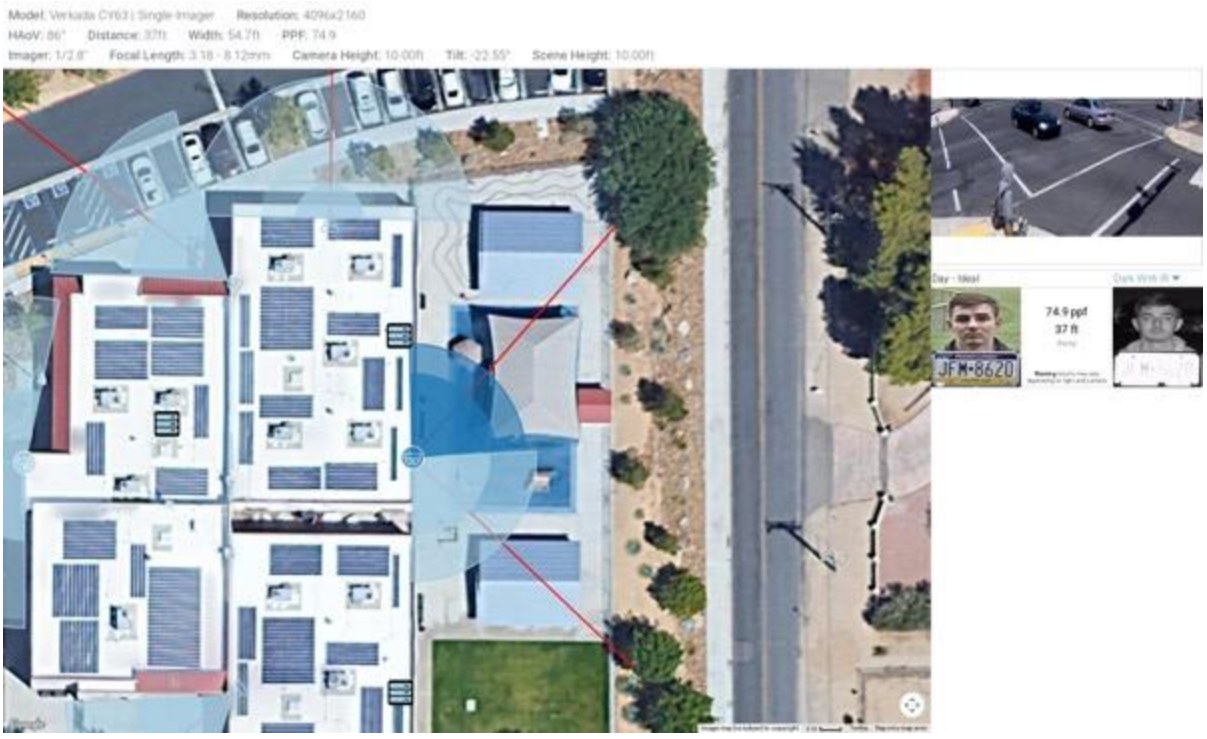
CY63 5: Imager 1



CY63 5: Imager 2



CY63 6: Imager 1



CY63 6: Imager 2



Network Closet 1



Network Closet 2

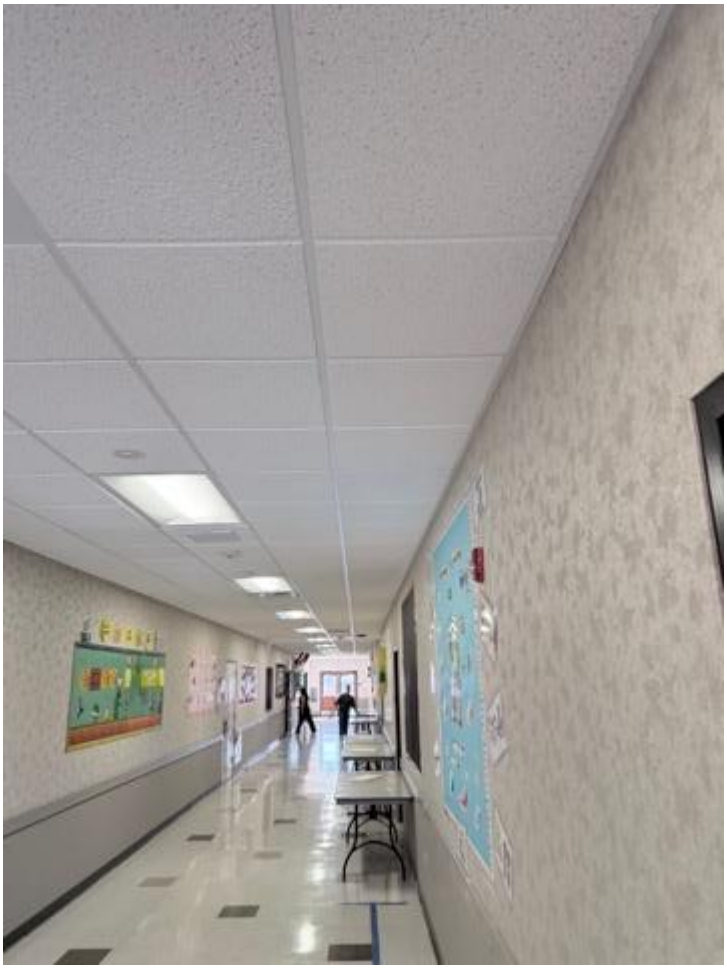


Network Closet 3



Network Closet 4

Site Photographs



Site Photo 1



Site Photo 2



Site Photo 3



Site Photo 4



Site Photo 5



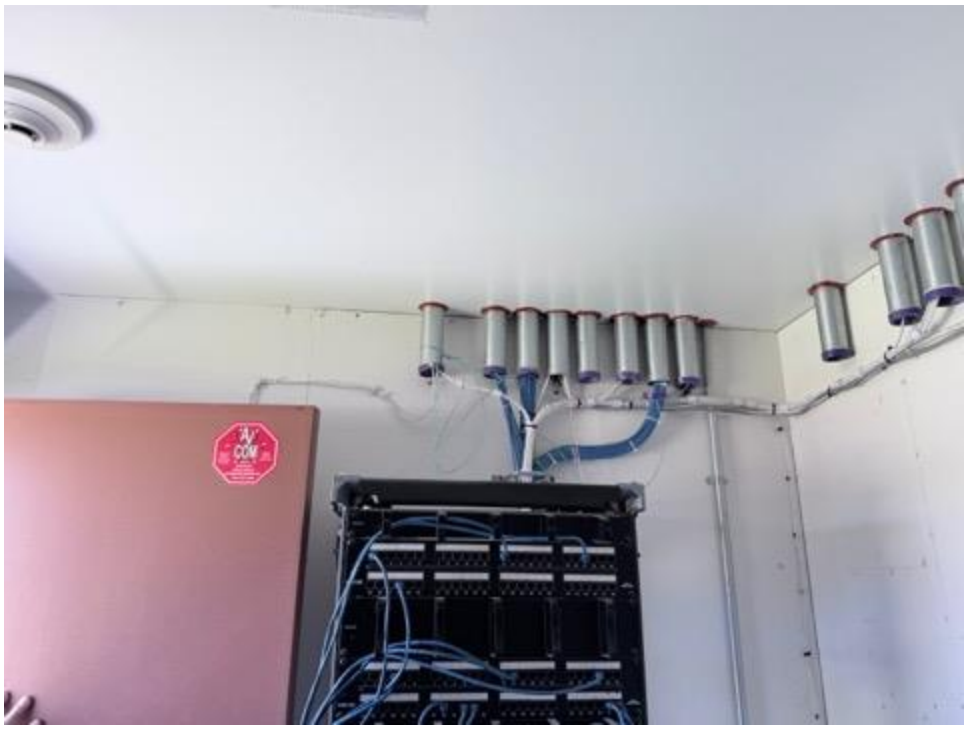
Site Photo 6



Site Photo 7



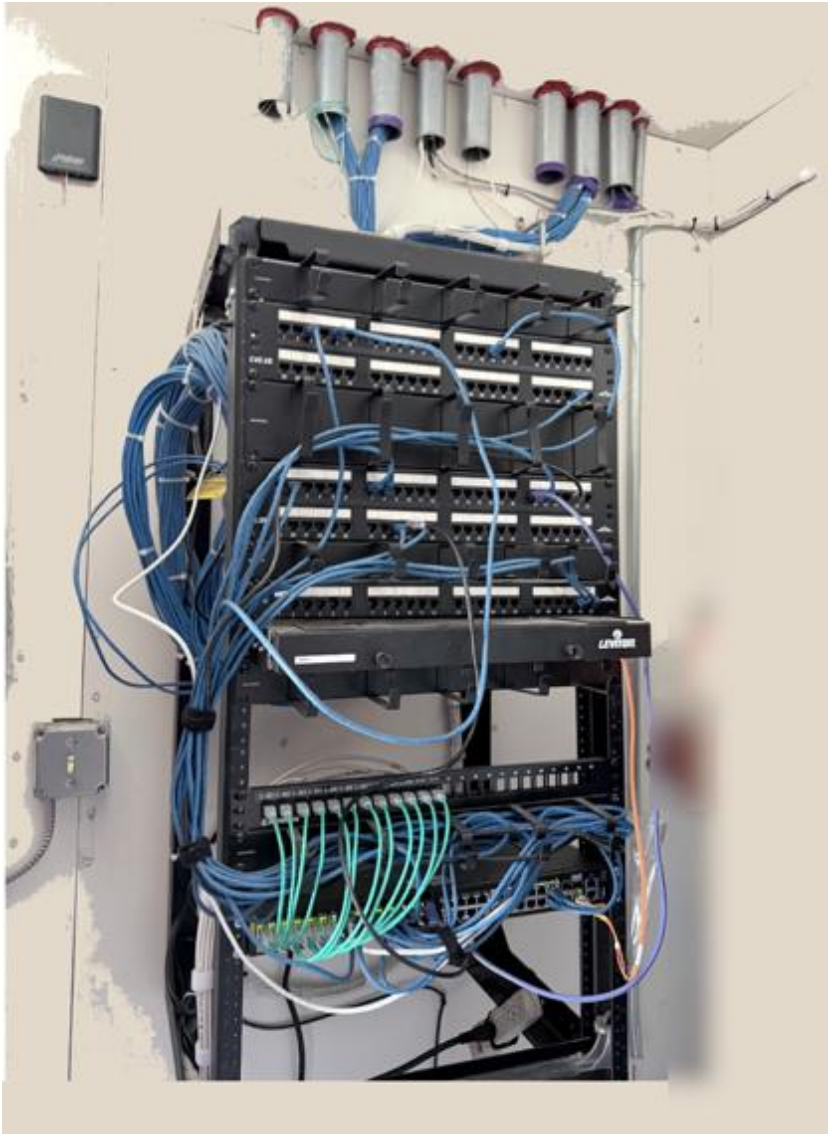
Site Photo 8



Site Photo 9



Site Photo 10



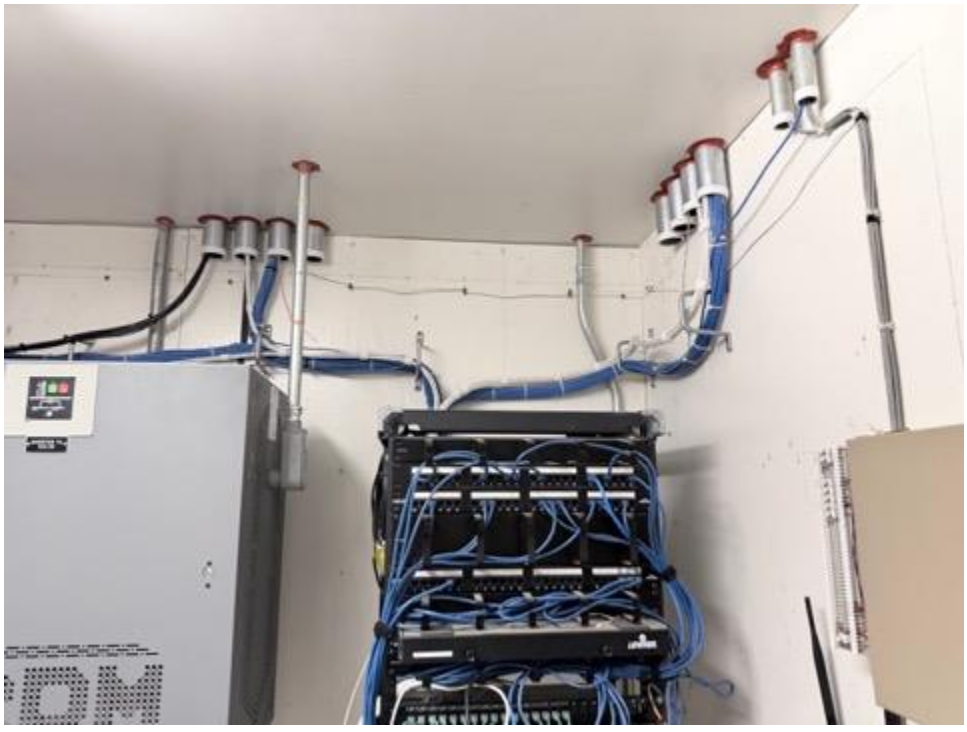
Site Photo 11



Site Photo 12



Site Photo 13



Site Photo 14



Site Photo 15



Site Photo 16

SCOPE OF WORK

Site 2: AVC Education Center

San Bernardino County Superintendent of Schools • Verkada Video Surveillance System

Project	Owner	Camera Units	Document Date
SBCSS Verkada Video Surveillance	San Bernardino County Superintendent of Schools	15 camera units (owner-furnished)	March 2026

1. Scope Overview Summary

This Scope of Work describes the labor, materials, and services to be provided by the Contractor for the installation and commissioning of the Verkada video surveillance system at AVC Education Center, a facility of the San Bernardino County Superintendent of Schools (SBCSS). All Verkada cameras, mounting accessories are Owner-furnished. The Contractor shall furnish structured cabling, conduit, pathways, consumables, and all other materials required to complete the installation.

The AVC Education Center campus comprises multiple portable and bungalow structures. The facility is served by one Main Distribution Frame (MDF) and four Intermediate Distribution Frame (IDF) locations; refer to the site-specific documentation provided for exact locations.

The contractor shall home-run all camera cabling to the most appropriate and nearest network location for each respective structure.

The contractor shall furnish and install patch panels, keystones, and patch cables throughout. All infrastructure shall be clearly and consistently labeled in accordance with industry best practices.

2. Owner-Furnished Equipment

The following Verkada equipment will be provided by the Owner (SBCSS) for installation at this site. The Contractor shall acknowledge receipt of all materials prior to beginning work and report any discrepancies or damage in writing within 48 hours of delivery.

Item Description	Part Number	Qty	Category
Exterior Camera CD63E	CD63-512E-HW	6	Camera
Exterior Camera CH63 4-Sensor	CH63-2TBE-HW	1	Camera
Verkada CY63 Dual-Sensor Camera	CY63-1TBE-HW	8	Camera
Verkada PTZ Arm Mount	ACC-MNT-XLARM-1	1	Mount
Verkada Corner Mount	ACC-MNT-CORNER-1	1	Mount
Verkada Pendant Cap Mount	ACC-MNT-PEND-1	1	Mount
Verkada CY Junction Box Mount	ACC-MNT-YJBOX-1	8	Mount

Note: Owner-furnished equipment is provided for installation only. Contractor shall not substitute, modify, or return any Owner-furnished items without prior written authorization from SBCSS.

3. Contractor-Furnished Materials

The Contractor is responsible for furnishing all materials required to complete the installation that are not listed above as Owner-furnished. Contractor-furnished materials shall include, but are not limited to:

- Category 6A structured cabling (plenum-rated, UL listed) for all camera runs
- Conduit, fittings, and EMT raceway for all exposed cable runs (interior and exterior)
- Junction boxes, back boxes, and surface raceways as required for a complete and clean installation
- Weatherproof conduit fittings, seals, and duct seal compound for all exterior penetrations
- Patch panels, keystone jacks, and cable management as needed at network termination points
- Mounting hardware: screws, anchors, toggle bolts, masonry anchors, and structural backing as required
- Cable labels, permanent markers, and documentation materials
- Consumables: wire ties, lacing, split loom, and protective materials

4. Scope of Installation Services

The Contractor shall provide the following services for this site:

- Receive, inspect, and verify all Owner-furnished Verkada equipment upon delivery. Report discrepancies or damage to the Owner in writing within 48 hours.
- Perform a pre-installation site walk with the Owner's representative to confirm camera mounting locations, cabling routes, and any site-specific access requirements.
- Install 6 Verkada CD63E exterior dome cameras at Owner-approved locations. Mount at approved height using furnished hardware. Provide weatherproof cable entry seals at all exterior penetrations.
- Install 1 Verkada CH63 4-Sensor multi-directional camera. Mount at ceiling or elevated locations per Owner direction. Orient each of the four sensor heads to cover designated coverage zones. Requires PoE++ (802.3bt) power delivery.
- Install 8 Verkada CY63 Dual-Sensor cameras using furnished CY Junction Box Mounts (ACC-MNT-YJBOX-1).
- Install Verkada Corner Mounts (ACC-MNT-CORNER-1) at building corners or angled surfaces where a standard flat mount is not suitable. Confirm alignment covers the intended coverage zone.
- Install Verkada Pendant / 2-Camera Pendant Cap Mounts at designated ceiling pendant locations. Confirm ceiling structure supports pendant mount loading per manufacturer specification.
- Install Verkada PTZ Arm Mount (ACC-MNT-XLARM-1) on a structurally rigid wall or post. Ensure mounting point is free of vibration and can support the combined mount and camera load.
- Furnish and install all structured cabling (minimum Cat6A, plenum-rated where required). Run cabling from each camera location to the designated network closet or PoE switch. Test all runs with a calibrated cable tester and document results. Label both ends of all cables to match the camera naming convention established by the Owner.
- Claim all cameras into the SBCSS Verkada Command organization. Assign each camera to the correct site and apply the approved camera naming convention. Confirm all cameras report online in the Command portal.
- Configure image settings for each camera: adjust zoom and focus (varifocal cameras), enable WDR where required, verify night vision performance, and apply privacy masks at any locations required by Owner.

- Conduct a final walkthrough with the Owner's representative to verify coverage at all camera locations. Correct any pointing, focus, or obstruction issues identified during the walkthrough.
- Provide as-built documentation including: annotated floor plan showing all camera locations, cable schedule with cable ID, run length, and termination port, and a completed camera inventory list with serial numbers.

5. Work Not Included

The following items are explicitly excluded from this Scope of Work:

- Procurement or replacement of Owner-furnished Verkada cameras, accessories, or software licenses
- Network switching infrastructure (PoE switches, routers, firewalls) unless listed as Owner-furnished or specifically included by addendum
- Internet service, broadband, or cellular data services
- Structural modifications to walls, ceilings, or roofing systems
- Painting, patching, or cosmetic restoration beyond standard cable pathway patching
- Verkada Command organizational setup beyond camera claiming, site assignment, and naming (user management and advanced configuration to be performed by SBCSS IT or authorized Verkada partner)
- Ongoing maintenance, service contracts, or warranty response after system acceptance

AVC Education Center Site Survey & Camera Layout

IPVM Camera Coverage Analysis

IPVM Designer Calculation — March 2026. This output is the work product of the individual who created it. IPVM does not guarantee nor warranty the work therein nor its implementation.



Overview



CD63E 1



CD63E 2



CD63E 3



CD63E 4



CD63E 5



CD63E 6



CH63 1: Imager 1



CH63 1: Imager 2



CH63 1: Imager 3



CH63 1: Imager 4



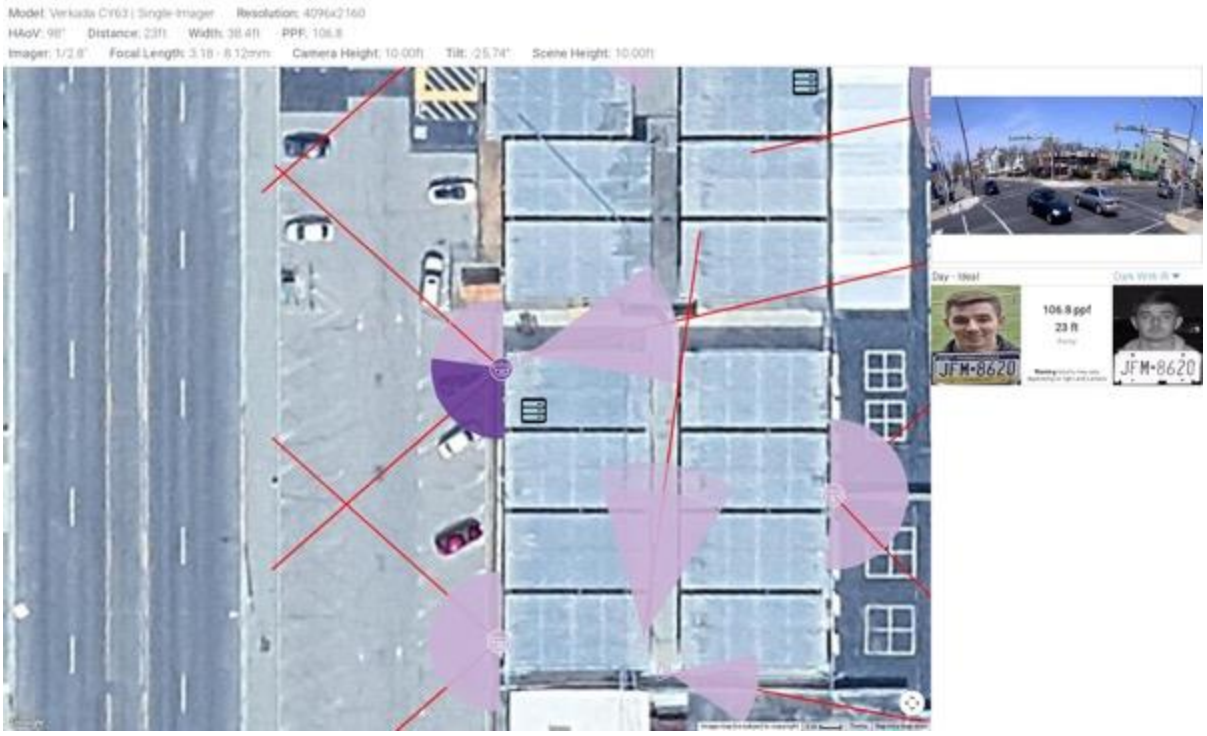
CY63 1: Imager 1



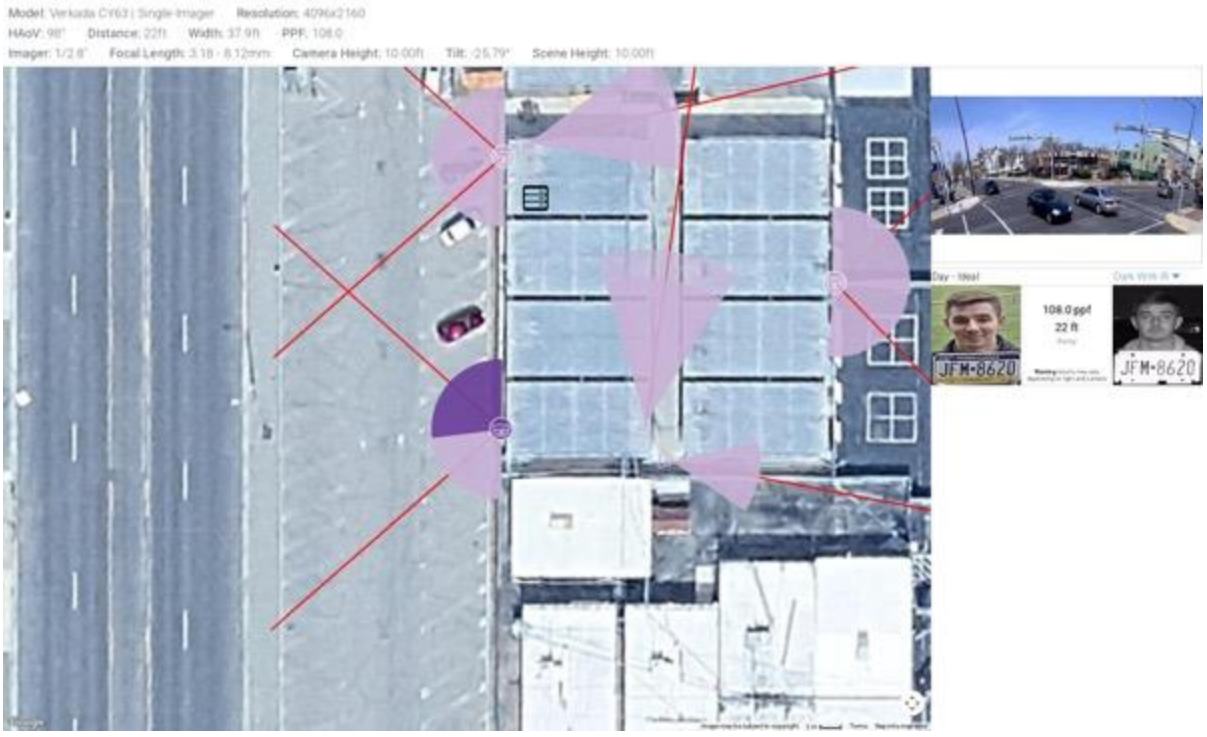
CY63 1: Imager 2



CY63 2: Imager 1



CY63 2: Imager 2



CY63 3: Imager 1



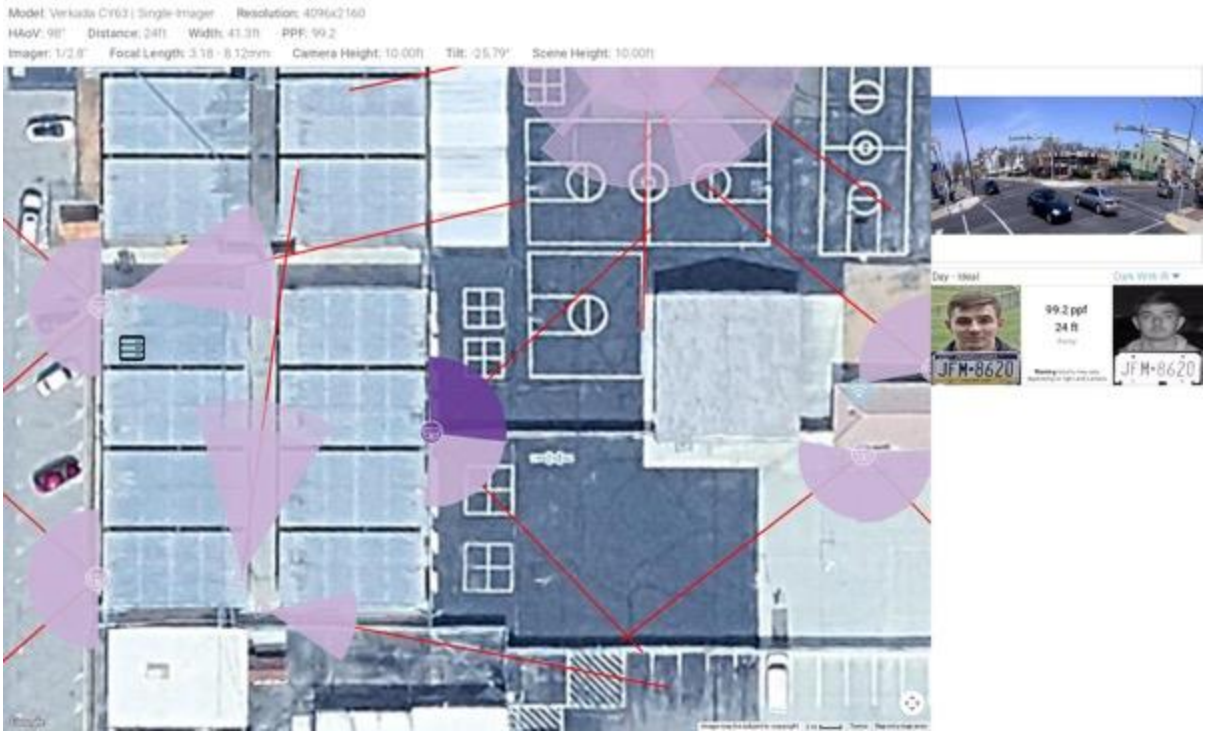
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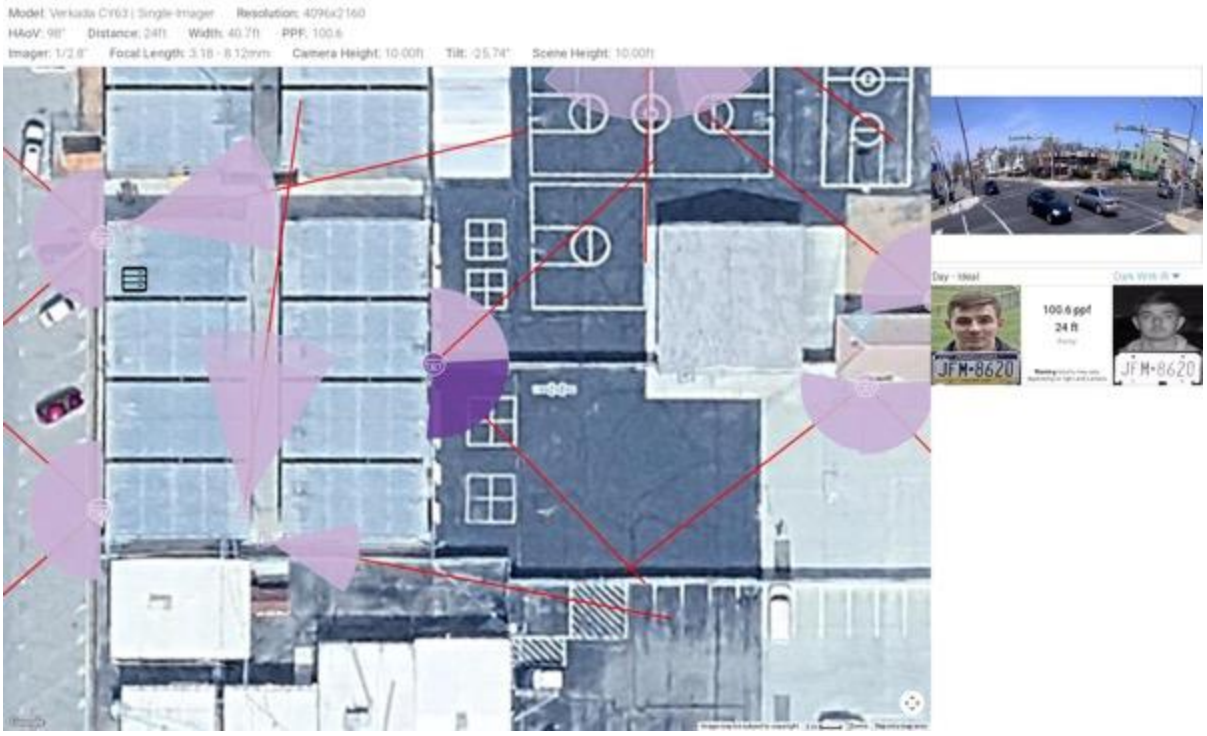
CY63 4: Imager 1



CY63 4: Imager 2



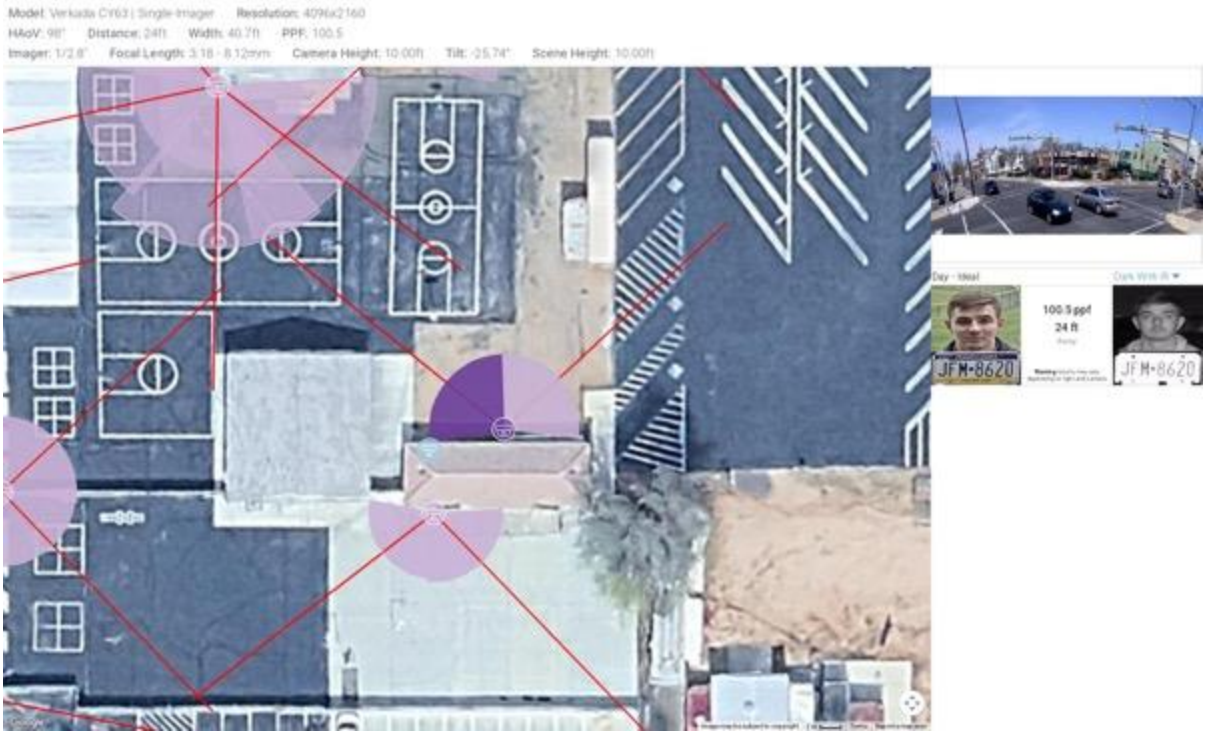
CY63 5: Imager 1



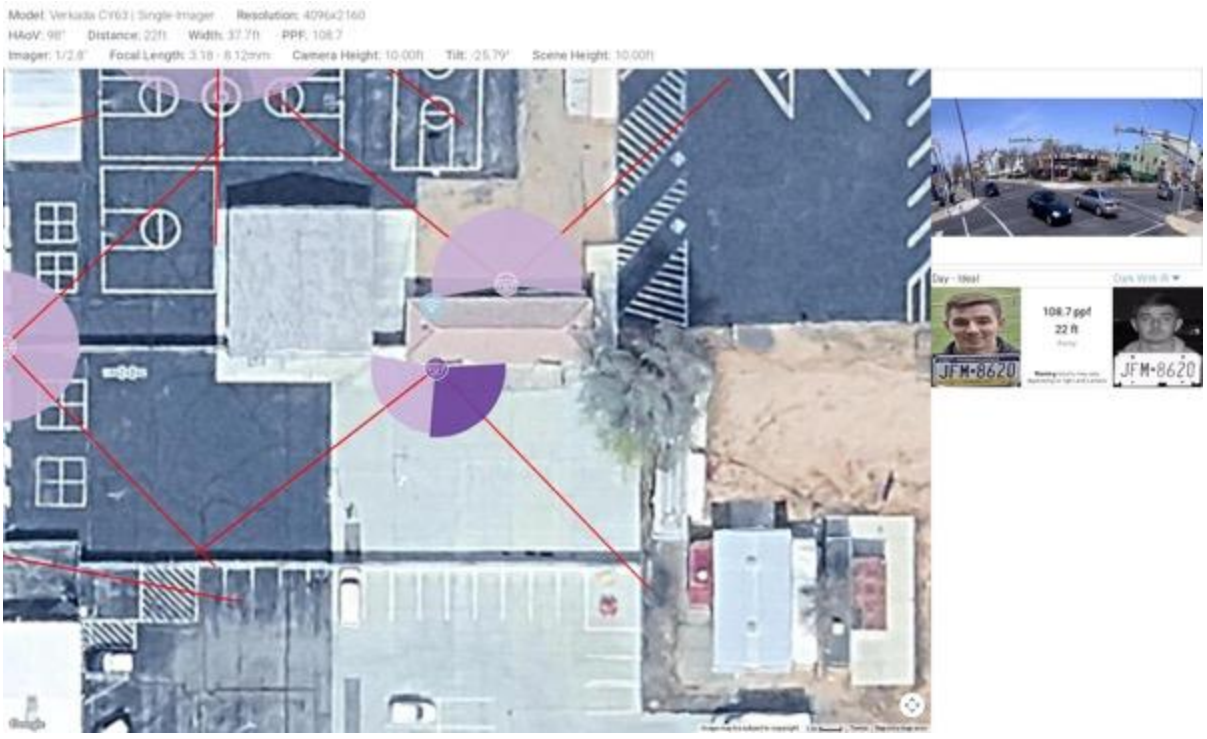
CY63 5: Imager 2



CY63 6: Imager 1



CY63 6: Imager 2



CY63 7: Imager 1



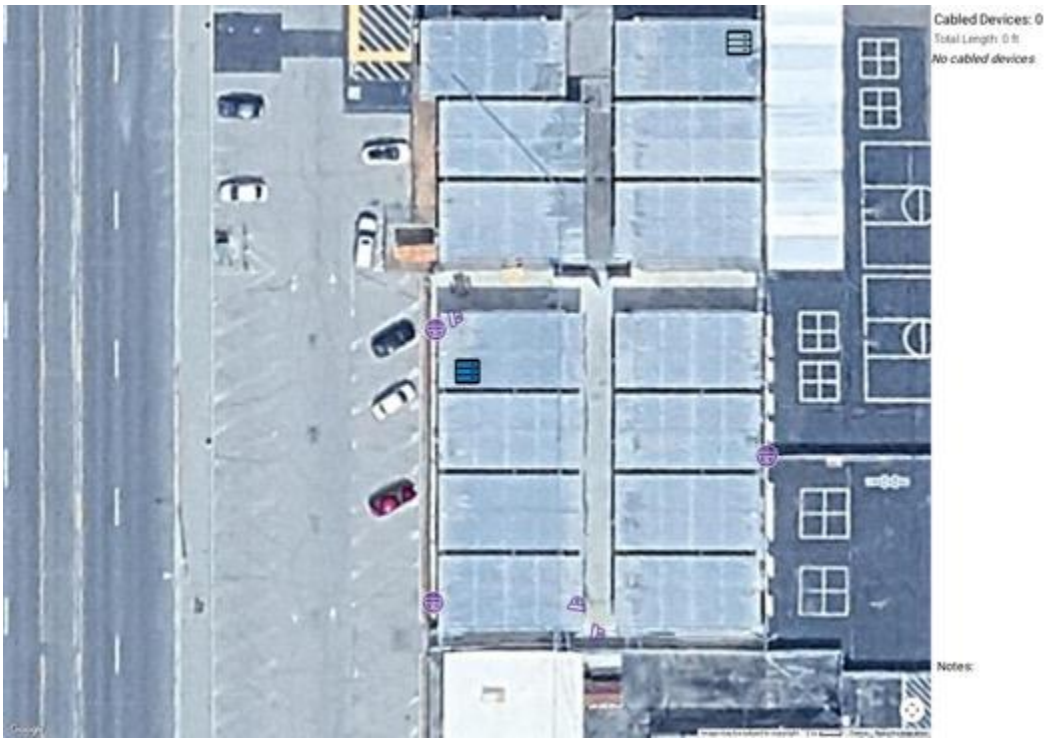
CY63 7: Imager 2



CY63 8: Imager 1



CY63 8: Imager 2



Network Closet 1



Network Closet 2



Network Closet 3



Network Closet 4



Network Closet 5

Site Photographs



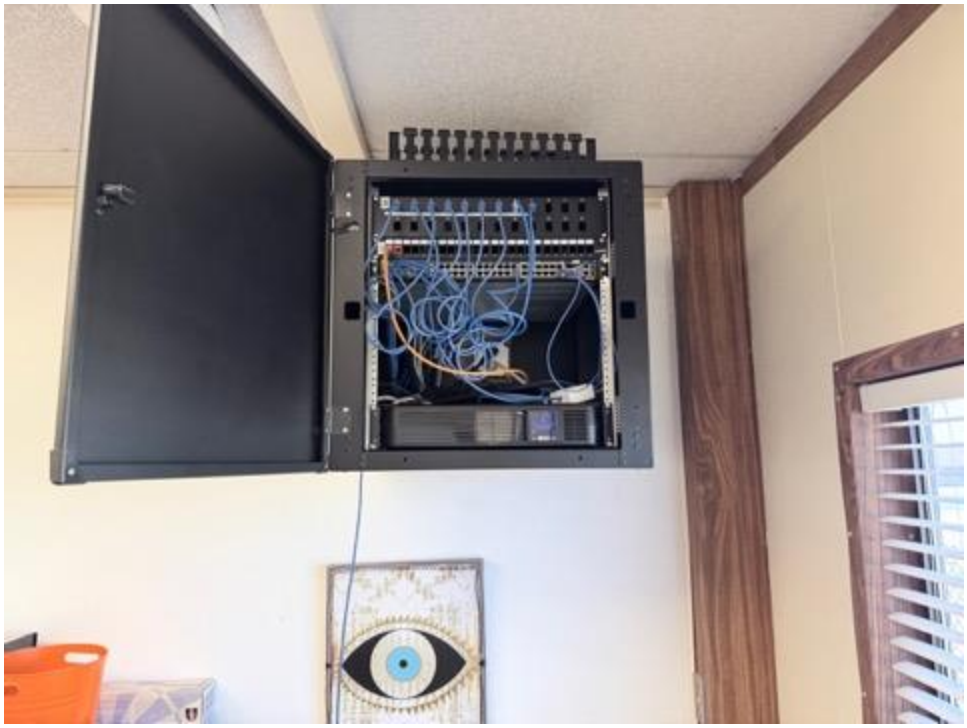
Site Photo 1



Site Photo 2



Site Photo 3



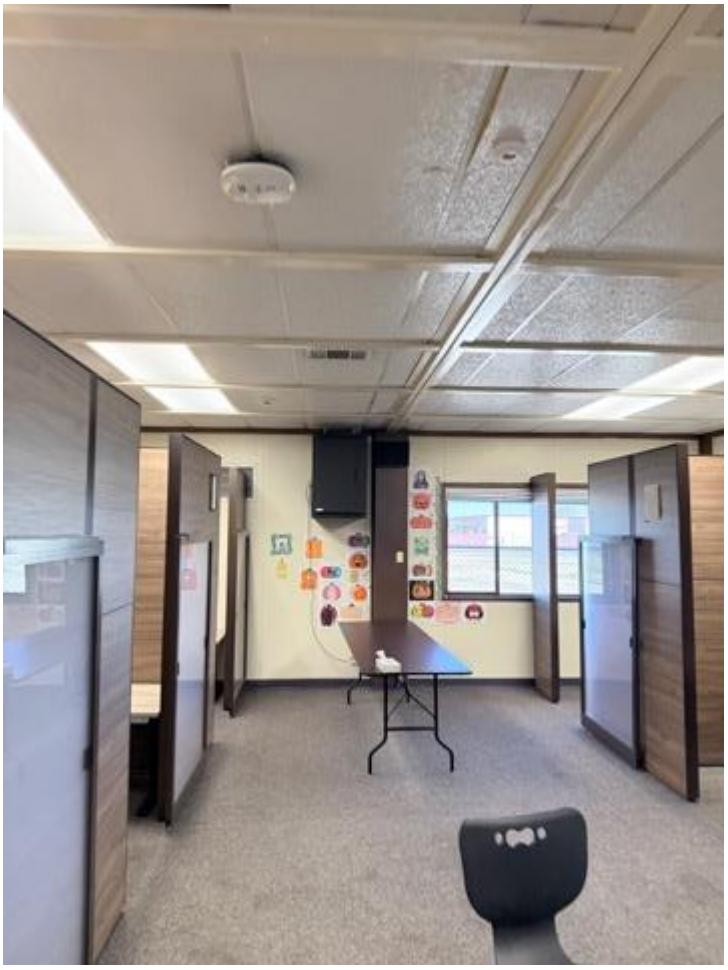
Site Photo 4



Site Photo 5



Site Photo 6



Site Photo 7



Site Photo 8



Site Photo 9



Site Photo 10



Site Photo 11



Site Photo 12



Site Photo 13



Site Photo 14



Site Photo 15



Site Photo 16



Site Photo 17



Site Photo 18



Site Photo 19



Site Photo 20



Site Photo 21



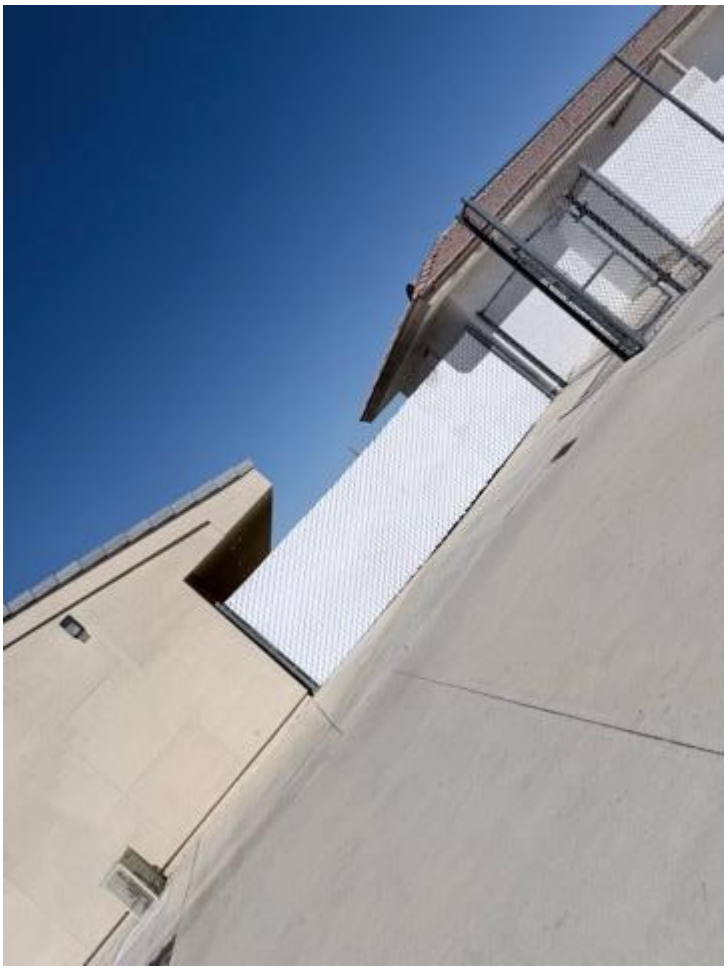
Site Photo 22



Site Photo 23



Site Photo 24



Site Photo 25



Site Photo 26



Site Photo 27



Site Photo 28



Site Photo 29



Site Photo 30



Site Photo 31



Site Photo 32



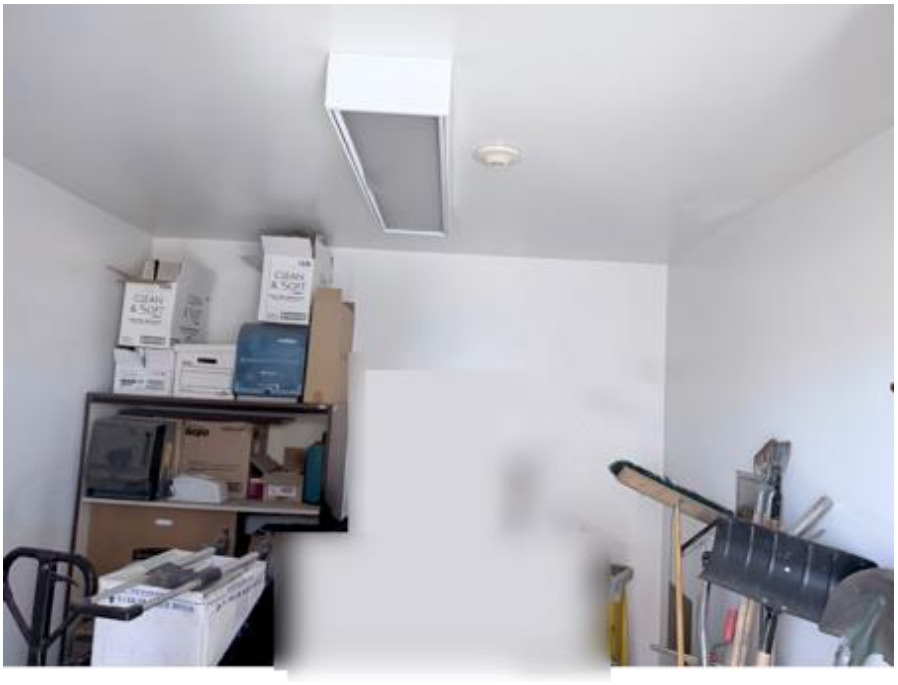
Site Photo 33



Site Photo 34



Site Photo 35



Site Photo 36



Site Photo 37

SCOPE OF WORK

Site 3: Frost County Early Education Center

San Bernardino County Superintendent of Schools • Verkada Video Surveillance System

Project	Owner	Camera Units	Document Date
SBCSS Verkada Video Surveillance	San Bernardino County Superintendent of Schools	13 camera units (owner-furnished)	March 2026

1. Scope Overview Summary

This Scope of Work describes the labor, materials, and services to be provided by the Contractor for the installation and commissioning of the Verkada video surveillance system at Frost County Early Education Center, a facility of the San Bernardino County Superintendent of Schools (SBCSS). All Verkada cameras, mounting accessories, and configured switch ports are Owner-furnished. The Contractor shall furnish structured cabling, conduit, pathways, consumables, and all other materials required to complete the installation.

The Frost County Early Education Center campus comprises four classroom buildings and one medical building situated at the rear of the property. The facility is served by one Main Distribution Frame (MDF) and four Intermediate Distribution Frame (IDF) locations; refer to the site-specific documentation provided for exact locations.

Each building maintains a dedicated network distribution point, and the majority of structures feature drop-ceiling construction. The contractor shall home-run all camera cabling to the most appropriate and nearest network location for each respective building.

The contractor shall furnish and install patch panels, keystones, and patch cables throughout. All infrastructure shall be clearly and consistently labeled in accordance with industry best practices.

2. Owner-Furnished Equipment

The following Verkada equipment will be provided by the Owner (SBCSS) for installation at this site. The Contractor shall acknowledge receipt of all materials prior to beginning work and report any discrepancies or damage in writing within 48 hours of delivery.

Item Description	Part Number	Qty	Category
Exterior Camera CD63E	CD63-512E-HW	6	Camera
Exterior Camera CF83 180-Degree	CF83-512E-HW	4	Camera
Verkada CY63 Dual-Sensor Camera	CY63-1TBE-HW	3	Camera
Verkada CY Junction Box Mount	ACC-MNT-YJBOX-1	3	Mount
Verkada Angle Mount	ACC-MNT-ANGLE-1	4	Mount

Note: Owner-furnished equipment is provided for installation only. Contractor shall not substitute, modify, or return any Owner-furnished items without prior written authorization from SBCSS.

3. Contractor-Furnished Materials

The Contractor is responsible for furnishing all materials required to complete the installation that are not listed above as Owner-furnished. Contractor-furnished materials shall include, but are not limited to:

- Category 6A structured cabling (plenum-rated, UL listed) for all camera runs
- Conduit, fittings, and EMT raceway for all exposed cable runs (interior and exterior)
- Junction boxes, back boxes, and surface raceways as required for a complete and clean installation
- Weatherproof conduit fittings, seals, and duct seal compound for all exterior penetrations
- Patch panels, keystone jacks, and cable management as needed at network termination points
- Mounting hardware: screws, anchors, toggle bolts, masonry anchors, and structural backing as required
- Cable labels, permanent markers, and documentation materials
- Consumables: wire ties, lacing, split loom, and protective materials

4. Scope of Installation Services

The Contractor shall provide the following services for this site:

- Receive, inspect, and verify all Owner-furnished Verkada equipment upon delivery. Report discrepancies or damage to the Owner in writing within 48 hours.
- Perform a pre-installation site walk with the Owner’s representative to confirm camera mounting locations, cabling routes, and any site-specific access requirements.
- Install 6 Verkada CD63E exterior dome cameras at Owner-approved locations. Mount at approved height using furnished hardware. Provide weatherproof cable entry seals at all exterior penetrations.
- Install 4 Verkada CF83 180-degree wide-angle cameras at Owner-approved ceiling or eave locations. Confirm full 180° coverage of intended area during installation.
- Install 3 Verkada CY63 Dual-Sensor cameras using furnished CY Junction Box Mounts (ACC-MNT-YJBOX-1).
- Install Verkada Angle Mounts (ACC-MNT-ANGLE-1) at locations where the mounting surface does not provide adequate downward camera tilt. Adjust angle prior to final camera positioning.
- Furnish and install all structured cabling (minimum Cat6A, plenum-rated where required). Run cabling from each camera location to the designated network closet or PoE switch. Test all runs with a calibrated cable tester and document results. Label both ends of all cables to match the camera naming convention established by the Owner.
- Claim all cameras into the SBCSS Verkada Command organization. Assign each camera to the correct site and apply the approved camera naming convention. Confirm all cameras report online in the Command portal.
- Configure image settings for each camera: adjust zoom and focus (varifocal cameras), enable WDR where required, verify night vision performance, and apply privacy masks at any locations required by Owner.
- Conduct a final walkthrough with the Owner’s representative to verify coverage at all camera locations. Correct any pointing, focus, or obstruction issues identified during the walkthrough.
- Provide as-built documentation including: annotated floor plan showing all camera locations, cable schedule with cable ID, run length, and termination port, and a completed camera inventory list with serial numbers.

5. Work Not Included

The following items are explicitly excluded from this Scope of Work:

- Procurement or replacement of Owner-furnished Verkada cameras, accessories, or software licenses
- Network switching infrastructure (PoE switches, routers, firewalls) unless listed as Owner-furnished or specifically included by addendum
- Internet service, broadband, or cellular data services
- Structural modifications to walls, ceilings, or roofing systems
- Painting, patching, or cosmetic restoration beyond standard cable pathway patching
- Verkada Command organizational setup beyond camera claiming, site assignment, and naming (user management and advanced configuration to be performed by SBCSS IT or authorized Verkada partner)
- Ongoing maintenance, service contracts, or warranty response after system acceptance

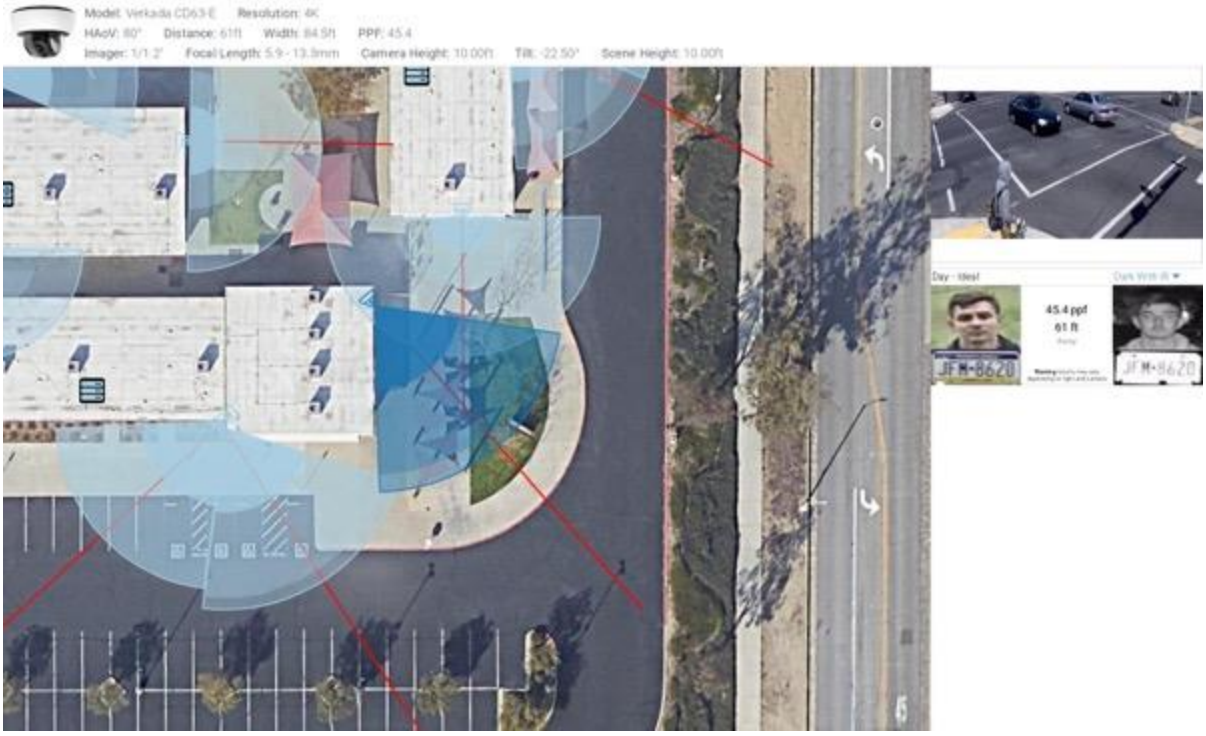
Frost County Early Education Center Site Survey & Camera Layout

IPVM Camera Coverage Analysis

IPVM Designer Calculation — March 2026. This output is the work product of the individual who created it. IPVM does not guarantee nor warranty the work therein nor its implementation.



Overview



CD63E 1



CD63E 2



CD63E 3



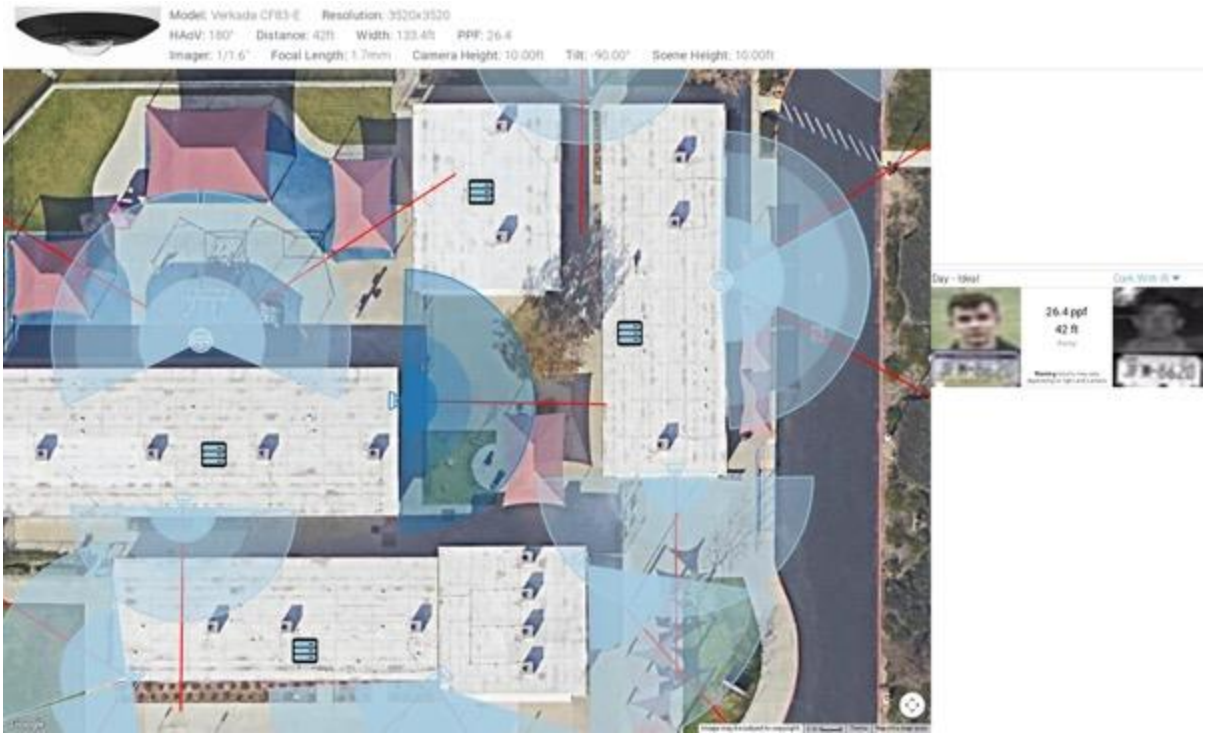
CD63E 4



CD63E 5



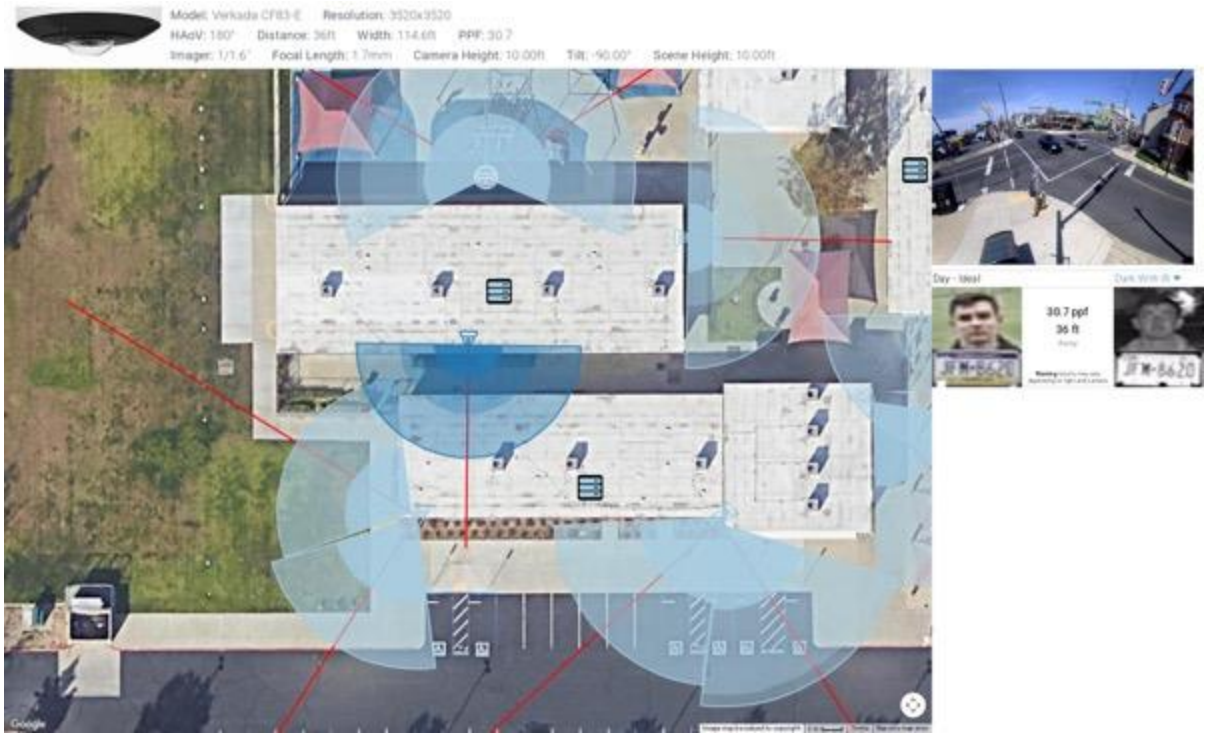
CD63E 6


Model: Verkada CF83-E Resolution: 3520x3520
HAoV: 180° Distance: 42ft Width: 133.4ft PPF: 26.4
Imager: 1/1.6" Focal Length: 1.7mm Camera Height: 10.00ft Tilt: -90.00° Scene Height: 10.00ft
26.4 ppf
42 ft

CF83 1


Model: Verkada CF83-E Resolution: 3520x3520
HAoV: 180° Distance: 45ft Width: 140.1ft PPF: 25.1
Imager: 1/1.6" Focal Length: 1.7mm Camera Height: 10.00ft Tilt: -90.00° Scene Height: 10.00ft
25.1 ppf
45 ft

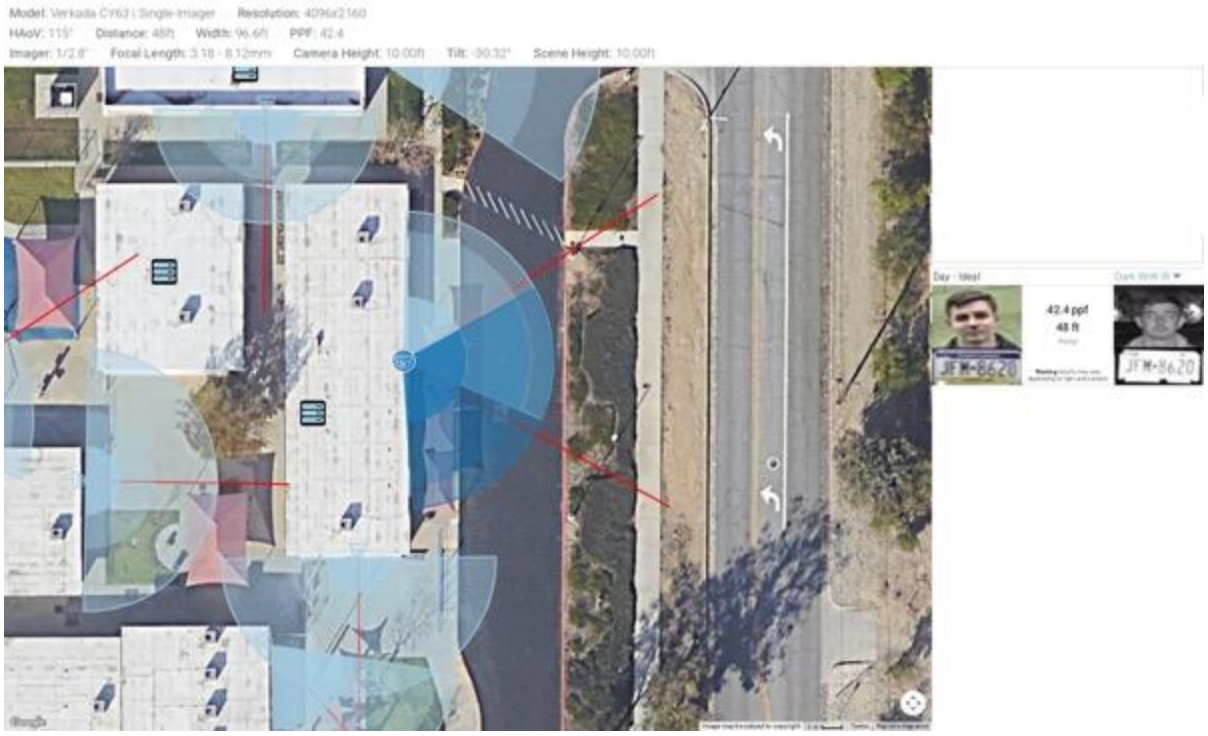
CF83 2


Model: Verkada CF83-E Resolution: 3520x3520
HAoV: 180° Distance: 36ft Width: 114.6ft PPF: 30.7
Image: 1/1.6" Focal Length: 1.7mm Camera Height: 10.00ft Tilt: -90.00° Scene Height: 10.00ft
Day - Ideal
30.7 ppf
36 ft

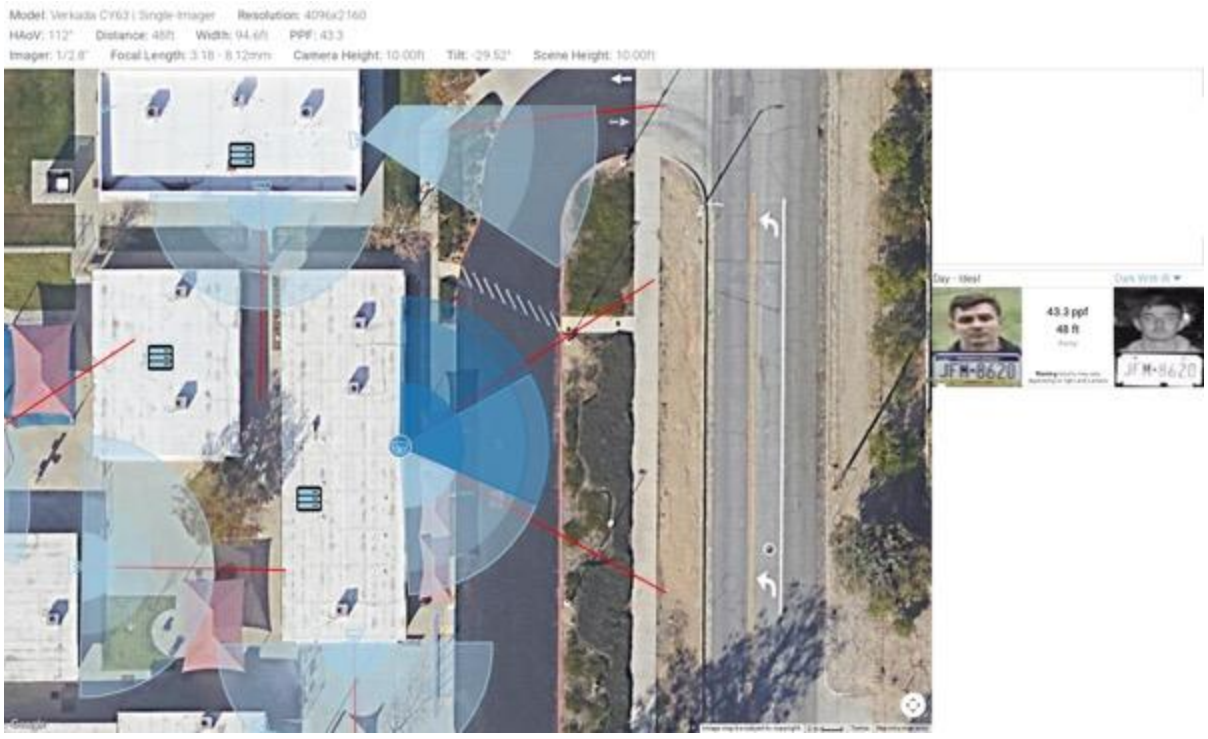
CF83 3


Model: Verkada CF83-E Resolution: 3520x3520
HAoV: 180° Distance: 36ft Width: 114.6ft PPF: 30.7
Image: 1/1.6" Focal Length: 1.7mm Camera Height: 10.00ft Tilt: -90.00° Scene Height: 10.00ft
Day - Ideal
30.7 ppf
36 ft

CF83 4



CY63 1: Imager 1



CY63 1: Imager 2



CY63 2: Imager 1



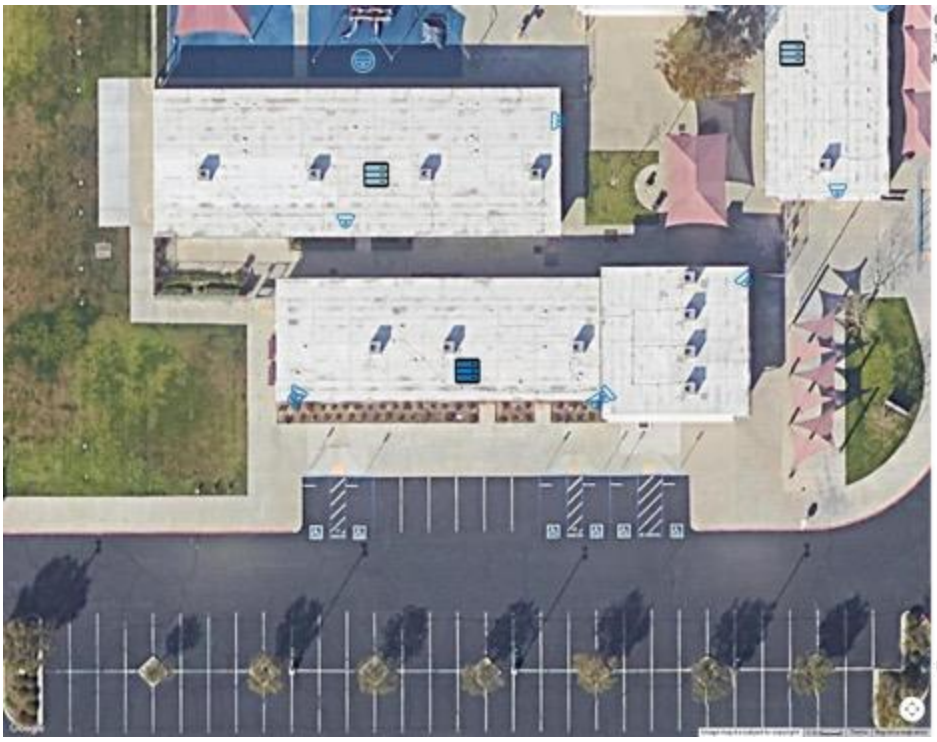
CY63 2: Imager 2



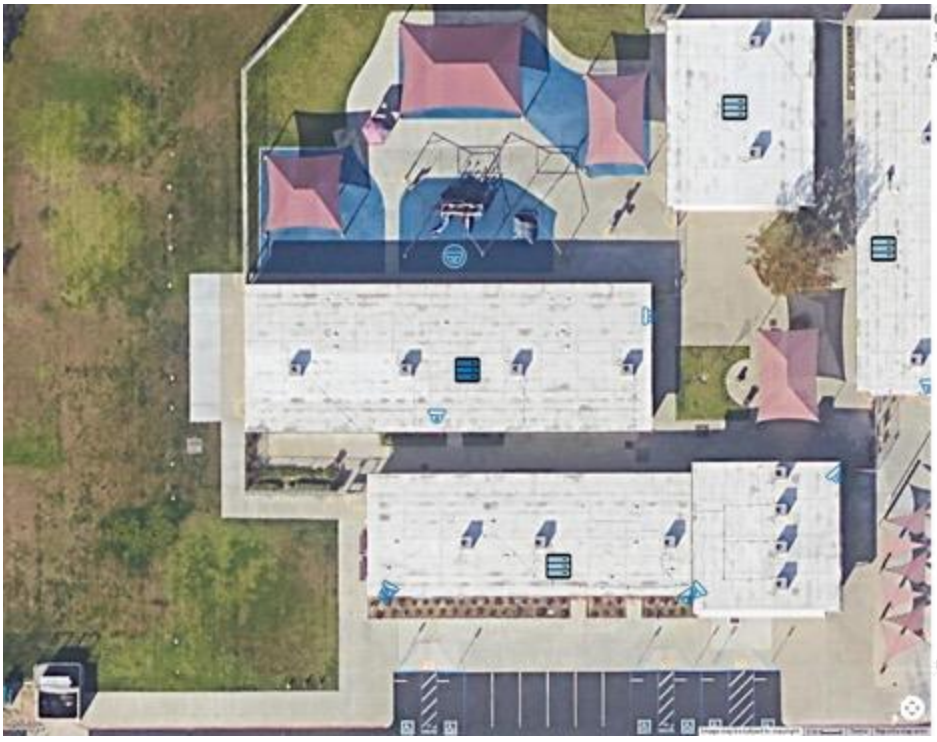
CY63 3: Imager 1



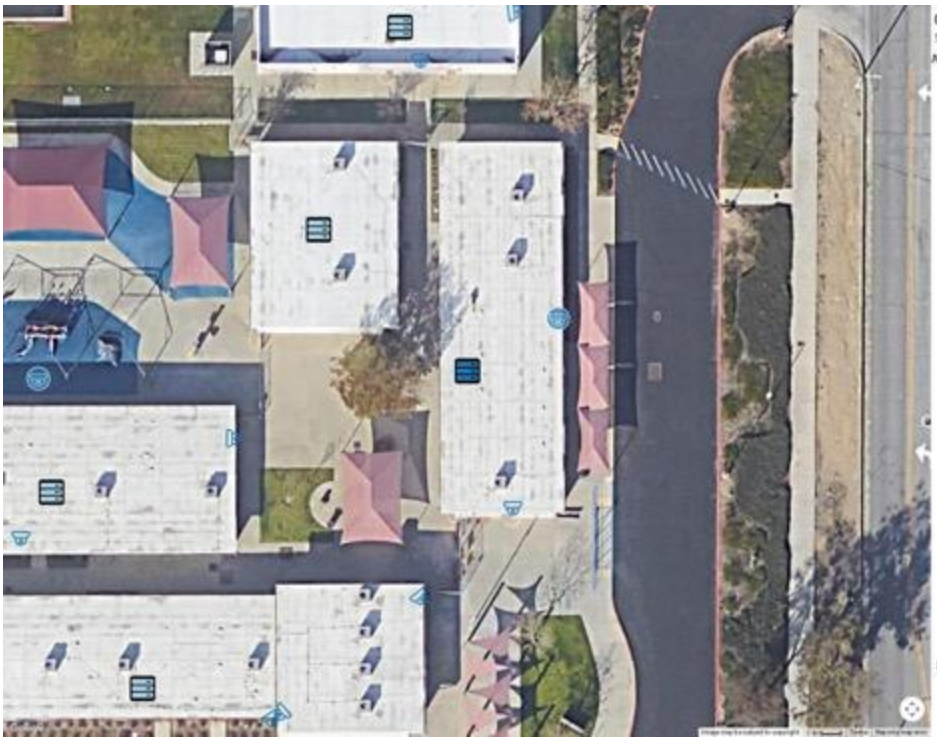
CY63 3: Imager 2



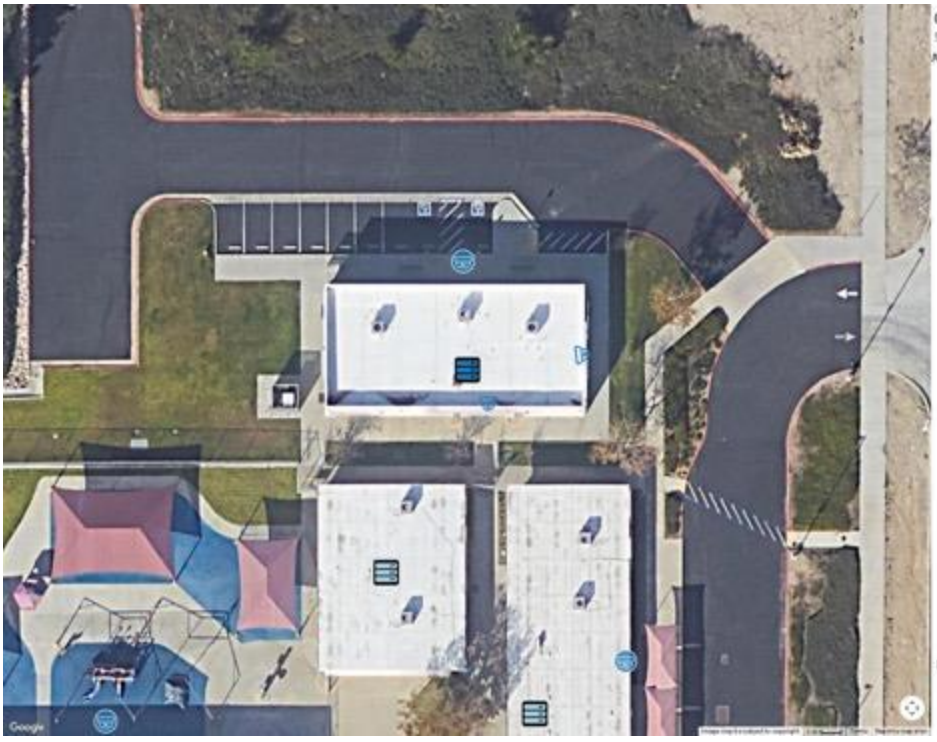
Network Closet 1



Network Closet 2



Network Closet 3



Network Closet 4



Network Closet 5

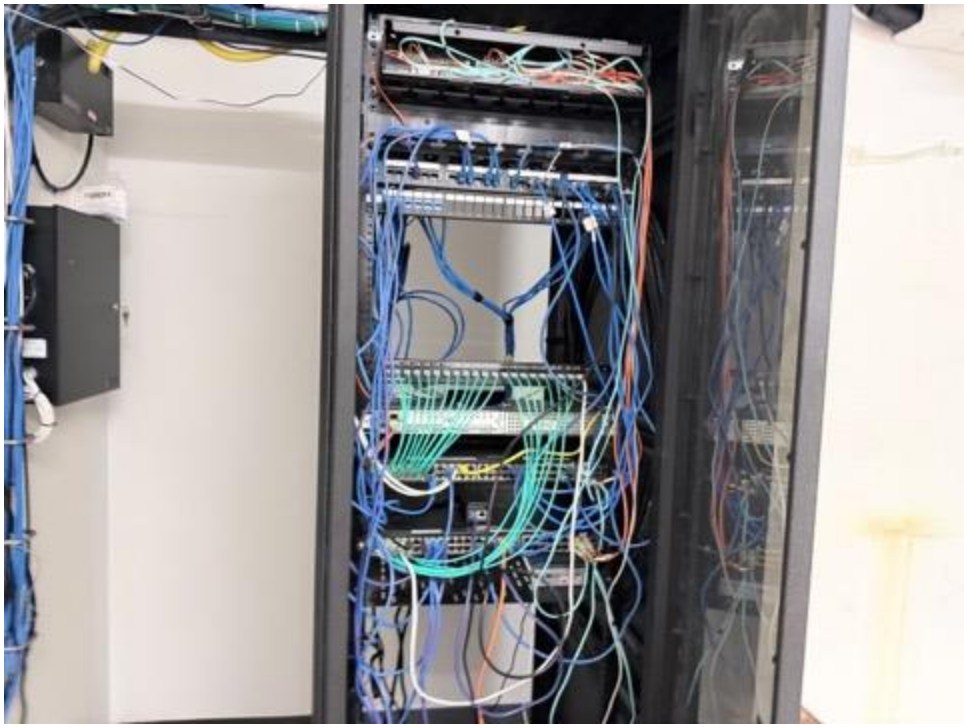
Site Photographs



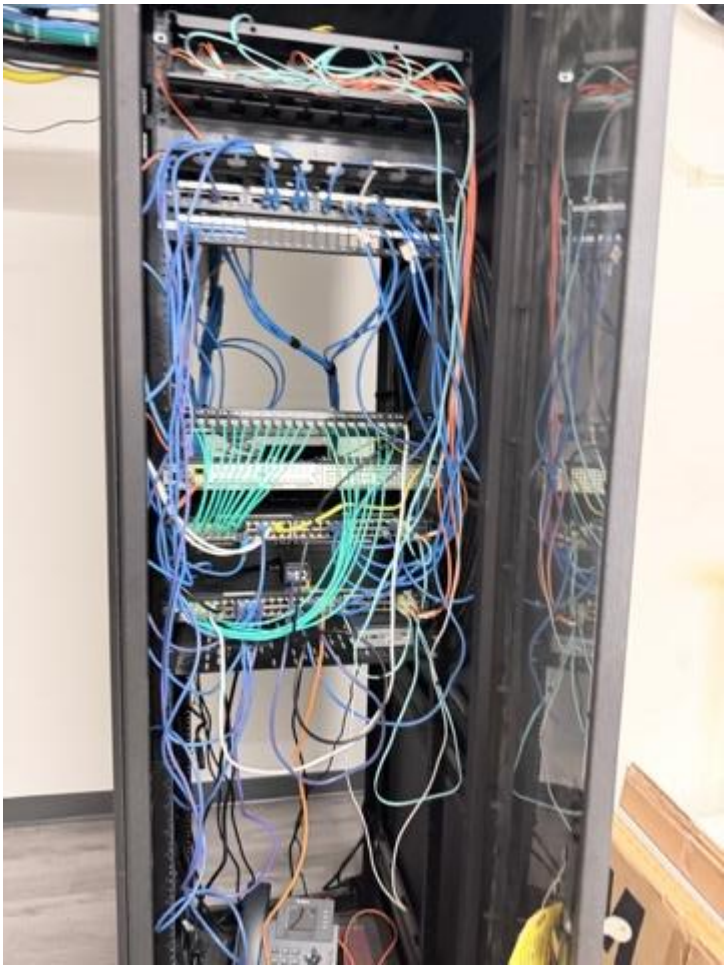
Site Photo 1



Site Photo 2



Site Photo 3



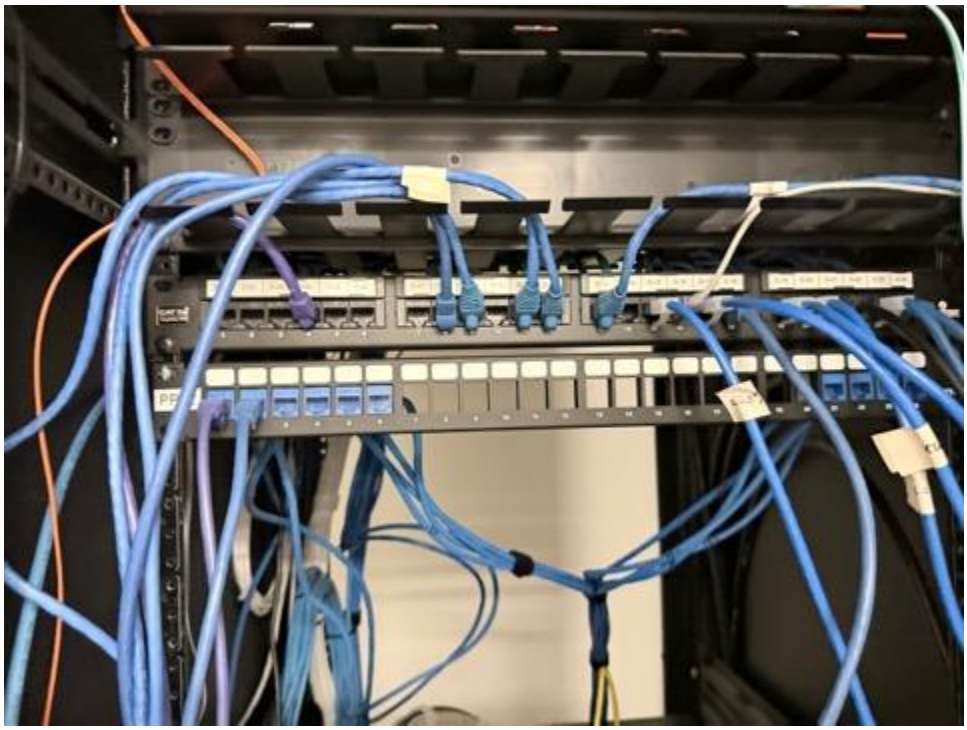
Site Photo 4



Site Photo 5



Site Photo 6



Site Photo 7



Site Photo 8



Site Photo 9



Site Photo 10



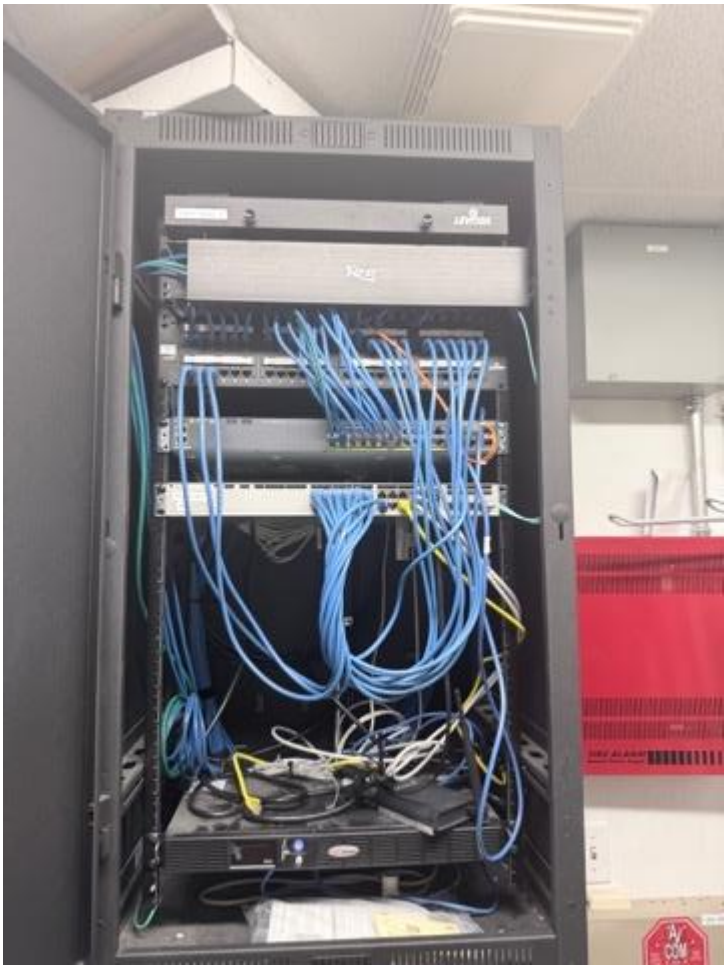
Site Photo 11



Site Photo 12



Site Photo 13



Site Photo 14

SCOPE OF WORK

Site 4: Live Oak Early Education Center

San Bernardino County Superintendent of Schools • Verkada Video Surveillance System

Project	Owner	Camera Units	Document Date
SBCSS Verkada Video Surveillance	San Bernardino County Superintendent of Schools	12 camera units (owner-furnished)	March 2026

1. Scope Overview Summary

This Scope of Work describes the labor, materials, and services to be provided by the Contractor for the installation and commissioning of the Verkada video surveillance system at Live Oak Early Education Center, a facility of the San Bernardino County Superintendent of Schools (SBCSS). All Verkada cameras, mounting accessories are Owner-furnished. The Contractor shall furnish structured cabling, conduit, pathways, consumables, and all other materials required to complete the installation.

The Live Oak Early Education Center campus comprises four classroom buildings. The facility is served by one Main Distribution Frame (MDF) and three Intermediate Distribution Frame (IDF) locations; refer to the site-specific documentation provided for exact locations.

Each building maintains a dedicated network distribution point, and the majority of structures feature drop-ceiling construction. The contractor shall home-run all camera cabling to the most appropriate and nearest network location for each respective building.

The contractor shall furnish and install patch panels, keystones, and patch cables throughout. All infrastructure shall be clearly and consistently labeled in accordance with industry best practices.

2. Owner-Furnished Equipment

The following Verkada equipment will be provided by the Owner (SBCSS) for installation at this site. The Contractor shall acknowledge receipt of all materials prior to beginning work and report any discrepancies or damage in writing within 48 hours of delivery.

Item Description	Part Number	Qty	Category
Exterior Camera CD63E	CD63-512E-HW	2	Camera
Exterior Camera CF83 180-Degree	CF83-512E-HW	3	Camera
Exterior Camera CH63 4-Sensor	CH63-2TBE-HW	1	Camera
Verkada CP63 4K PTZ Camera	CP63-1TBE-HW	1	Camera
Verkada CY63 Dual-Sensor Camera	CY63-1TBE-HW	5	Camera
Verkada PTZ Arm Mount	ACC-MNT-XLARM-1	1	Mount
Verkada Corner Mount	ACC-MNT-CORNER-1	3	Mount

Verkada Arm Mount	ACC-MNT-ARM-1	2	Mount
Verkada Pendant Cap Mount	ACC-MNT-PEND-1	1	Mount
Verkada 2-Camera Pendant Cap Mount	ACC-MNT-YPEND-1	1	Mount
Verkada CY Junction Box Mount	ACC-MNT-YJBOX-1	4	Mount

Note: Owner-furnished equipment is provided for installation only. Contractor shall not substitute, modify, or return any Owner-furnished items without prior written authorization from SBCSS.

3. Contractor-Furnished Materials

The Contractor is responsible for furnishing all materials required to complete the installation that are not listed above as Owner-furnished. Contractor-furnished materials shall include, but are not limited to:

- Category 6A structured cabling (plenum-rated, UL listed) for all camera runs
- Conduit, fittings, and EMT raceway for all exposed cable runs (interior and exterior)
- Junction boxes, back boxes, and surface raceways as required for a complete and clean installation
- Weatherproof conduit fittings, seals, and duct seal compound for all exterior penetrations
- Patch panels, keystone jacks, and cable management as needed at network termination points
- Mounting hardware: screws, anchors, toggle bolts, masonry anchors, and structural backing as required
- Cable labels, permanent markers, and documentation materials
- Consumables: wire ties, lacing, split loom, and protective materials

4. Scope of Installation Services

The Contractor shall provide the following services for this site:

- Receive, inspect, and verify all Owner-furnished Verkada equipment upon delivery. Report discrepancies or damage to the Owner in writing within 48 hours.
- Perform a pre-installation site walk with the Owner’s representative to confirm camera mounting locations, cabling routes, and any site-specific access requirements.
- Install 2 Verkada CD63E exterior dome cameras at Owner-approved locations. Mount at approved height using furnished hardware. Provide weatherproof cable entry seals at all exterior penetrations.
- Install 3 Verkada CF83 180-degree wide-angle cameras at Owner-approved ceiling or eave locations. Confirm full 180° coverage of intended area during installation.
- Install 1 Verkada CH63 4-Sensor multi-directional camera. Mount at ceiling or elevated locations per Owner direction. Orient each of the four sensor heads to cover designated coverage zones. Requires PoE++ (802.3bt) power delivery.
- Install 5 Verkada CY63 Dual-Sensor cameras using furnished CY Junction Box Mounts (ACC-MNT-YJBOX-1).
- Install 1 Verkada CP63 4K PTZ camera using the furnished PTZ Arm Mount (ACC-MNT-XLARM-1). Confirm mounting structure rigidity and vibration-free installation. Program PTZ patrol routes and presets in Verkada Command upon system commissioning.
- Install Verkada Corner Mounts (ACC-MNT-CORNER-1) at building corners or angled surfaces where a standard flat mount is not suitable. Confirm alignment covers the intended coverage zone.

- Install Verkada Arm Mounts (ACC-MNT-ARM-1) at locations requiring standoff from the mounting surface. Anchor to structural backing; do not mount to drywall or finished surface alone.
- Install Verkada Pendant / 2-Camera Pendant Cap Mounts at designated ceiling pendant locations. Confirm ceiling structure supports pendant mount loading per manufacturer specification.
- Install Verkada PTZ Arm Mount (ACC-MNT-XLARM-1) on a structurally rigid wall or post. Ensure mounting point is free of vibration and can support the combined mount and camera load.
- Furnish and install all structured cabling (minimum Cat6A, plenum-rated where required). Run cabling from each camera location to the designated network closet or PoE switch. Test all runs with a calibrated cable tester and document results. Label both ends of all cables to match the camera naming convention established by the Owner.
- Claim all cameras into the SBCSS Verkada Command organization. Assign each camera to the correct site and apply the approved camera naming convention. Confirm all cameras report online in the Command portal.
- Configure image settings for each camera: adjust zoom and focus (varifocal cameras), enable WDR where required, verify night vision performance, and apply privacy masks at any locations required by Owner.
- Conduct a final walkthrough with the Owner's representative to verify coverage at all camera locations. Correct any pointing, focus, or obstruction issues identified during the walkthrough.
- Provide as-built documentation including: annotated floor plan showing all camera locations, cable schedule with cable ID, run length, and termination port, and a completed camera inventory list with serial numbers.

⚠ SPECIAL CONDITION: This site includes a Verkada CP63 4K PTZ (Pan-Tilt-Zoom) camera. Contractor shall program PTZ patrol routes and presets in Verkada Command as directed by the Owner. PTZ mounting surface must be structurally rigid and vibration-free. PTZ operation shall be verified at system acceptance.

5. Work Not Included

The following items are explicitly excluded from this Scope of Work:

- Procurement or replacement of Owner-furnished Verkada cameras, accessories, or software licenses
- Network switching infrastructure (PoE switches, routers, firewalls) unless listed as Owner-furnished or specifically included by addendum
- Internet service, broadband, or cellular data services
- Structural modifications to walls, ceilings, or roofing systems
- Painting, patching, or cosmetic restoration beyond standard cable pathway patching
- Verkada Command organizational setup beyond camera claiming, site assignment, and naming (user management and advanced configuration to be performed by SBCSS IT or authorized Verkada partner)
- Ongoing maintenance, service contracts, or warranty response after system acceptance

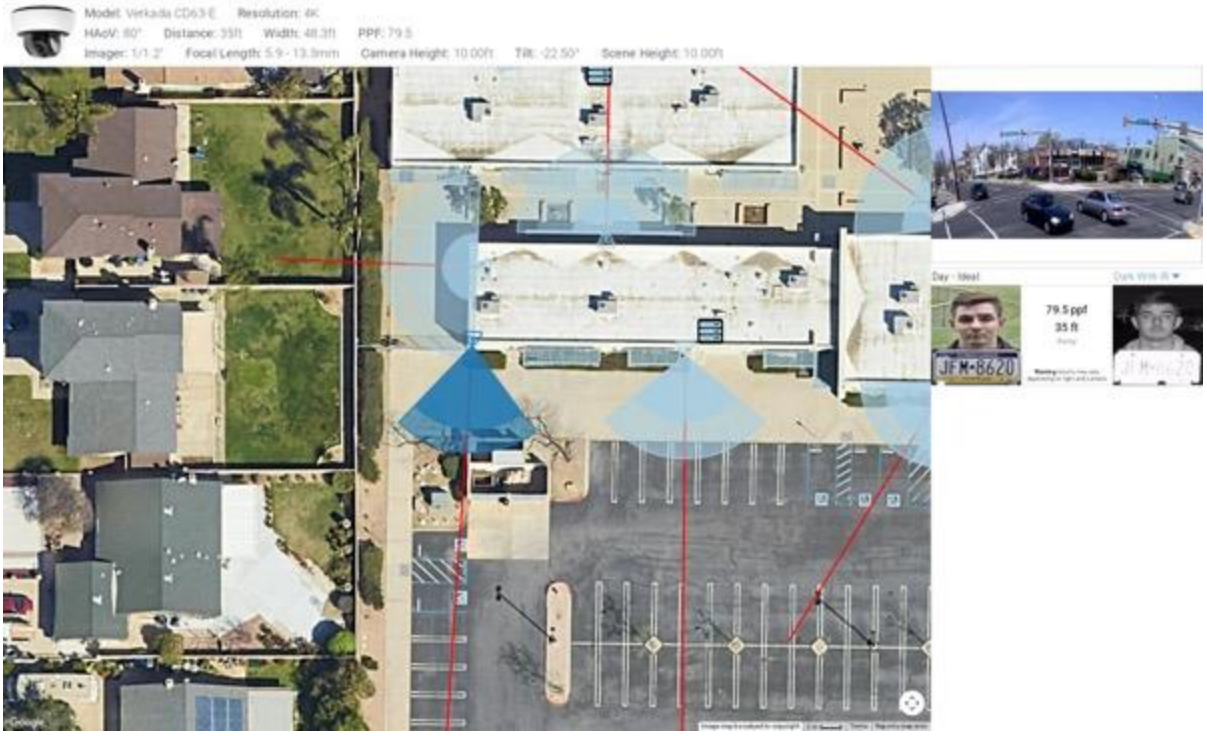
Live Oak Early Education Center Site Survey & Camera Layout

IPVM Camera Coverage Analysis

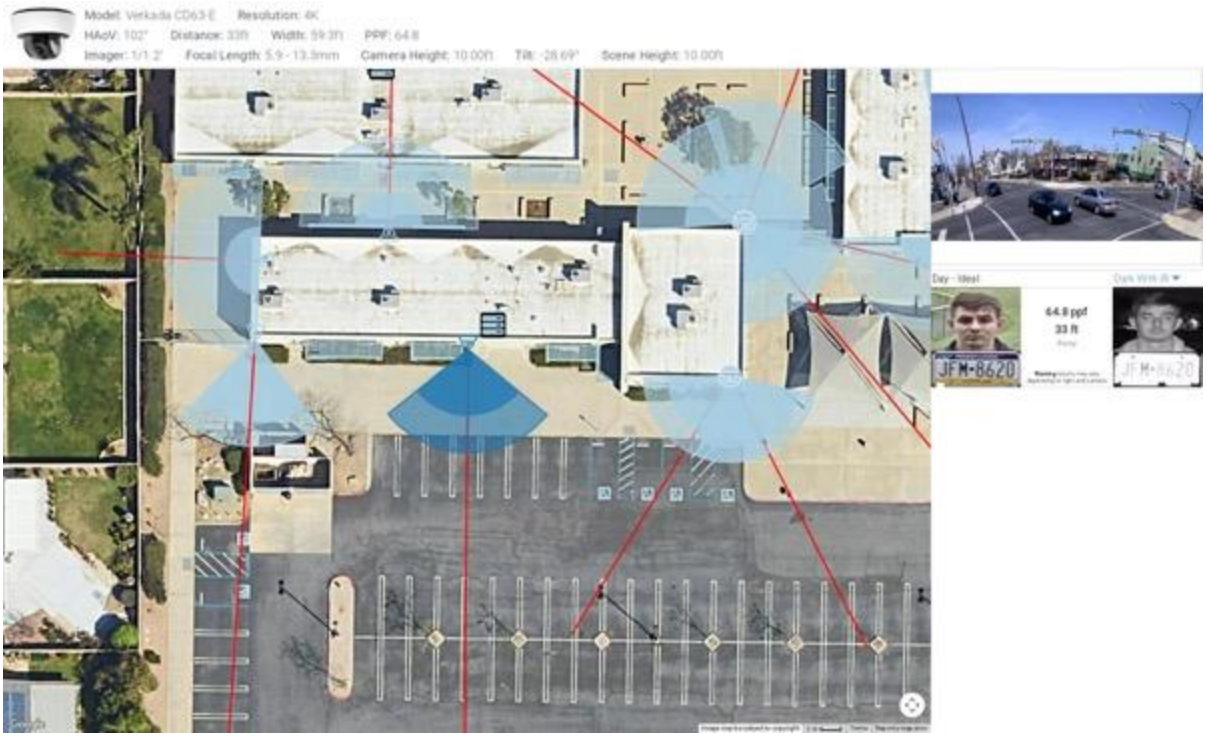
IPVM Designer Calculation — March 2026. This output is the work product of the individual who created it. IPVM does not guarantee nor warranty the work therein nor its implementation.



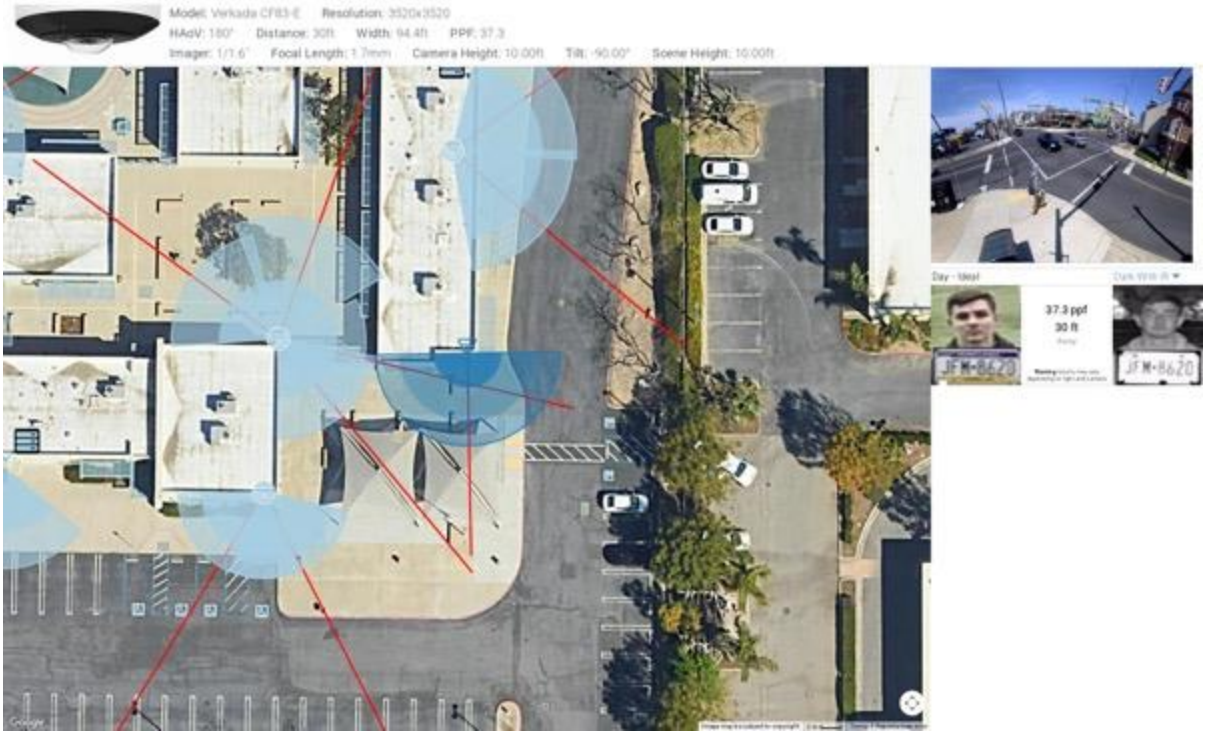
Overview



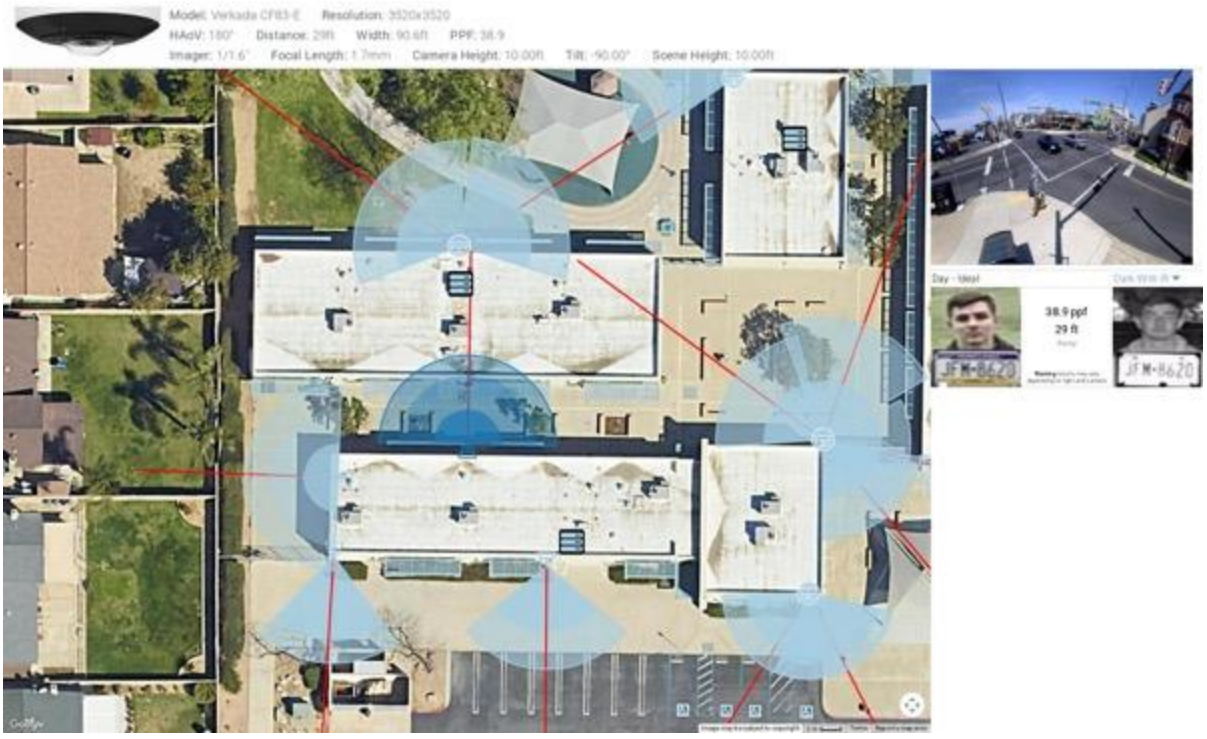
CD63E 1



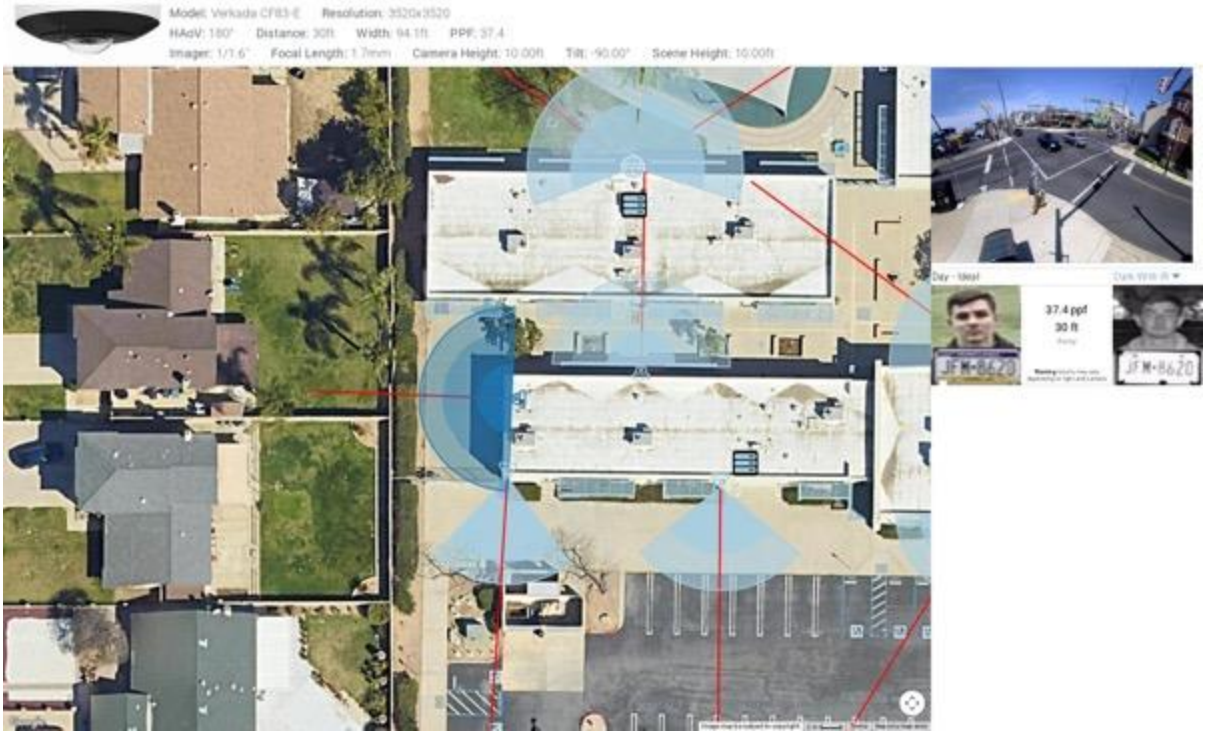
CD63E 2


Model: Verkada CF83-E Resolution: 3520x3520
HAoV: 180° Distance: 30ft Width: 94.4ft PPF: 37.3
Image: 1/1.6" Focal Length: 1.7mm Camera Height: 10.00ft Tilt: -90.00° Scene Height: 10.00ft
Day - Ideal
37.3 ppf
30 ft

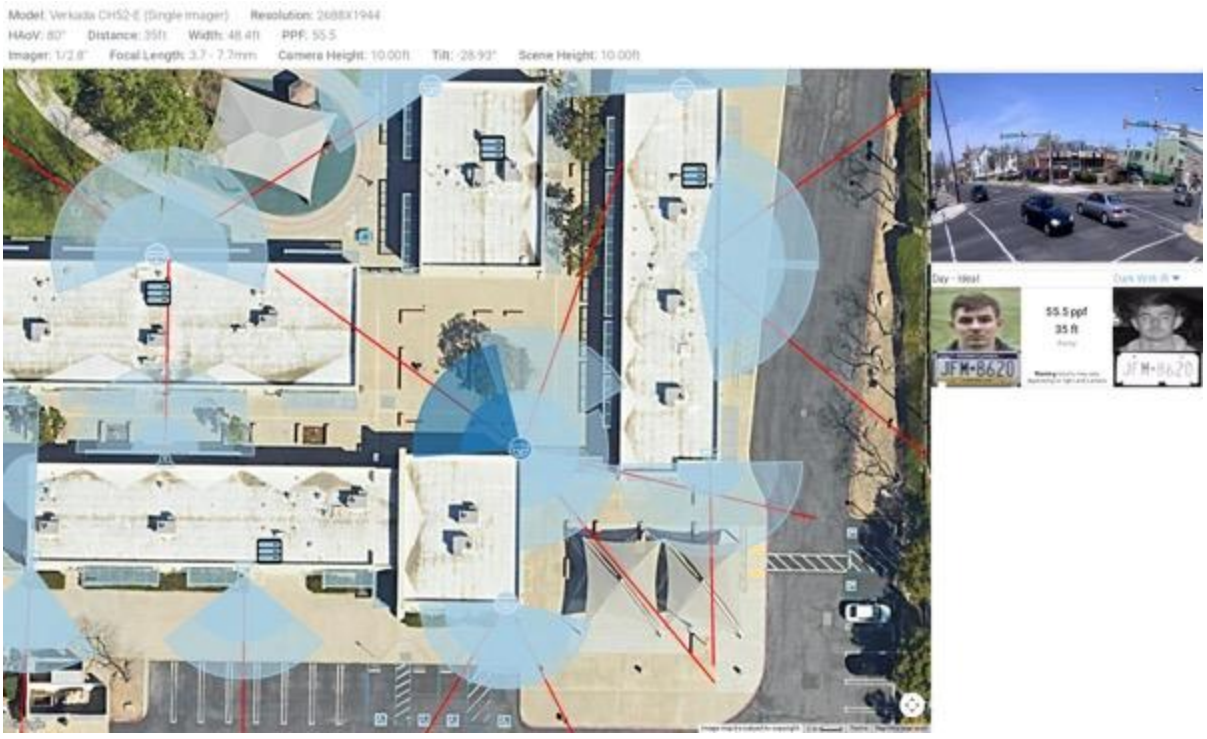
CF83 1


Model: Verkada CF83-E Resolution: 3520x3520
HAoV: 180° Distance: 29ft Width: 90.6ft PPF: 38.9
Image: 1/1.6" Focal Length: 1.7mm Camera Height: 10.00ft Tilt: -90.00° Scene Height: 10.00ft
Day - Ideal
38.9 ppf
29 ft

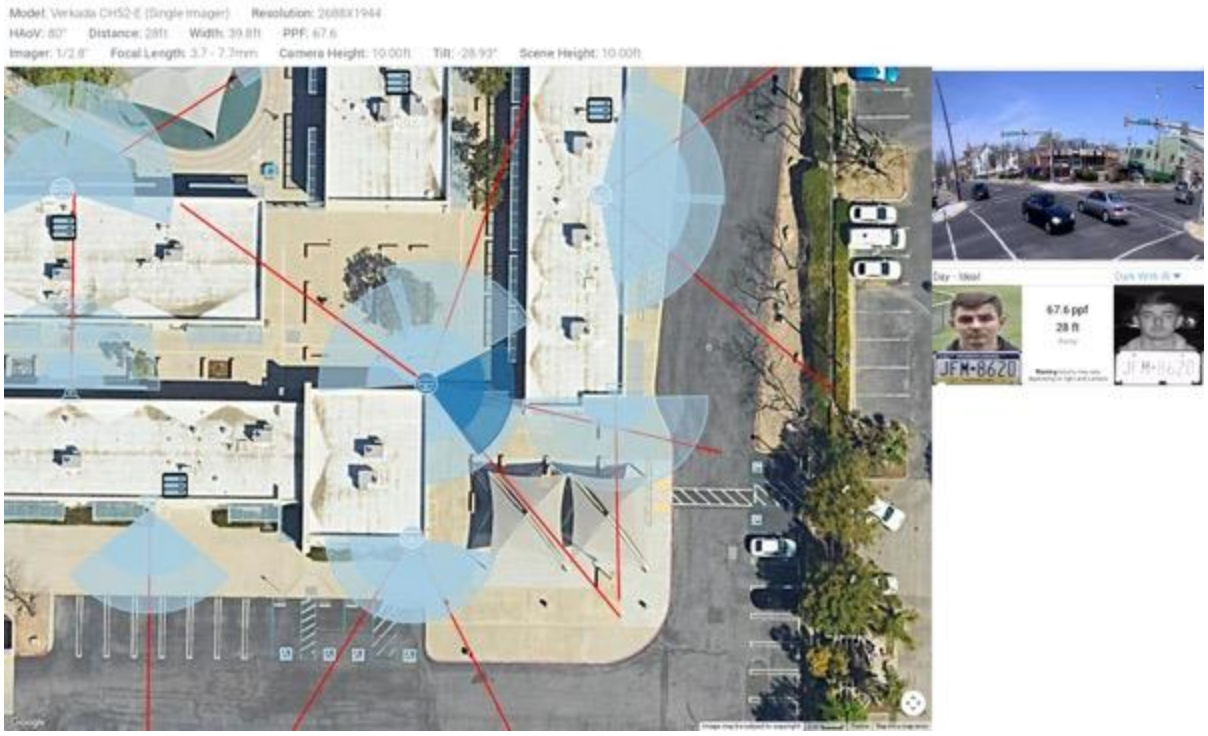
CF83 2



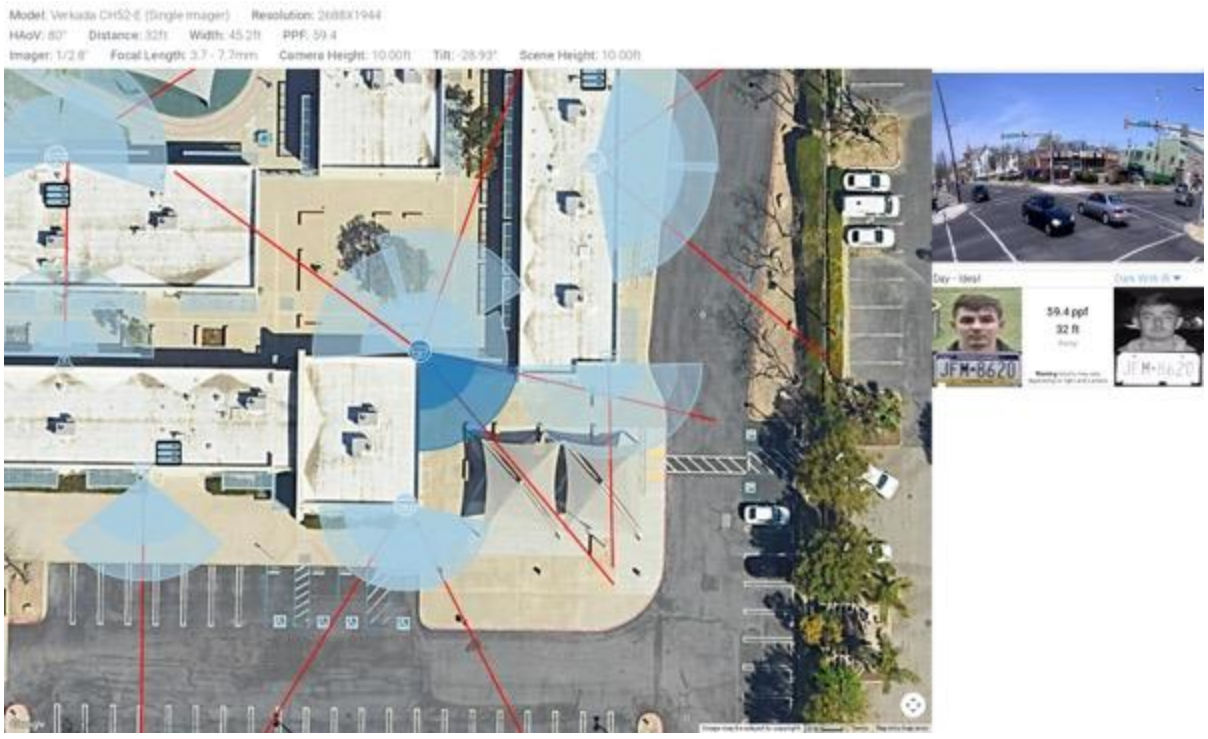
CF83 3



CH63 1: Imager 1



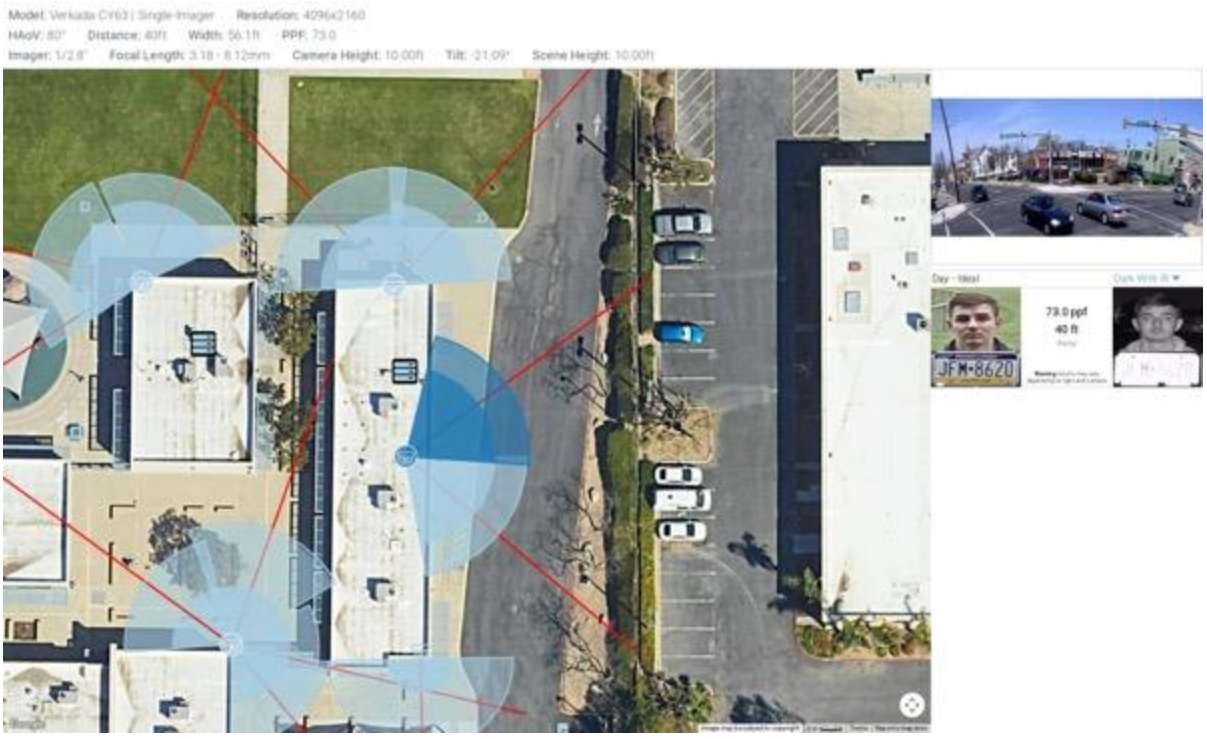
CH63 1: Imager 2



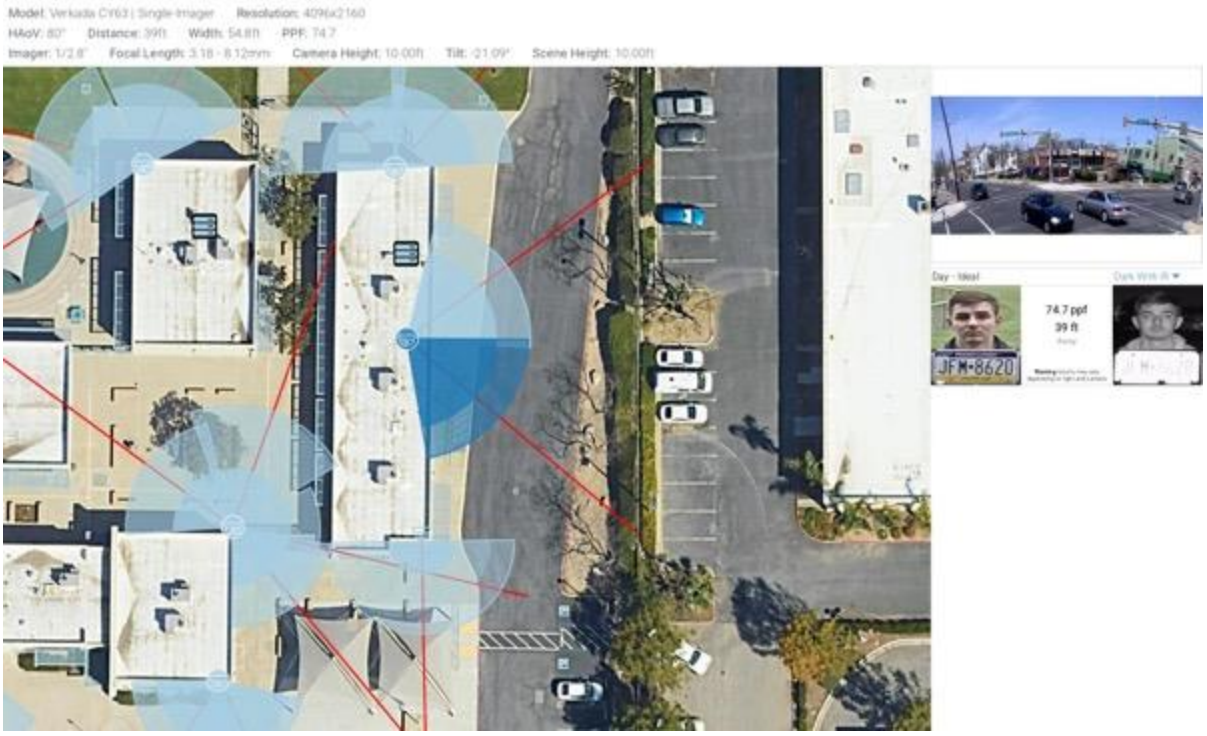
CH63 1: Imager 3



CH63 1: Imager 4



CY63 1: Imager 1



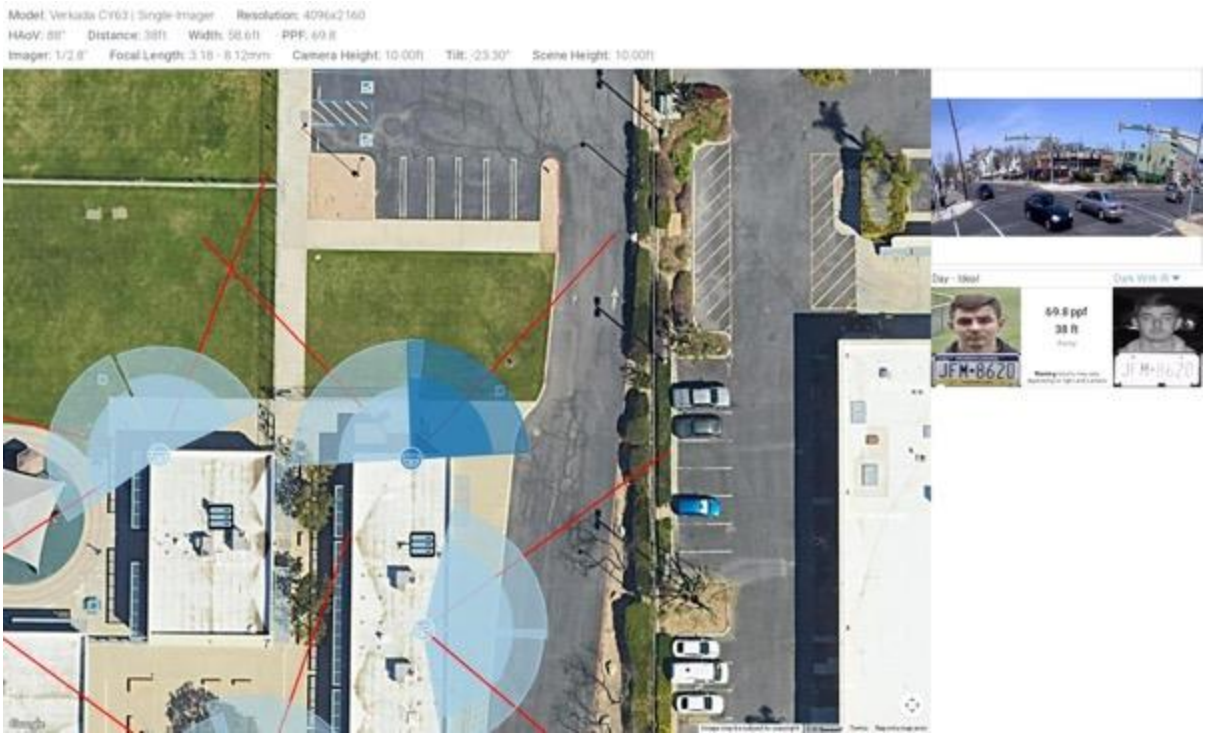
CY63 1: Imager 2



CY63 2: Imager 1



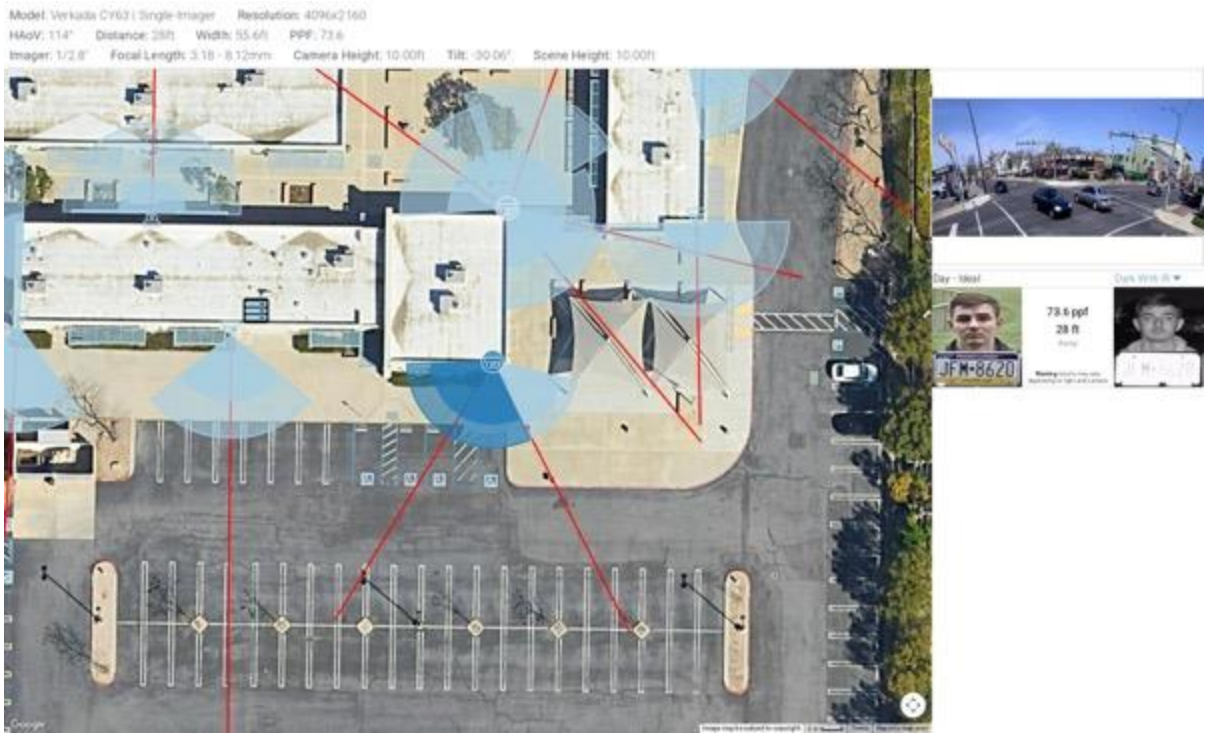
CY63 2: Imager 2



CY63 3: Imager 1



CY63 3: Imager 2



CY63 4: Imager 1



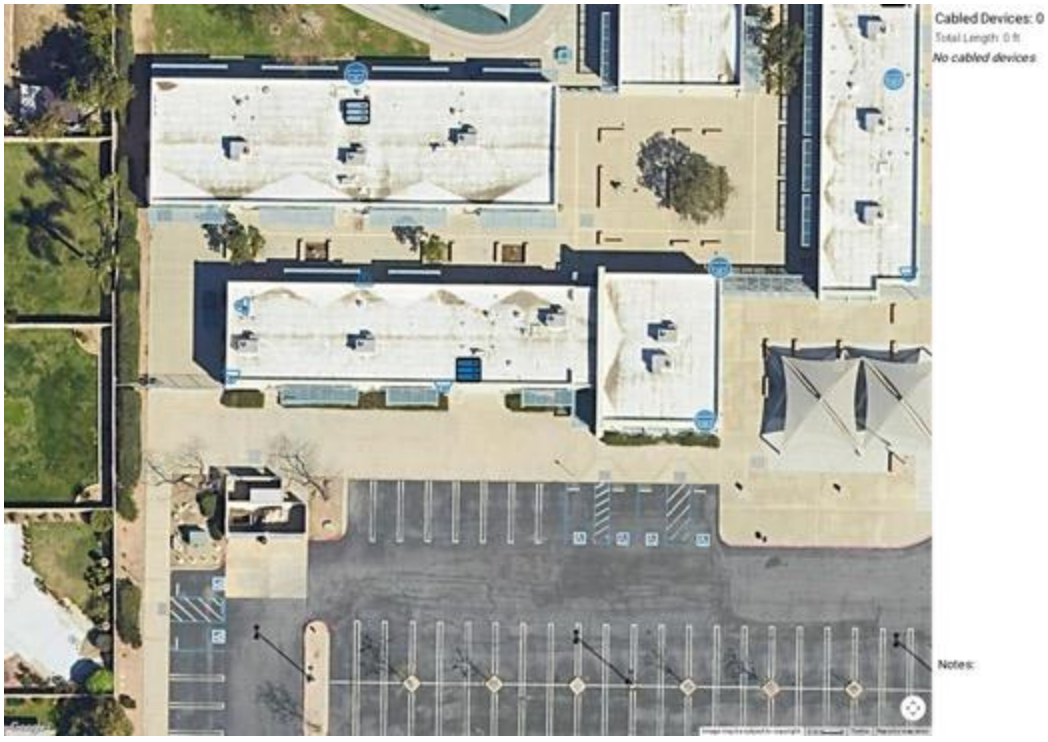
CY63 4: Imager 2



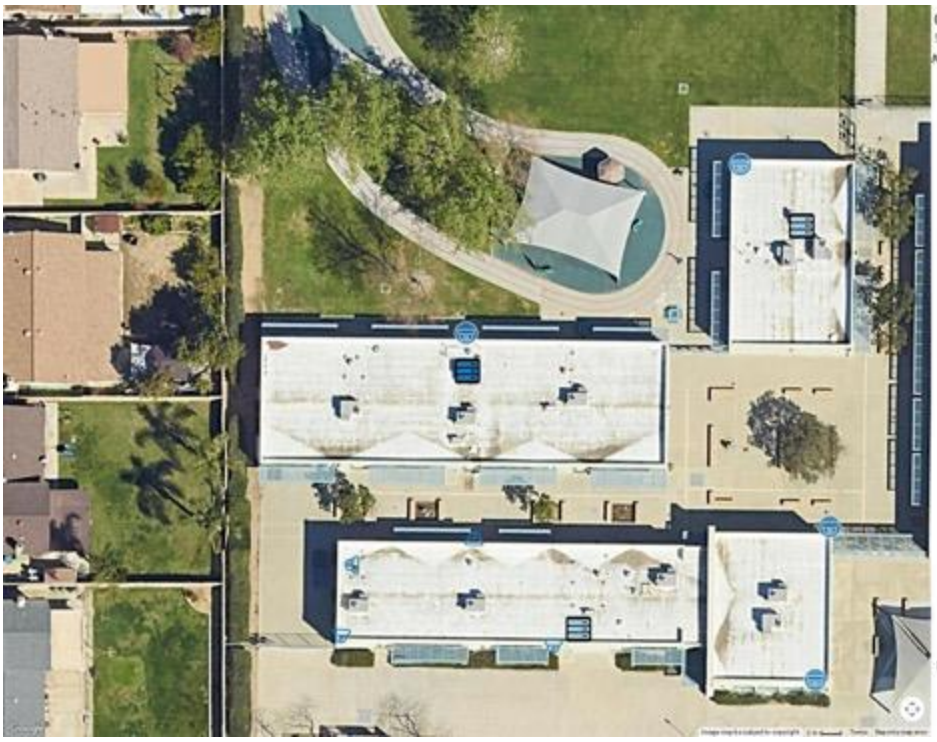
CY63 5: Imager 1



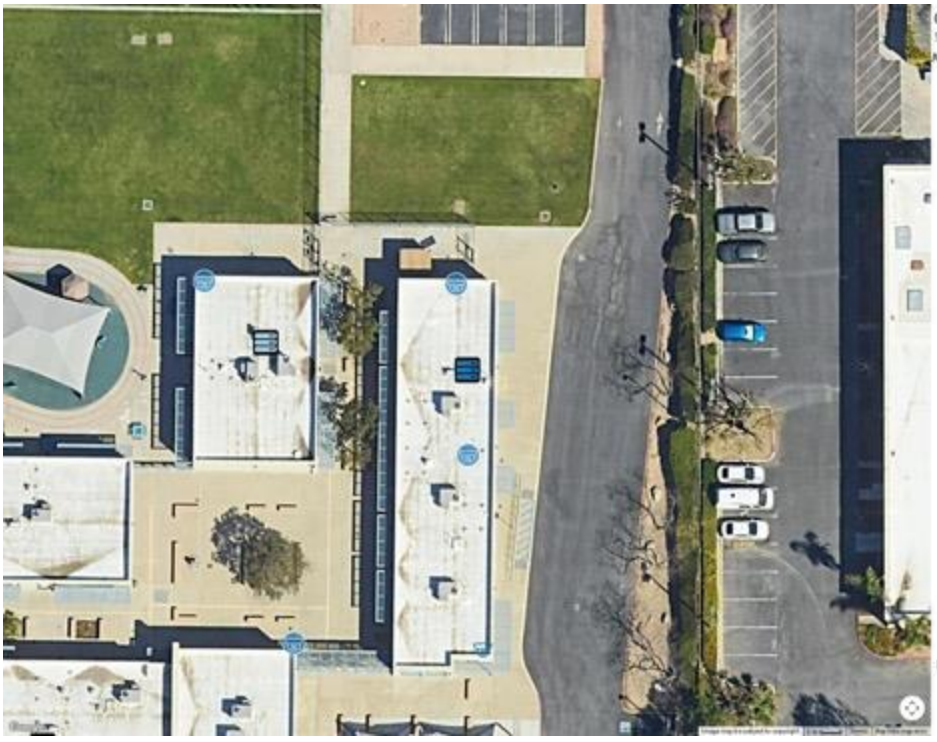
CY63 5: Imager 2



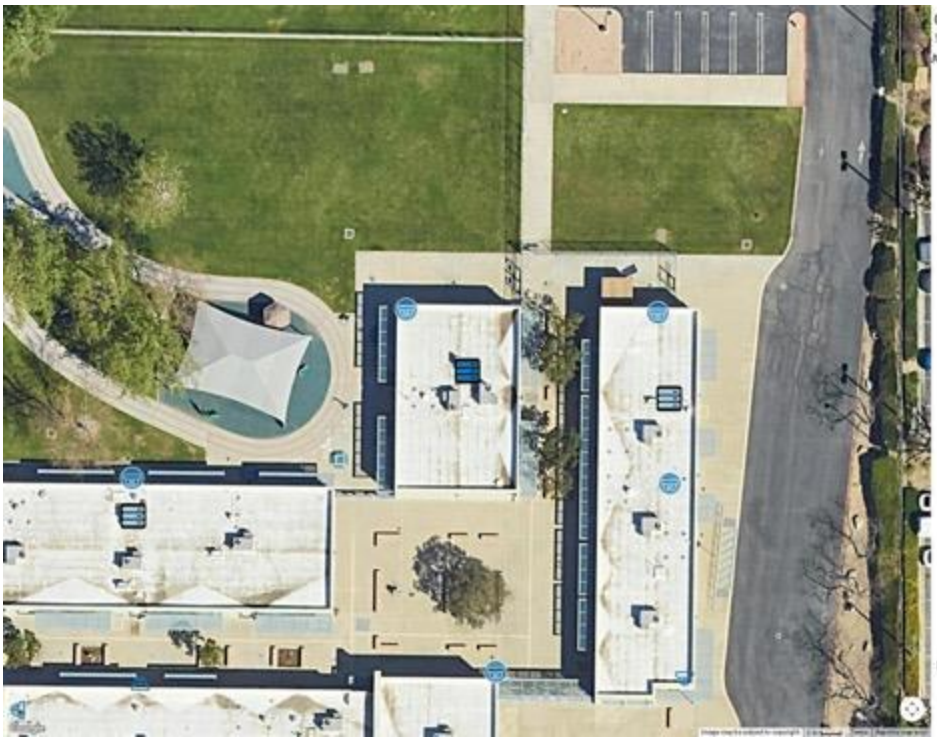
Network Closet 1



Network Closet 2



Network Closet 3



Network Closet 4

Site Photographs



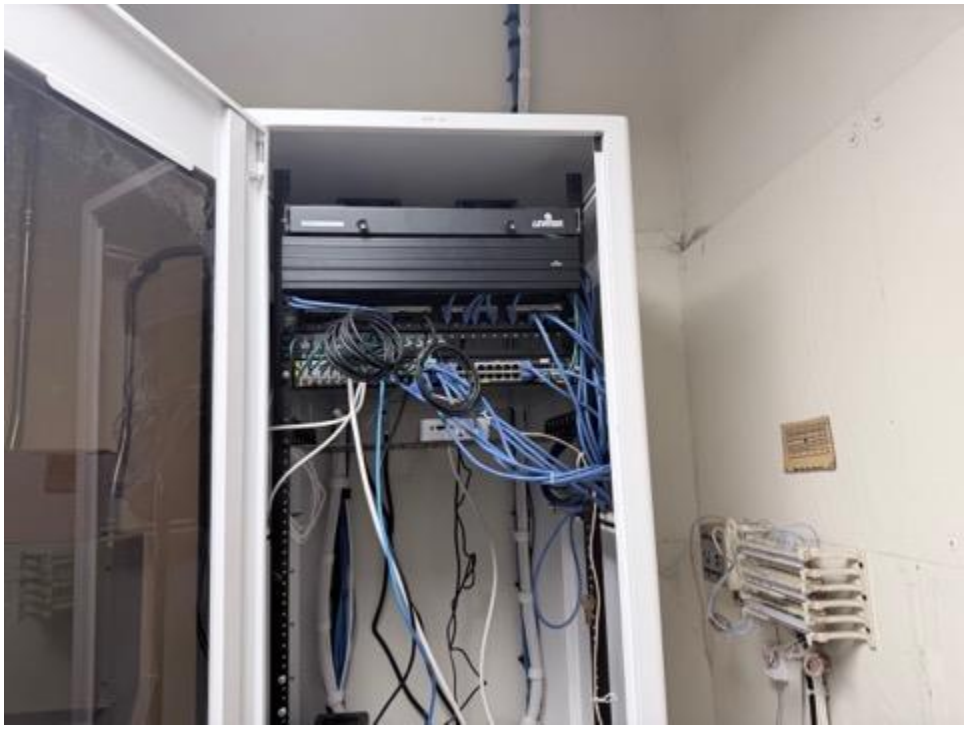
Site Photo 1



Site Photo 2



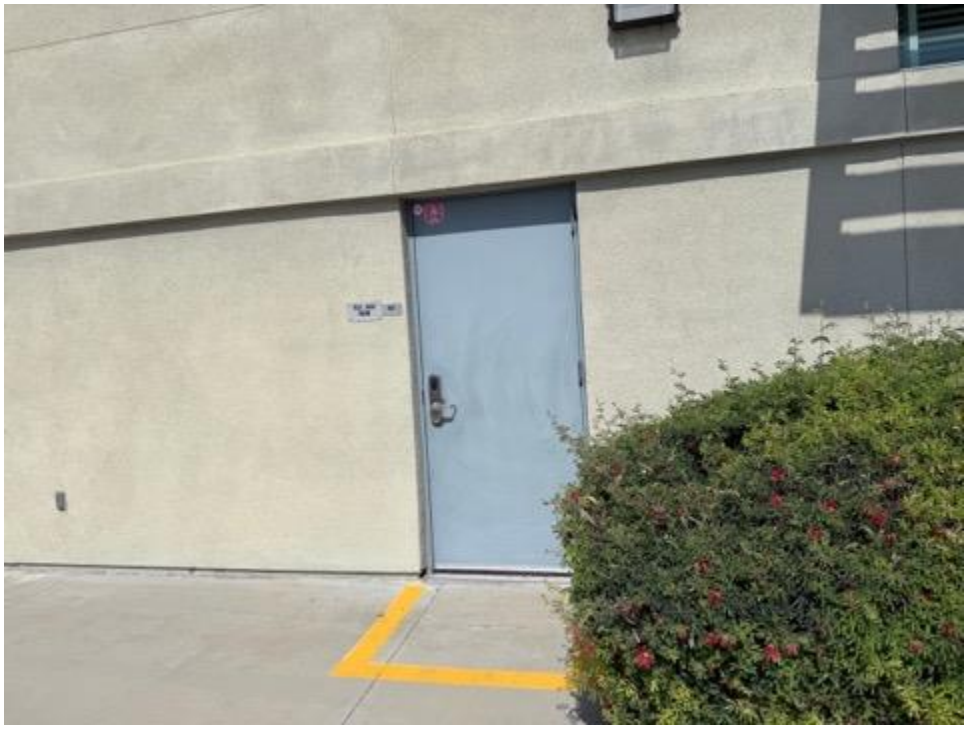
Site Photo 3



Site Photo 4



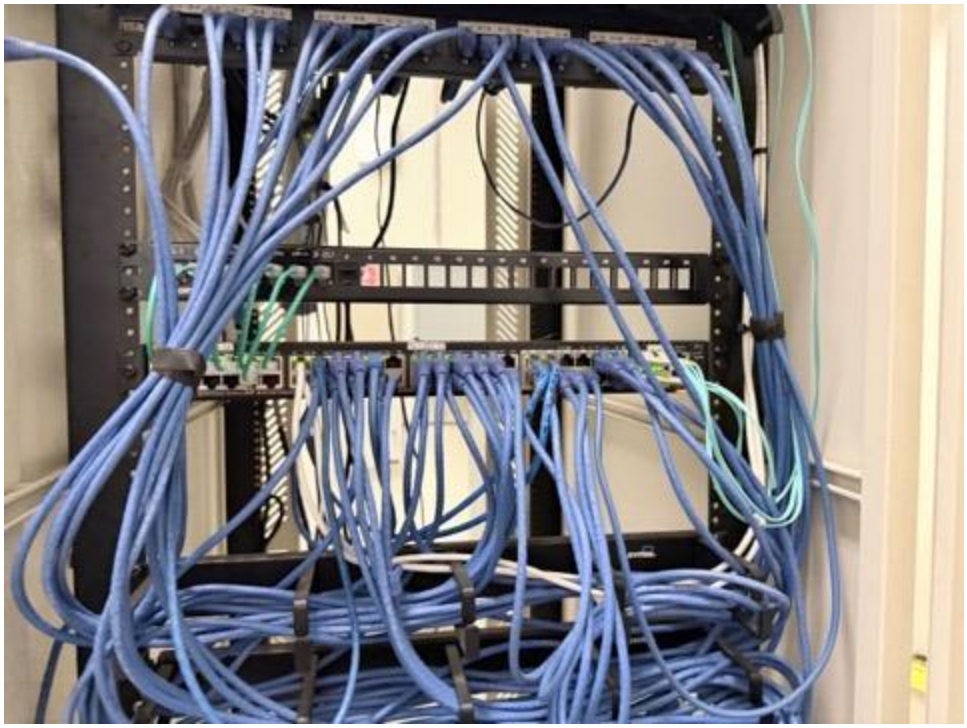
Site Photo 5



Site Photo 6



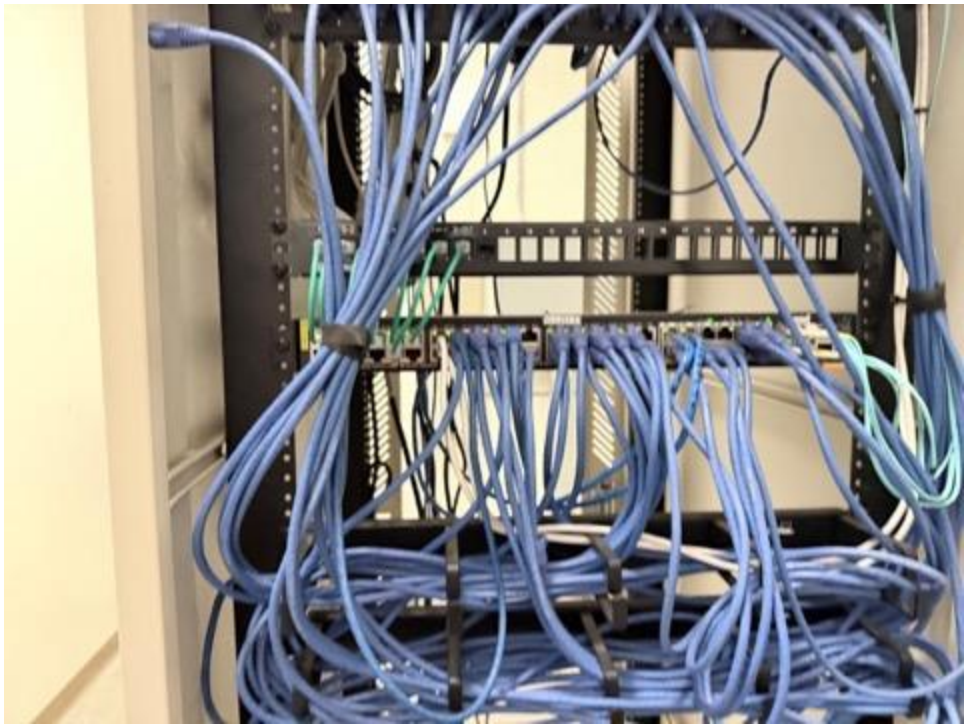
Site Photo 7



Site Photo 8



Site Photo 9



Site Photo 10

SCOPE OF WORK

Site 5: Mulberry Early Education Center

San Bernardino County Superintendent of Schools • Verkada Video Surveillance System

Project	Owner	Camera Units	Document Date
SBCSS Verkada Video Surveillance	San Bernardino County Superintendent of Schools	9 camera units (owner-furnished)	March 2026

1. Scope Overview Summary

This Scope of Work describes the labor, materials, and services to be provided by the Contractor for the installation and commissioning of the Verkada video surveillance system at Mulberry Early Education Center, a facility of the San Bernardino County Superintendent of Schools (SBCSS). All Verkada cameras, mounting accessories are Owner-furnished. The Contractor shall furnish structured cabling, conduit, pathways, consumables, and all other materials required to complete the installation.

The Mulberry Early Education Center campus comprises four classroom buildings. The facility is served by one Main Distribution Frame (MDF) and three Intermediate Distribution Frame (IDF) locations; refer to the site-specific documentation provided for exact locations.

Each building maintains a dedicated network distribution point, and the majority of structures feature drop-ceiling construction. The contractor shall home-run all camera cabling to the most appropriate and nearest network location for each respective building.

The contractor shall furnish and install patch panels, keystones, and patch cables throughout. All infrastructure shall be clearly and consistently labeled in accordance with industry best practices.

2. Owner-Furnished Equipment

The following Verkada equipment will be provided by the Owner (SBCSS) for installation at this site. The Contractor shall acknowledge receipt of all materials prior to beginning work and report any discrepancies or damage in writing within 48 hours of delivery.

Item Description	Part Number	Qty	Category
Exterior Camera CD63E	CD63-512E-HW	1	Camera
Exterior Camera CF83 180-Degree	CF83-512E-HW	4	Camera
Exterior Camera CH63 4-Sensor	CH63-2TBE-HW	1	Camera
Verkada CY63 Dual-Sensor Camera	CY63-1TBE-HW	3	Camera
Verkada Corner Mount	ACC-MNT-CORNER-1	1	Mount
Verkada Arm Mount	ACC-MNT-ARM-1	1	Mount
Verkada Pendant Cap Mount	ACC-MNT-PEND-1	1	Mount

Verkada CY Junction Box Mount	ACC-MNT-YJBOX-1	3	Mount
Verkada Angle Mount	ACC-MNT-ANGLE-1	4	Mount

Note: Owner-furnished equipment is provided for installation only. Contractor shall not substitute, modify, or return any Owner-furnished items without prior written authorization from SBCSS.

3. Contractor-Furnished Materials

The Contractor is responsible for furnishing all materials required to complete the installation that are not listed above as Owner-furnished. Contractor-furnished materials shall include, but are not limited to:

- Category 6A structured cabling (plenum-rated, UL listed) for all camera runs
- Conduit, fittings, and EMT raceway for all exposed cable runs (interior and exterior)
- Junction boxes, back boxes, and surface raceways as required for a complete and clean installation
- Weatherproof conduit fittings, seals, and duct seal compound for all exterior penetrations
- Patch panels, keystone jacks, and cable management as needed at network termination points
- Mounting hardware: screws, anchors, toggle bolts, masonry anchors, and structural backing as required
- Cable labels, permanent markers, and documentation materials
- Consumables: wire ties, lacing, split loom, and protective materials

4. Scope of Installation Services

The Contractor shall provide the following services for this site:

- Receive, inspect, and verify all Owner-furnished Verkada equipment upon delivery. Report discrepancies or damage to the Owner in writing within 48 hours.
- Perform a pre-installation site walk with the Owner’s representative to confirm camera mounting locations, cabling routes, and any site-specific access requirements.
- Install 1 Verkada CD63E exterior dome camera at Owner-approved locations. Mount at approved height using furnished hardware. Provide weatherproof cable entry seals at all exterior penetrations.
- Install 4 Verkada CF83 180-degree wide-angle cameras at Owner-approved ceiling or eave locations. Confirm full 180° coverage of intended area during installation.
- Install 1 Verkada CH63 4-Sensor multi-directional camera. Mount at ceiling or elevated locations per Owner direction. Orient each of the four sensor heads to cover designated coverage zones. Requires PoE++ (802.3bt) power delivery.
- Install 3 Verkada CY63 Dual-Sensor cameras using furnished CY Junction Box Mounts (ACC-MNT-YJBOX-1).
- Install Verkada Angle Mounts (ACC-MNT-ANGLE-1) at locations where the mounting surface does not provide adequate downward camera tilt. Adjust angle prior to final camera positioning.
- Install Verkada Corner Mounts (ACC-MNT-CORNER-1) at building corners or angled surfaces where a standard flat mount is not suitable. Confirm alignment covers the intended coverage zone.
- Install Verkada Arm Mounts (ACC-MNT-ARM-1) at locations requiring standoff from the mounting surface. Anchor to structural backing; do not mount to drywall or finished surface alone.
- Install Verkada Pendant / 2-Camera Pendant Cap Mounts at designated ceiling pendant locations. Confirm ceiling structure supports pendant mount loading per manufacturer specification.

- Furnish and install all structured cabling (minimum Cat6A, plenum-rated where required). Run cabling from each camera location to the designated network closet or PoE switch. Test all runs with a calibrated cable tester and document results. Label both ends of all cables to match the camera naming convention established by the Owner.
- Claim all cameras into the SBCSS Verkada Command organization. Assign each camera to the correct site and apply the approved camera naming convention. Confirm all cameras report online in the Command portal.
- Configure image settings for each camera: adjust zoom and focus (varifocal cameras), enable WDR where required, verify night vision performance, and apply privacy masks at any locations required by Owner.
- Conduct a final walkthrough with the Owner's representative to verify coverage at all camera locations. Correct any pointing, focus, or obstruction issues identified during the walkthrough.
- Provide as-built documentation including: annotated floor plan showing all camera locations, cable schedule with cable ID, run length, and termination port, and a completed camera inventory list with serial numbers.

5. Work Not Included

The following items are explicitly excluded from this Scope of Work:

- Procurement or replacement of Owner-furnished Verkada cameras, accessories, or software licenses
- Network switching infrastructure (PoE switches, routers, firewalls) unless listed as Owner-furnished or specifically included by addendum
- Internet service, broadband, or cellular data services
- Structural modifications to walls, ceilings, or roofing systems
- Painting, patching, or cosmetic restoration beyond standard cable pathway patching
- Verkada Command organizational setup beyond camera claiming, site assignment, and naming (user management and advanced configuration to be performed by SBCSS IT or authorized Verkada partner)
- Ongoing maintenance, service contracts, or warranty response after system acceptance

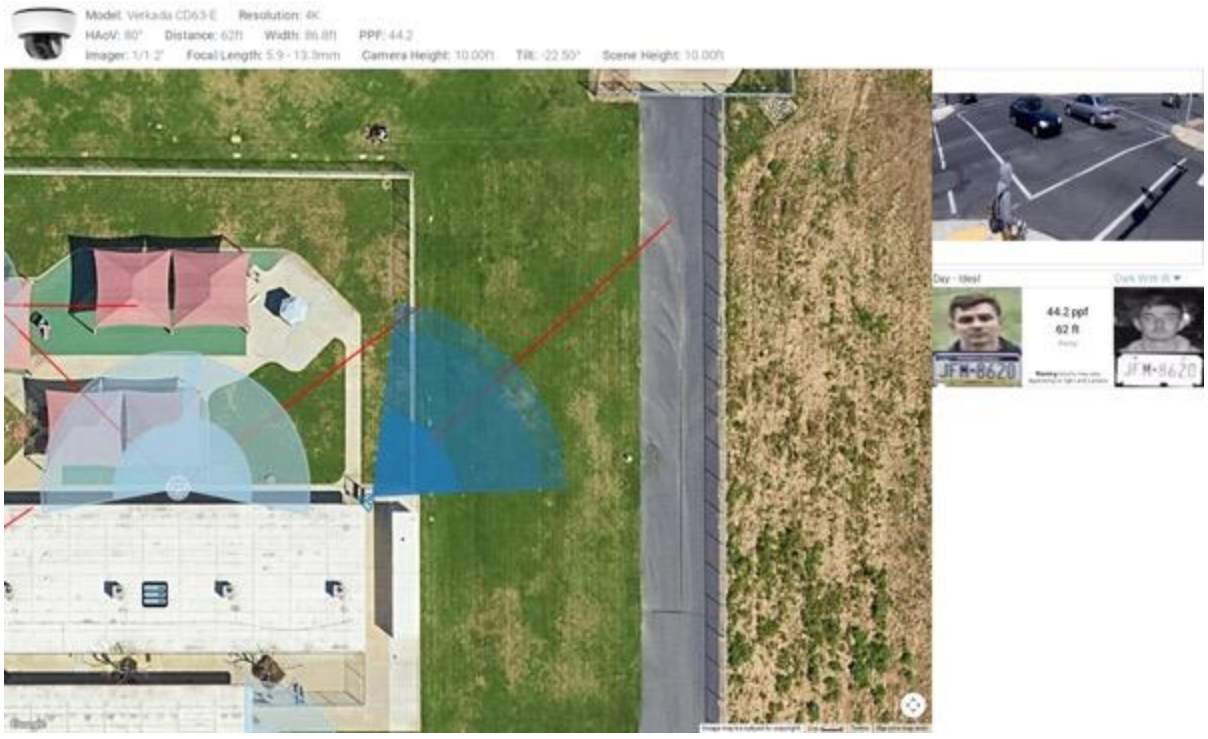
Mulberry Early Education Center Site Survey & Camera Layout

IPVM Camera Coverage Analysis

IPVM Designer Calculation — March 2026. This output is the work product of the individual who created it. IPVM does not guarantee nor warranty the work therein nor its implementation.



Overview



CD63E 1


Model: Verkada CF83-E Resolution: 3520x3520
HAoV: 180° Distance: 28ft Width: 99.2ft PPF: 39.5
Image: 1/1.6" Focal Length: 1.7mm Camera Height: 10.00ft Tilt: -90.00° Scene Height: 10.00ft
39.5 ppf
28 ft

CF83 1


Model: Verkada CF83-E Resolution: 3520x3520
HAoV: 180° Distance: 28ft Width: 99.2ft PPF: 39.5
Image: 1/1.6" Focal Length: 1.7mm Camera Height: 10.00ft Tilt: -90.00° Scene Height: 10.00ft
39.5 ppf
28 ft

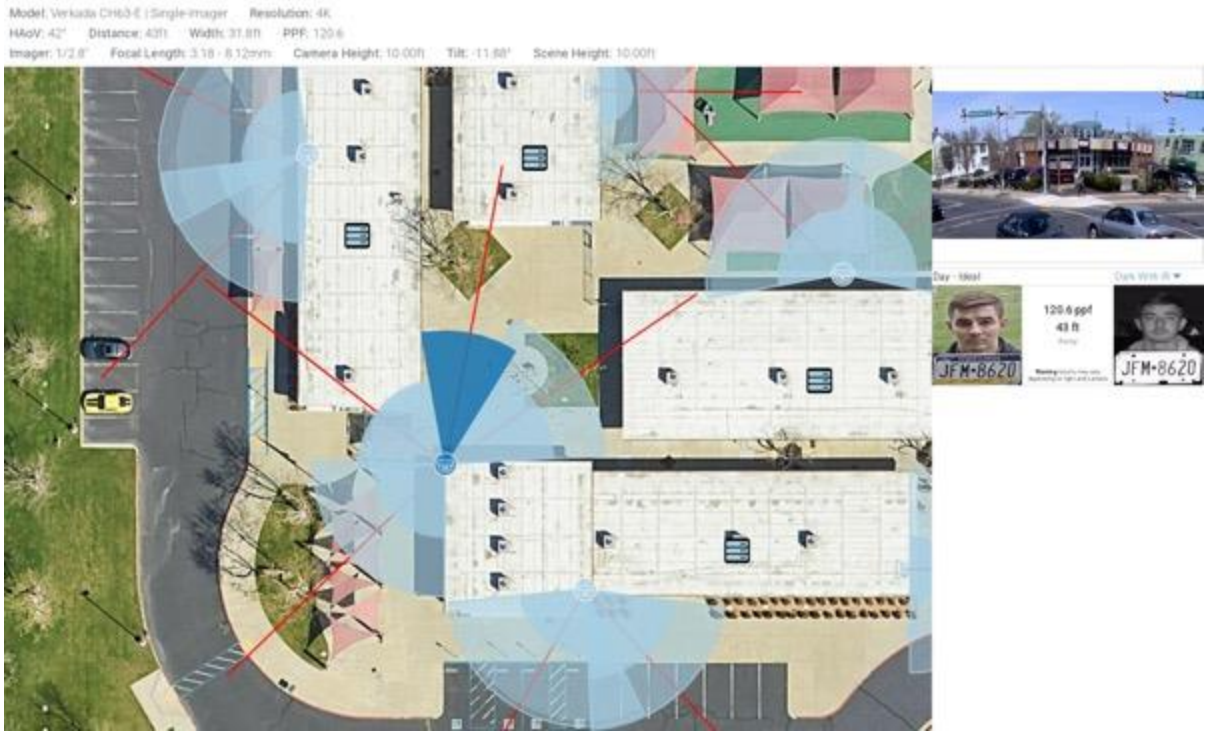
CF83 2


Model: Verkada CF83-E Resolution: 3520x3520
HAoV: 180° Distance: 33ft Width: 105.2ft PPF: 33.5
Image: 1/1.6" Focal Length: 1.7mm Camera Height: 10.00ft Tilt: -90.00° Scene Height: 10.00ft
33.5 ppf
33 ft

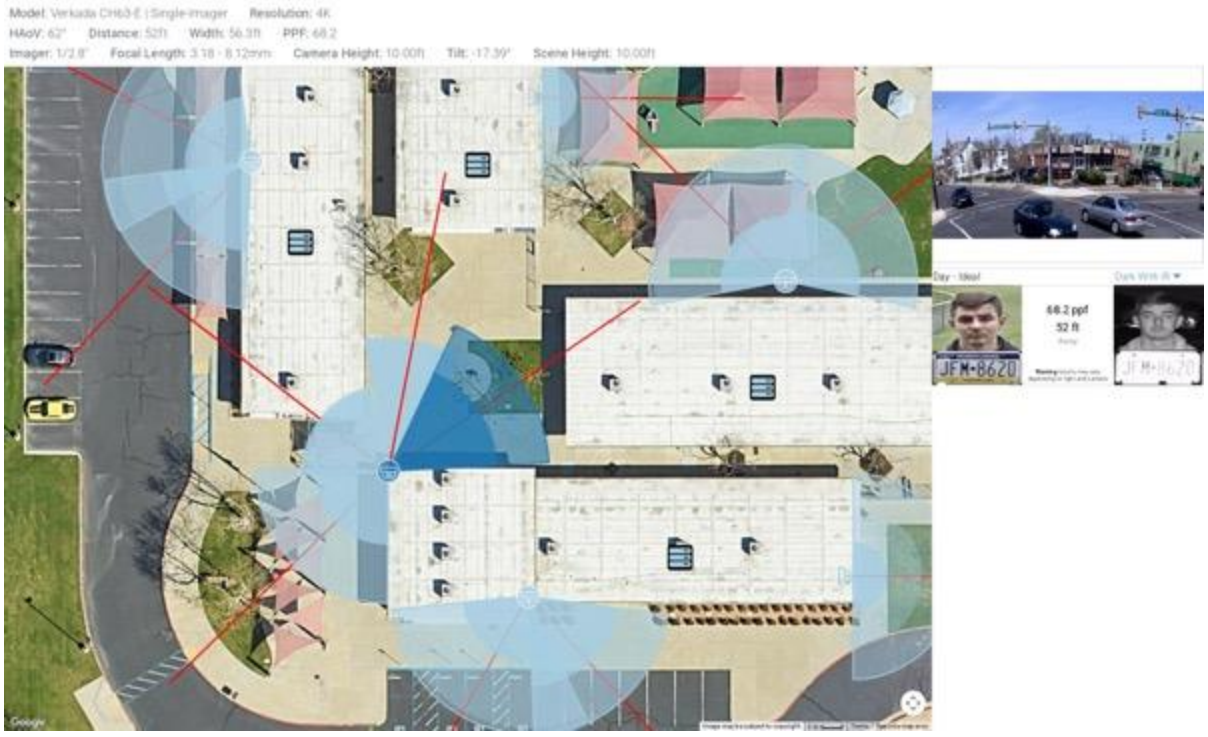
CF83 3


Model: Verkada CF83-E Resolution: 3520x3520
HAoV: 180° Distance: 28ft Width: 88.6ft PPF: 39.7
Image: 1/1.6" Focal Length: 1.7mm Camera Height: 10.00ft Tilt: -90.00° Scene Height: 10.00ft
39.7 ppf
28 ft

CF83 4



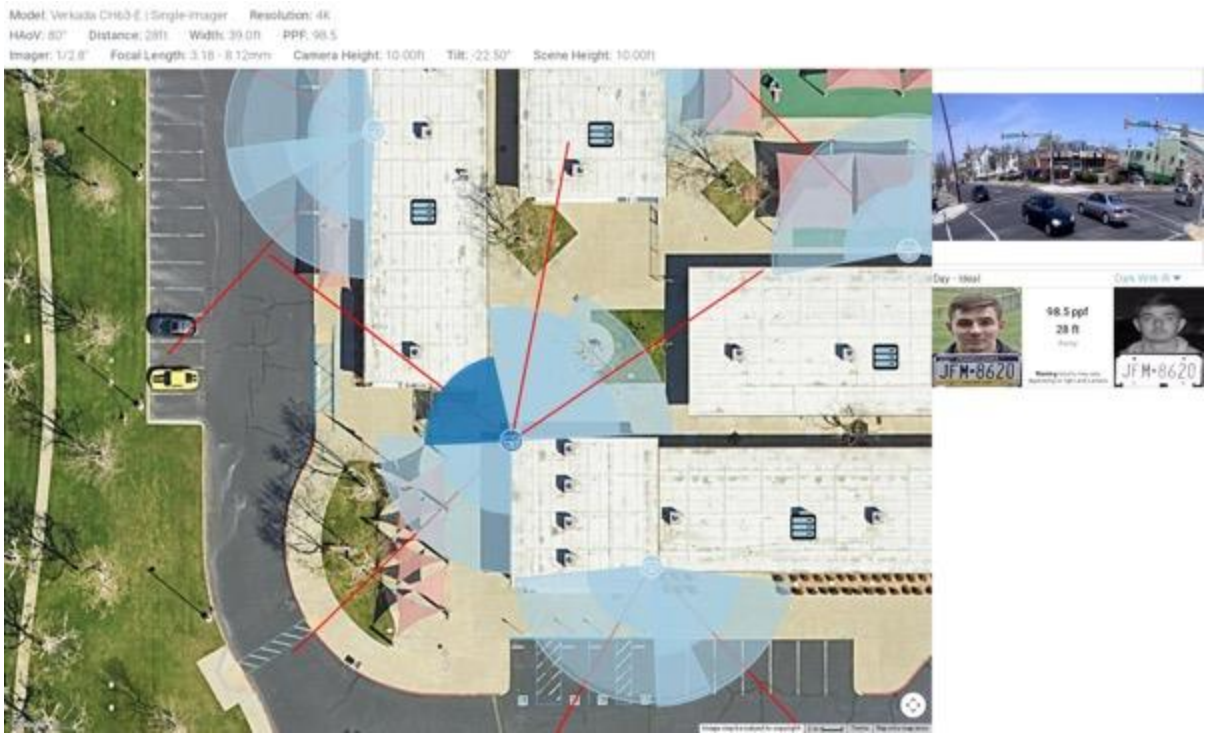
CH63 1: Imager 1



CH63 1: Imager 2



CH63 1: Imager 3



CH63 1: Imager 4



CY63 1: Imager 1



CY63 1: Imager 2



CY63 2: Imager 1



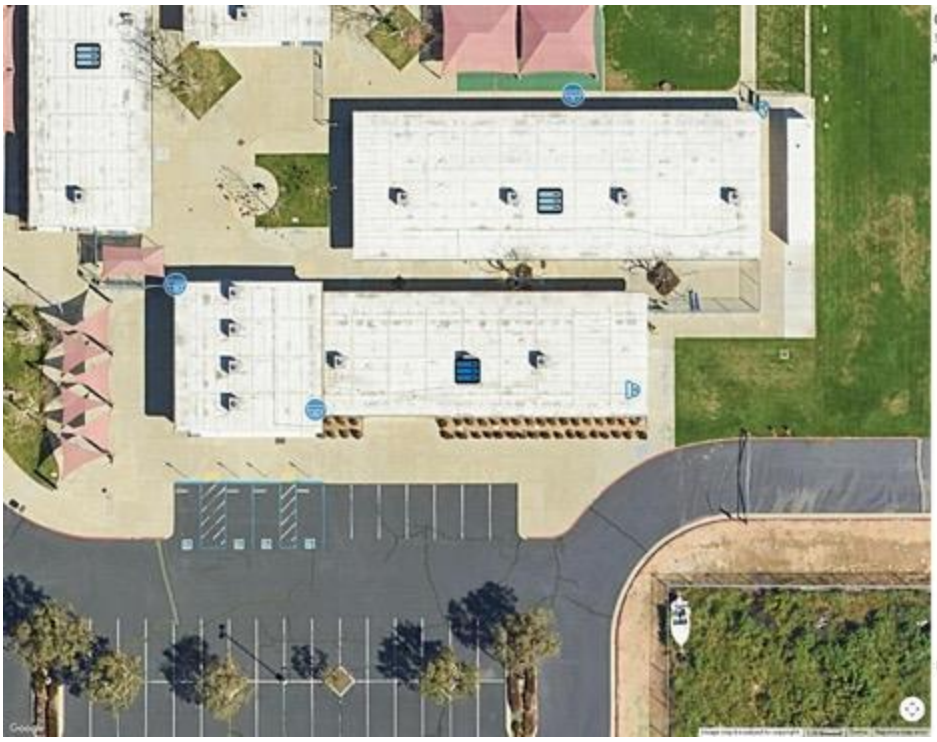
CY63 2: Imager 2



CY63 3: Imager 1



CY63 3: Imager 2



Network Closet 1



Network Closet 2

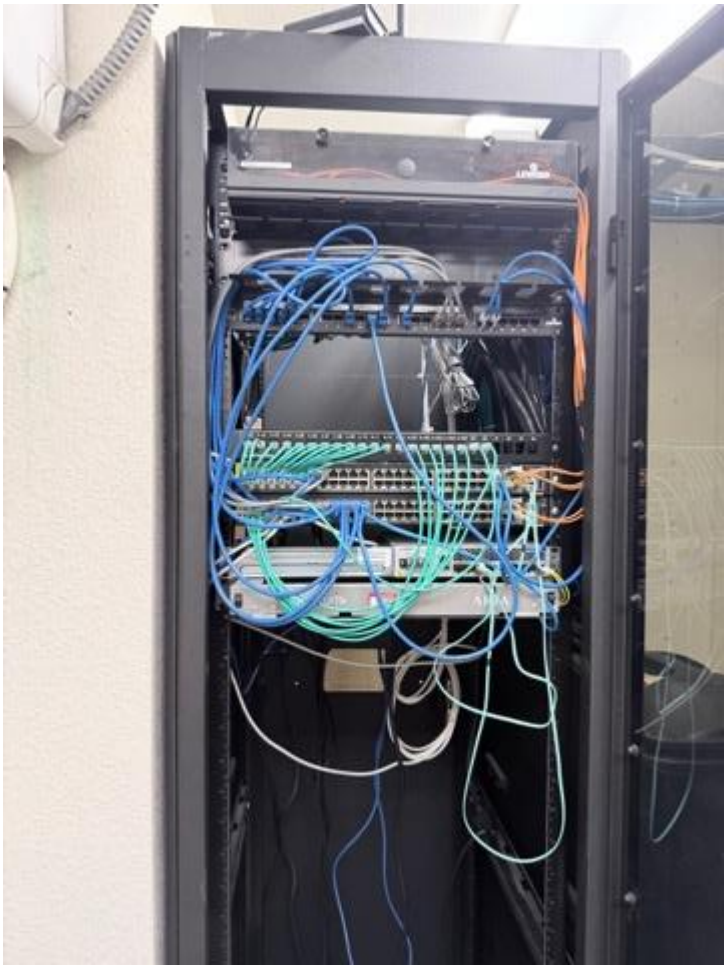


Network Closet 3



Network Closet 4

Site Photographs



Site Photo 1



Site Photo 2



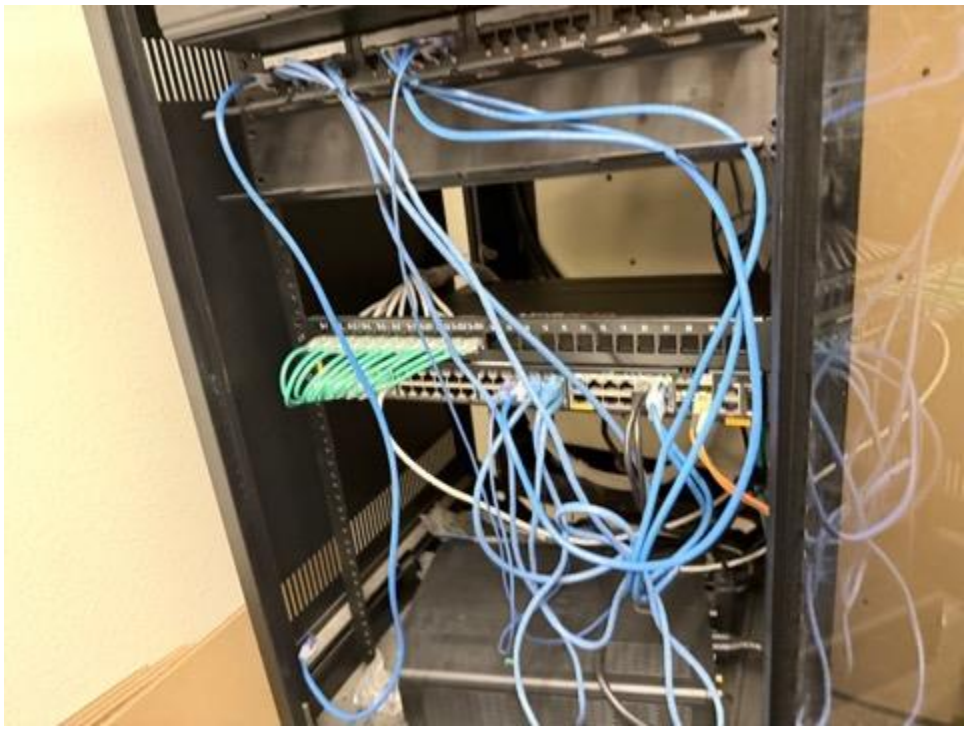
Site Photo 3



Site Photo 4



Site Photo 5



Site Photo 6

SCOPE OF WORK

Site 6: Lucy Siegrist Preschool

San Bernardino County Superintendent of Schools • Verkada Video Surveillance System

Project	Owner	Camera Units	Document Date
SBCSS Verkada Video Surveillance	San Bernardino County Superintendent of Schools	9 camera units (owner-furnished)	March 2026

1. Scope Overview Summary

This Scope of Work describes the labor, materials, and services to be provided by the Contractor for the installation and commissioning of the Verkada video surveillance system at Lucy Siegrist Preschool, a facility of the San Bernardino County Superintendent of Schools (SBCSS). All Verkada cameras, mounting accessories are Owner-furnished. The Contractor shall furnish structured cabling, conduit, pathways, consumables, and all other materials required to complete the installation.

The Lucy Siegrist Preschool campus comprises a main building and a secondary bungalow building. The facility is served by one Main Distribution Frame (MDF) and one Intermediate Distribution Frame (IDF) locations; refer to the site-specific documentation provided for exact locations.

Each building maintains a dedicated network distribution point, and the majority of structures feature drop-ceiling construction. The contractor shall home-run all camera cabling to the most appropriate and nearest network location for each respective building.

The contractor shall furnish and install patch panels, keystones, and patch cables throughout. All infrastructure shall be clearly and consistently labeled in accordance with industry best practices.

2. Owner-Furnished Equipment

The following Verkada equipment will be provided by the Owner (SBCSS) for installation at this site. The Contractor shall acknowledge receipt of all materials prior to beginning work and report any discrepancies or damage in writing within 48 hours of delivery.

Item Description	Part Number	Qty	Category
Exterior Camera CD63E	CD63-512E-HW	5	Camera
Exterior Camera CH63 4-Sensor	CH63-2TBE-HW	1	Camera
Verkada CY63 Dual-Sensor Camera	CY63-1TBE-HW	3	Camera
Verkada Corner Mount	ACC-MNT-CORNER-1	1	Mount
Verkada Arm Mount	ACC-MNT-ARM-1	1	Mount
Verkada CY Junction Box Mount	ACC-MNT-YJBOX-1	3	Mount

Note: Owner-furnished equipment is provided for installation only. Contractor shall not substitute, modify, or return any Owner-furnished items without prior written authorization from SBCSS.

3. Contractor-Furnished Materials

The Contractor is responsible for furnishing all materials required to complete the installation that are not listed above as Owner-furnished. Contractor-furnished materials shall include, but are not limited to:

- Category 6A structured cabling (plenum-rated, UL listed) for all camera runs
- Conduit, fittings, and EMT raceway for all exposed cable runs (interior and exterior)
- Junction boxes, back boxes, and surface raceways as required for a complete and clean installation
- Weatherproof conduit fittings, seals, and duct seal compound for all exterior penetrations
- Patch panels, keystone jacks, and cable management as needed at network termination points
- Mounting hardware: screws, anchors, toggle bolts, masonry anchors, and structural backing as required
- Cable labels, permanent markers, and documentation materials
- Consumables: wire ties, lacing, split loom, and protective materials

4. Scope of Installation Services

The Contractor shall provide the following services for this site:

- Receive, inspect, and verify all Owner-furnished Verkada equipment upon delivery. Report discrepancies or damage to the Owner in writing within 48 hours.
- Perform a pre-installation site walk with the Owner's representative to confirm camera mounting locations, cabling routes, and any site-specific access requirements.
- Install 5 Verkada CD63E exterior dome cameras at Owner-approved locations. Mount at approved height using furnished hardware. Provide weatherproof cable entry seals at all exterior penetrations.
- Install 1 Verkada CH63 4-Sensor multi-directional camera. Mount at ceiling or elevated locations per Owner direction. Orient each of the four sensor heads to cover designated coverage zones. Requires PoE++ (802.3bt) power delivery.
- Install 3 Verkada CY63 Dual-Sensor cameras using furnished CY Junction Box Mounts (ACC-MNT-YJBOX-1).
- Install Verkada Corner Mounts (ACC-MNT-CORNER-1) at building corners or angled surfaces where a standard flat mount is not suitable. Confirm alignment covers the intended coverage zone.
- Install Verkada Arm Mounts (ACC-MNT-ARM-1) at locations requiring standoff from the mounting surface. Anchor to structural backing; do not mount to drywall or finished surface alone.
- Furnish and install all structured cabling (minimum Cat6A, plenum-rated where required). Run cabling from each camera location to the designated network closet or PoE switch. Test all runs with a calibrated cable tester and document results. Label both ends of all cables to match the camera naming convention established by the Owner.
- Claim all cameras into the SBCSS Verkada Command organization. Assign each camera to the correct site and apply the approved camera naming convention. Confirm all cameras report online in the Command portal.
- Configure image settings for each camera: adjust zoom and focus (varifocal cameras), enable WDR where required, verify night vision performance, and apply privacy masks at any locations required by Owner.

- Conduct a final walkthrough with the Owner's representative to verify coverage at all camera locations. Correct any pointing, focus, or obstruction issues identified during the walkthrough.
- Provide as-built documentation including: annotated floor plan showing all camera locations, cable schedule with cable ID, run length, and termination port, and a completed camera inventory list with serial numbers.

5. Work Not Included

The following items are explicitly excluded from this Scope of Work:

- Procurement or replacement of Owner-furnished Verkada cameras, accessories, or software licenses
- Network switching infrastructure (PoE switches, routers, firewalls) unless listed as Owner-furnished or specifically included by addendum
- Internet service, broadband, or cellular data services
- Structural modifications to walls, ceilings, or roofing systems
- Painting, patching, or cosmetic restoration beyond standard cable pathway patching
- Verkada Command organizational setup beyond camera claiming, site assignment, and naming (user management and advanced configuration to be performed by SBCSS IT or authorized Verkada partner)
- Ongoing maintenance, service contracts, or warranty response after system acceptance

Lucy Siegrist Preschool Site Survey & Camera Layout

IPVM Camera Coverage Analysis

IPVM Designer Calculation — March 2026. This output is the work product of the individual who created it. IPVM does not guarantee nor warranty the work therein nor its implementation.



Overview



CD63E 1



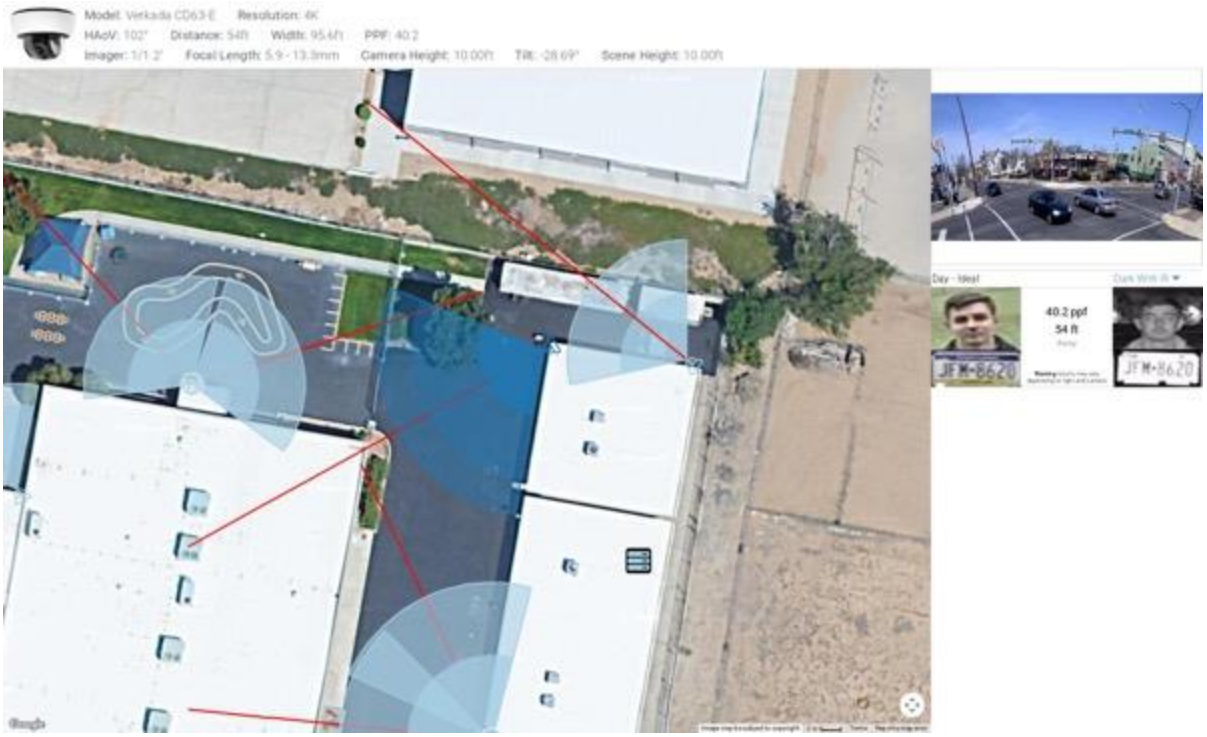
CD63E 2



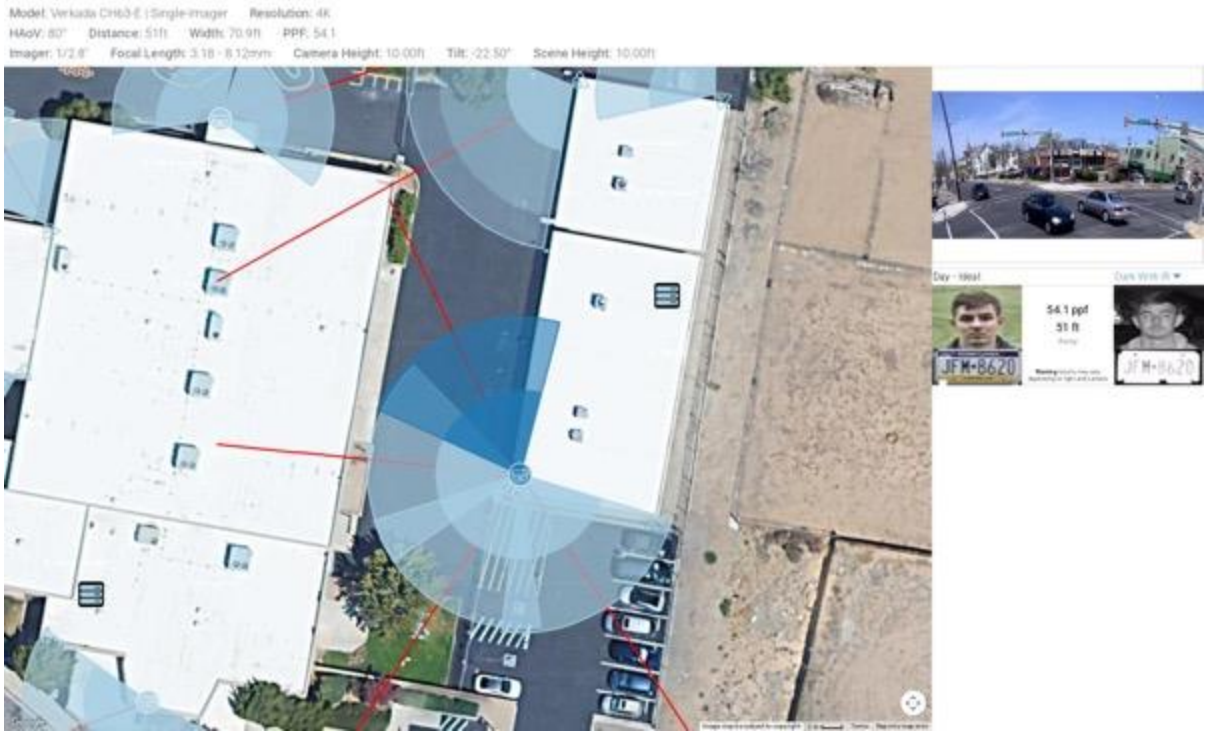
CD63E 3



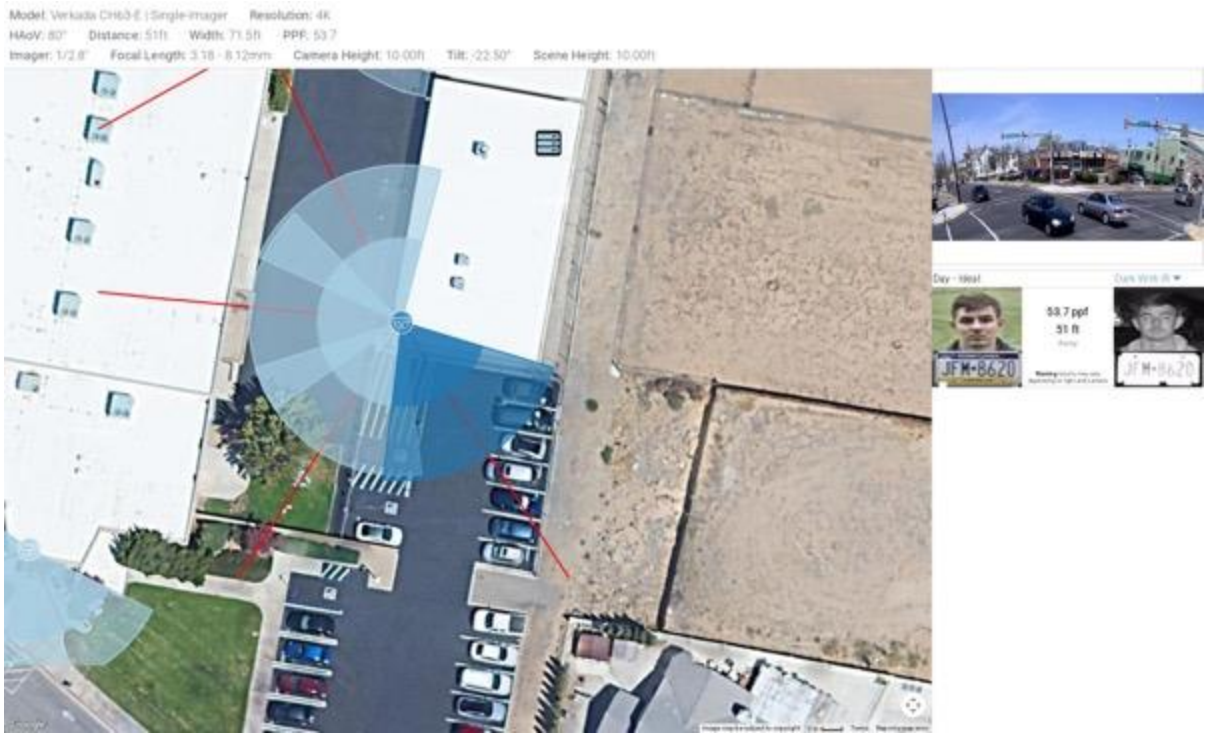
CD63E 4



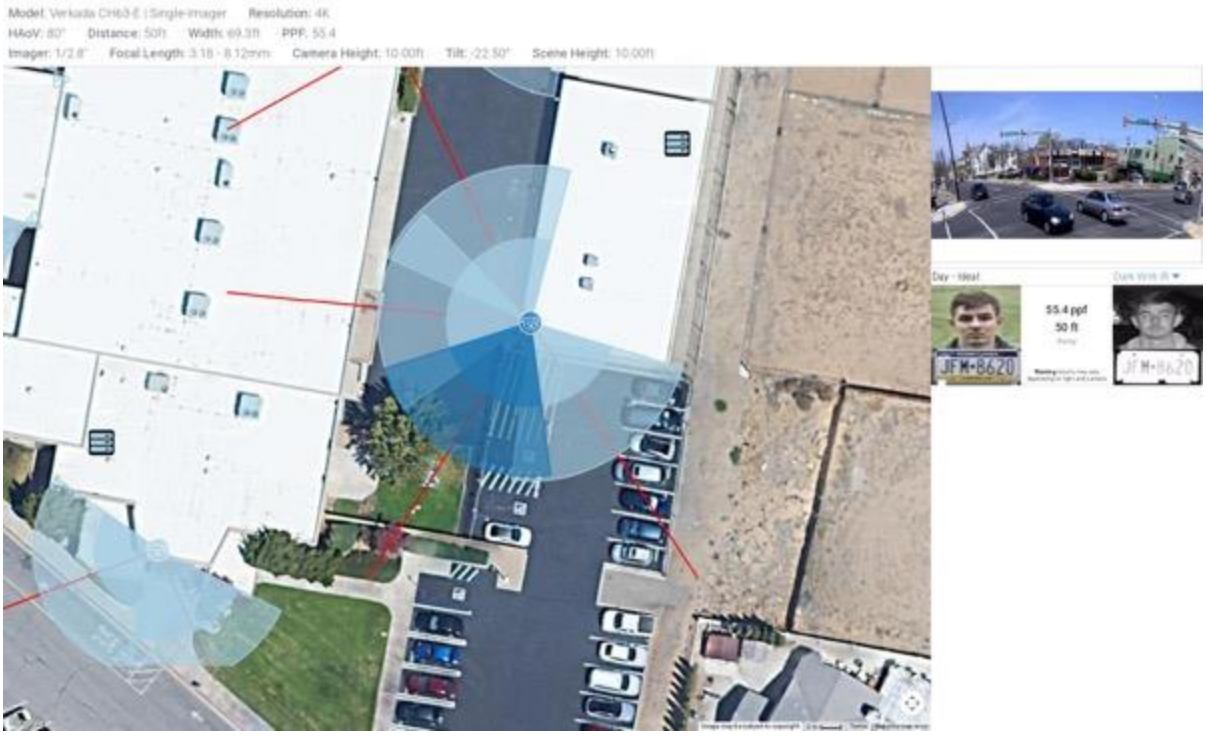
CD63E 5



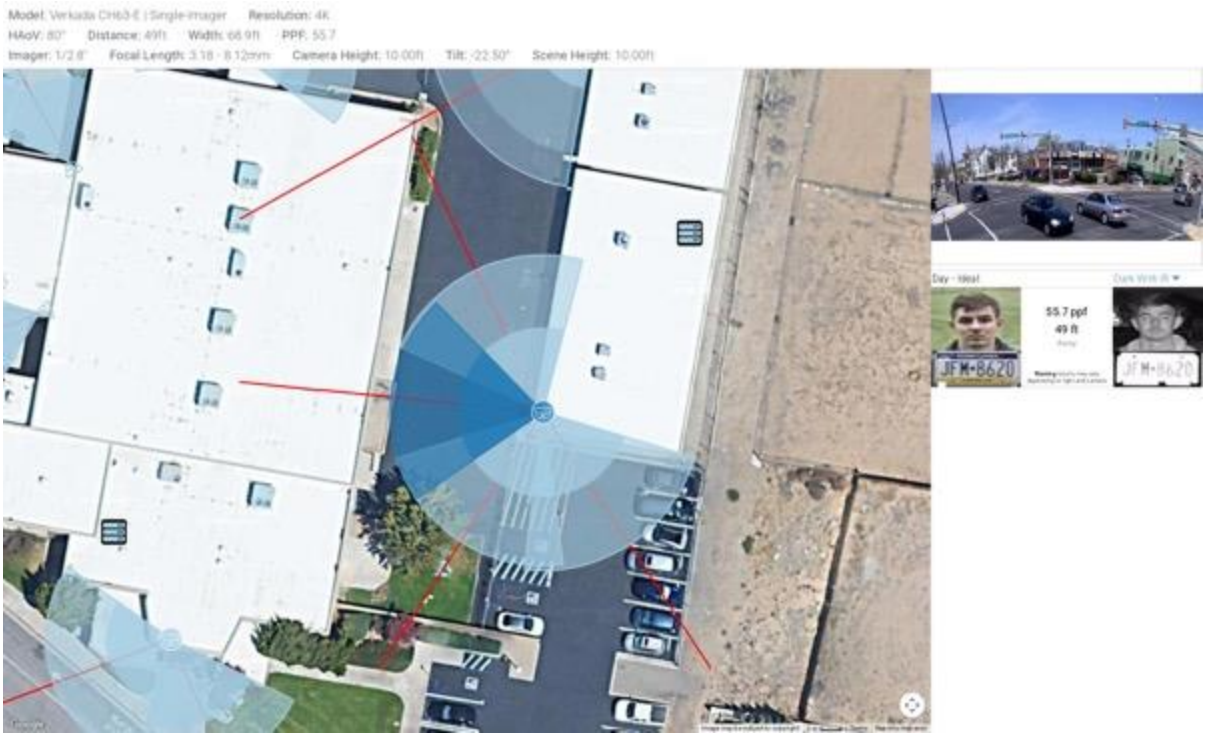
CH63 1: Imager 1



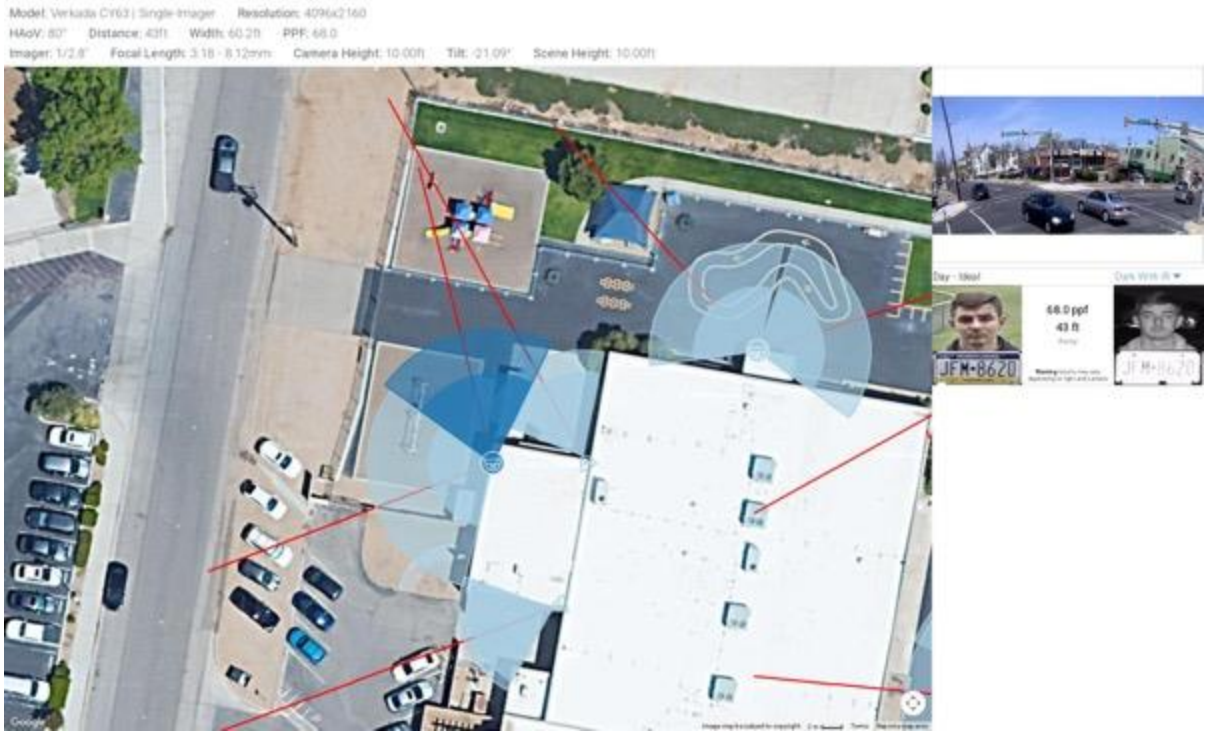
CH63 1: Imager 2



CH63 1: Imager 3



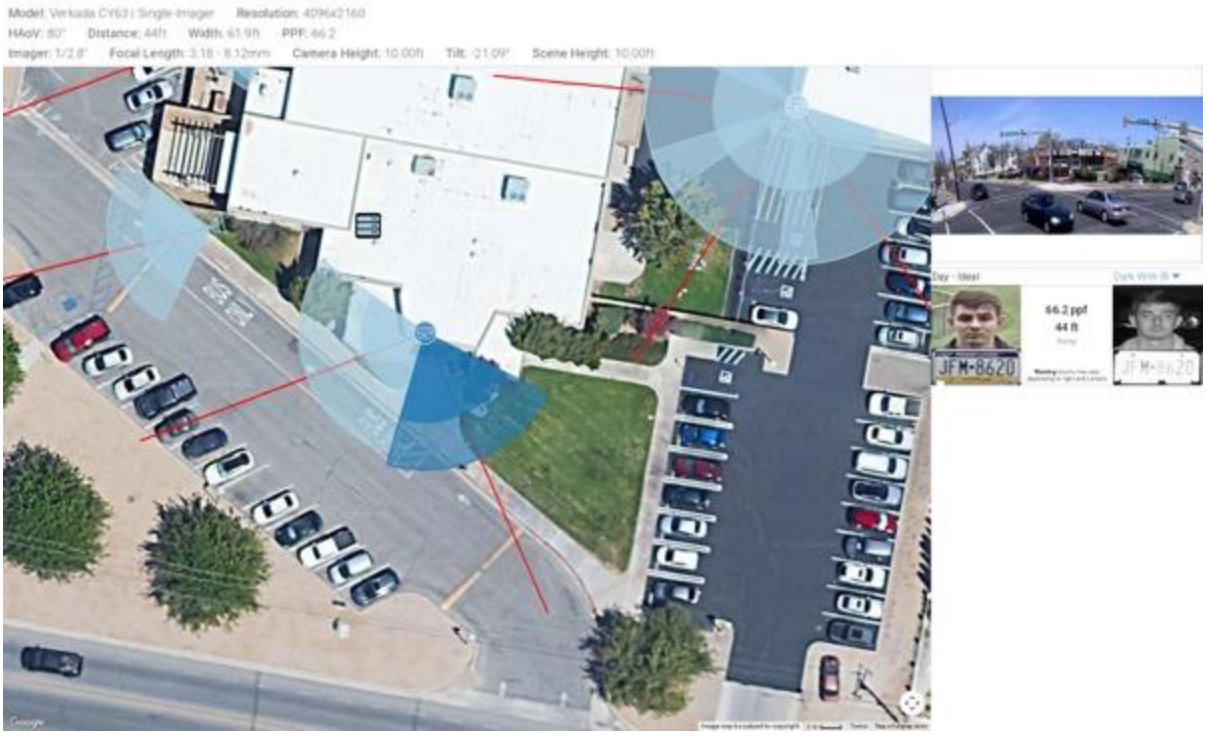
CH63 1: Imager 4



CY63 1: Imager 1



CY63 1: Imager 2



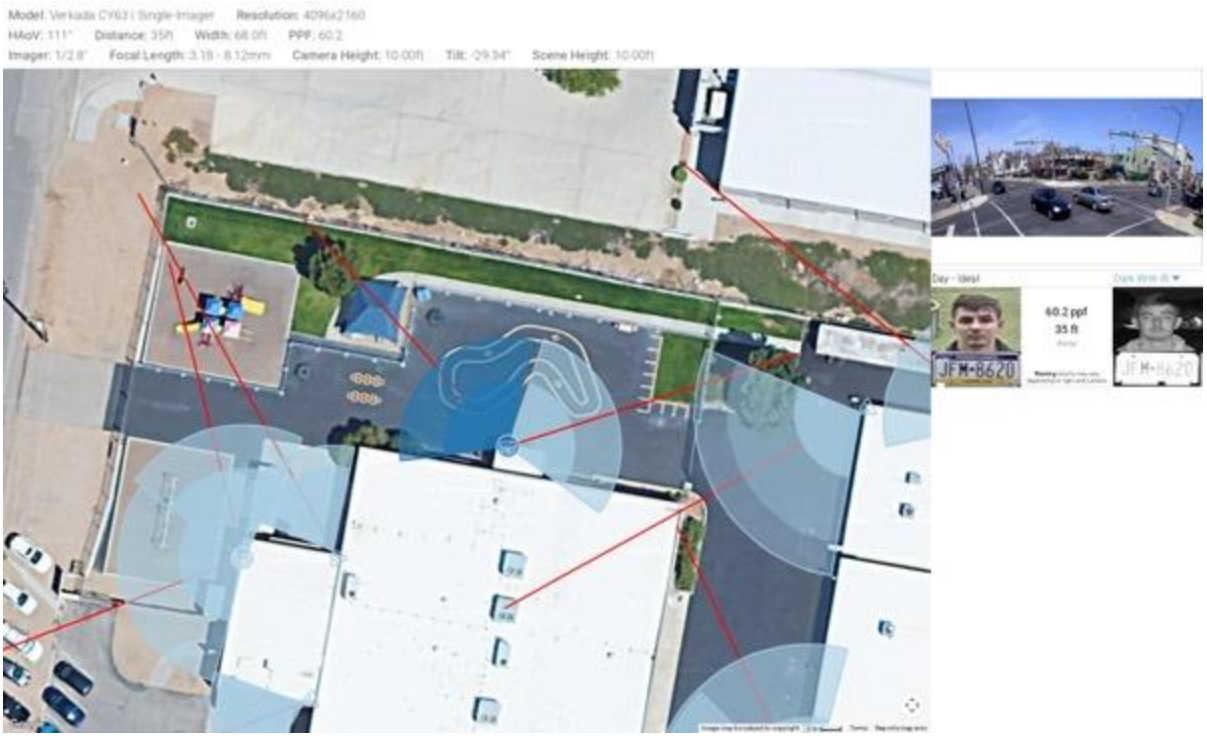
CY63 2: Imager 1



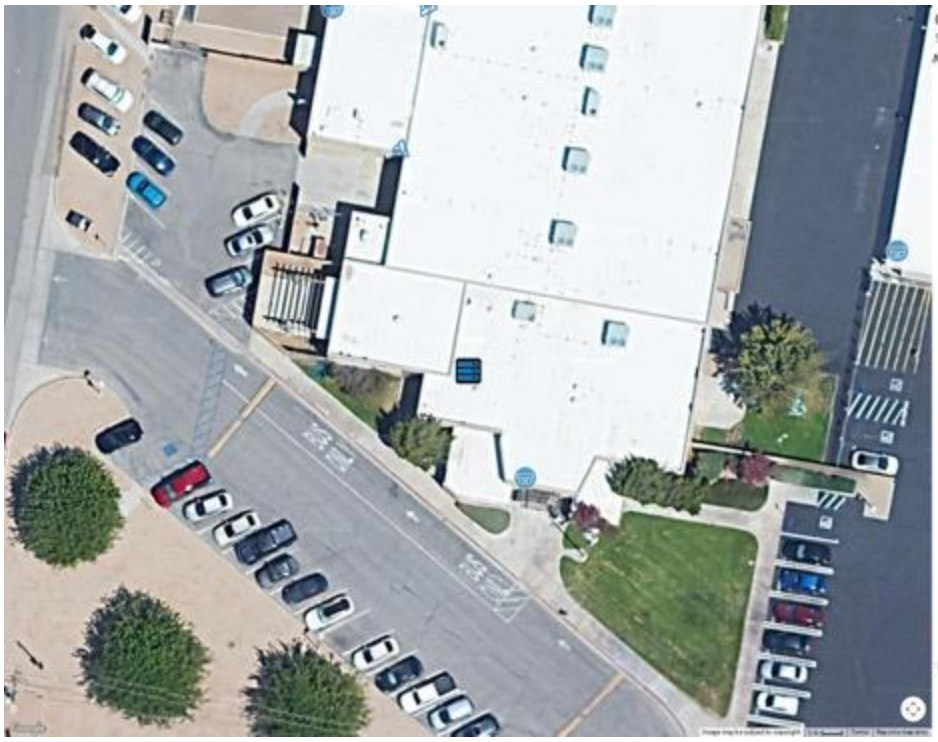
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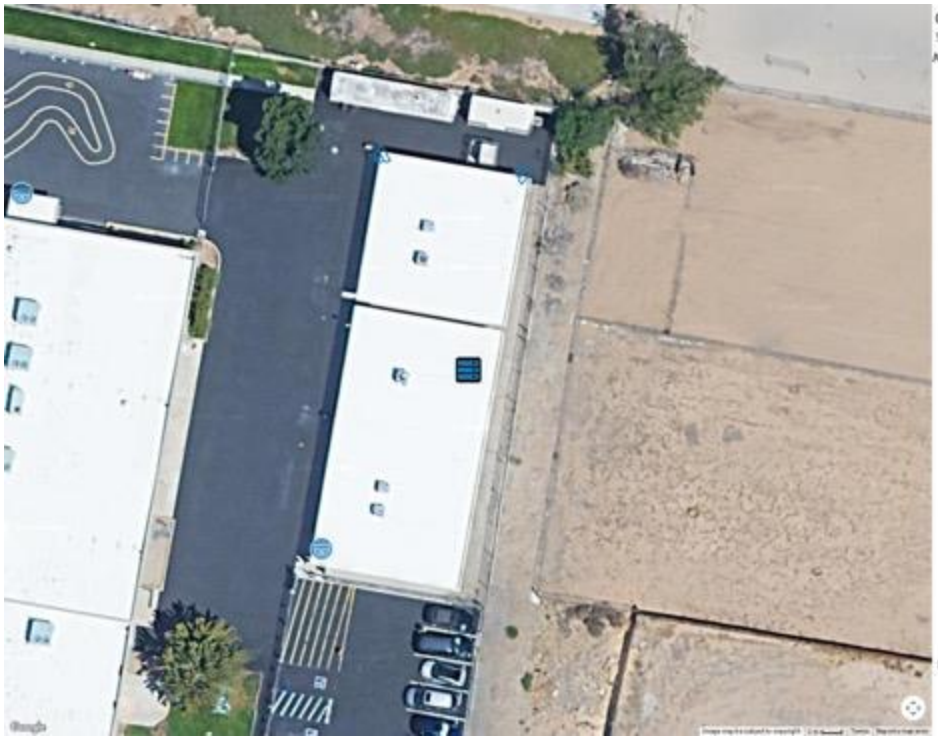
CY63 3: Imager 1



CY63 3: Imager 2

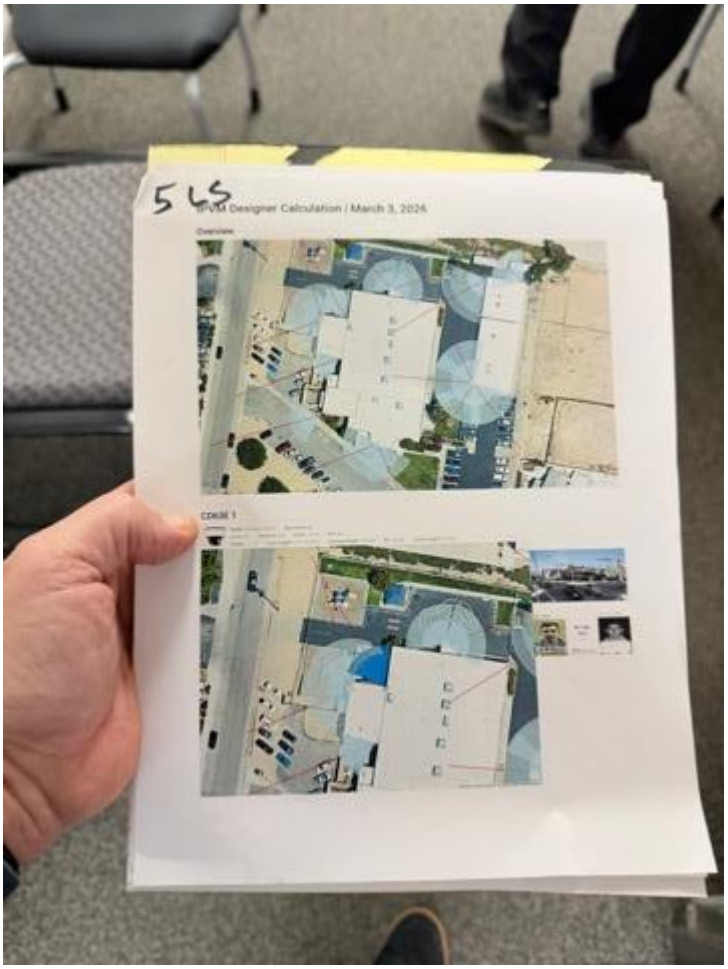


Network Closet 1

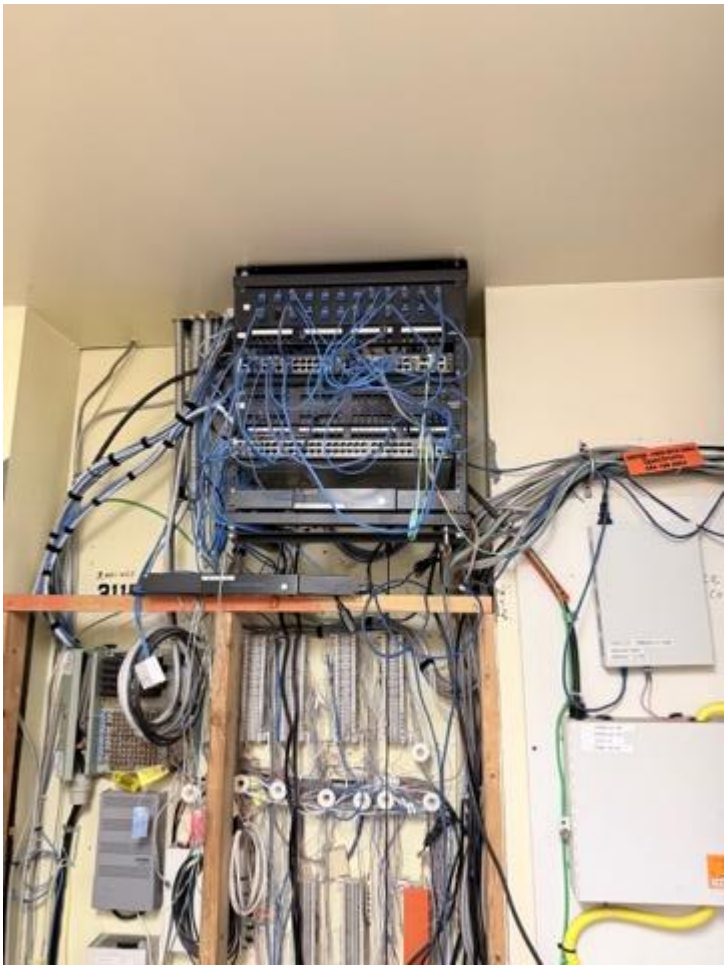


Network Closet 2

Site Photographs



Site Photo 1



Site Photo 2



Site Photo 3



Site Photo 4



Site Photo 5



Site Photo 6



Site Photo 7



Site Photo 8



Site Photo 9



Site Photo 10



Site Photo 11

SCOPE OF WORK

Site 7: Norma Covert County Education Center

San Bernardino County Superintendent of Schools • Verkada Video Surveillance System

Project	Owner	Camera Units	Document Date
SBCSS Verkada Video Surveillance	San Bernardino County Superintendent of Schools	5 camera units (owner-furnished)	March 2026

1. Scope Overview Summary

This Scope of Work describes the labor, materials, and services to be provided by the Contractor for the installation and commissioning of the Verkada video surveillance system at Norma Covert County Education Center, a facility of the San Bernardino County Superintendent of Schools (SBCSS). All Verkada cameras, mounting accessories are Owner-furnished. The Contractor shall furnish structured cabling, conduit, pathways, consumables, and all other materials required to complete the installation.

The Norma Covert County Education Center campus comprises three portable buildings. The facility is served by one Main Distribution Frame (MDF) and two Intermediate Distribution Frame (IDF) locations; refer to the site-specific documentation provided for exact locations.

Each building maintains a dedicated network distribution point, and the majority of structures feature drop-ceiling construction. The contractor shall home-run all camera cabling to the MDF building.

The contractor shall furnish and install patch panels, keystones, and patch cables throughout. All infrastructure shall be clearly and consistently labeled in accordance with industry best practices.

2. Owner-Furnished Equipment

The following Verkada equipment will be provided by the Owner (SBCSS) for installation at this site. The Contractor shall acknowledge receipt of all materials prior to beginning work and report any discrepancies or damage in writing within 48 hours of delivery.

Item Description	Part Number	Qty	Category
Exterior Camera CD63E	CD63-512E-HW	3	Camera
Verkada CY63 Dual-Sensor Camera	CY63-1TBE-HW	2	Camera
Verkada CY Junction Box Mount	ACC-MNT-YJBOX-1	2	Mount

Note: Owner-furnished equipment is provided for installation only. Contractor shall not substitute, modify, or return any Owner-furnished items without prior written authorization from SBCSS.

3. Contractor-Furnished Materials

The Contractor is responsible for furnishing all materials required to complete the installation that are not listed above as Owner-furnished. Contractor-furnished materials shall include, but are not limited to:

- Category 6A structured cabling (plenum-rated, UL listed) for all camera runs
- Conduit, fittings, and EMT raceway for all exposed cable runs (interior and exterior)
- Junction boxes, back boxes, and surface raceways as required for a complete and clean installation
- Weatherproof conduit fittings, seals, and duct seal compound for all exterior penetrations
- Patch panels, keystone jacks, and cable management as needed at network termination points
- Mounting hardware: screws, anchors, toggle bolts, masonry anchors, and structural backing as required
- Cable labels, permanent markers, and documentation materials
- Consumables: wire ties, lacing, split loom, and protective materials
- Aerial lift rental, qualified operator, and all associated safety equipment

4. Scope of Installation Services

The Norma Covert County Education Center campus comprises three portable buildings. The facility is served by one Main Distribution Frame (MDF) and two Intermediate Distribution Frame (IDF) locations; refer to the site-specific documentation provided for exact locations.

Each building maintains a dedicated network distribution point, and the majority of structures feature drop-ceiling construction. The contractor shall home-run all camera cabling to the MDF building.

The contractor shall furnish and install patch panels, keystones, and patch cables throughout. All infrastructure shall be clearly and consistently labeled in accordance with industry best practices.

The Contractor shall provide the following services for this site:

- Receive, inspect, and verify all Owner-furnished Verkada equipment upon delivery. Report discrepancies or damage to the Owner in writing within 48 hours.
- Perform a pre-installation site walk with the Owner’s representative to confirm camera mounting locations, cabling routes, and any site-specific access requirements.
- Install 3 Verkada CD63E exterior dome cameras at Owner-approved locations. Mount at approved height using furnished hardware. Provide weatherproof cable entry seals at all exterior penetrations.
- Install 2 Verkada CY63 Dual-Sensor cameras using furnished CY Junction Box Mounts (ACC-MNT-YJBOX-1).
- Furnish and install all structured cabling (minimum Cat6A, plenum-rated where required). Run cabling from each camera location to the designated network closet or PoE switch. Test all runs with a calibrated cable tester and document results. Label both ends of all cables to match the camera naming convention established by the Owner.
- Procure and provide a lift (aerial work platform) for camera installation at elevated mounting locations that cannot be safely accessed by ladder. Coordinate lift access with Owner. Lift must be operated by a qualified operator; follow all OSHA aerial lift safety requirements. Protect site surfaces from equipment damage.
- Claim all cameras into the SBCSS Verkada Command organization. Assign each camera to the correct site and apply the approved camera naming convention. Confirm all cameras report online in the Command portal.
- Configure image settings for each camera: adjust zoom and focus (varifocal cameras), enable WDR where required, verify night vision performance, and apply privacy masks at any locations required by Owner.
- Conduct a final walkthrough with the Owner’s representative to verify coverage at all camera locations. Correct any pointing, focus, or obstruction issues identified during the walkthrough.

- Provide as-built documentation including: annotated floor plan showing all camera locations, cable schedule with cable ID, run length, and termination port, and a completed camera inventory list with serial numbers.

⚠ SPECIAL CONDITION: Camera installation at this site requires an aerial lift (elevated work platform) to safely reach mounting locations. Contractor shall coordinate lift access and staging with the Owner's Facilities Manager prior to mobilization. Lift operator must be qualified and comply with all applicable OSHA aerial work platform safety requirements. Contractor is responsible for surface protection and site restoration.

5. Work Not Included

The following items are explicitly excluded from this Scope of Work:

- Procurement or replacement of Owner-furnished Verkada cameras, accessories, or software licenses
- Network switching infrastructure (PoE switches, routers, firewalls) unless listed as Owner-furnished or specifically included by addendum
- Internet service, broadband, or cellular data services
- Structural modifications to walls, ceilings, or roofing systems
- Painting, patching, or cosmetic restoration beyond standard cable pathway patching
- Verkada Command organizational setup beyond camera claiming, site assignment, and naming (user management and advanced configuration to be performed by SBCSS IT or authorized Verkada partner)
- Ongoing maintenance, service contracts, or warranty response after system acceptance

Norma Covert County Education Center Site Survey & Camera Layout

IPVM Camera Coverage Analysis

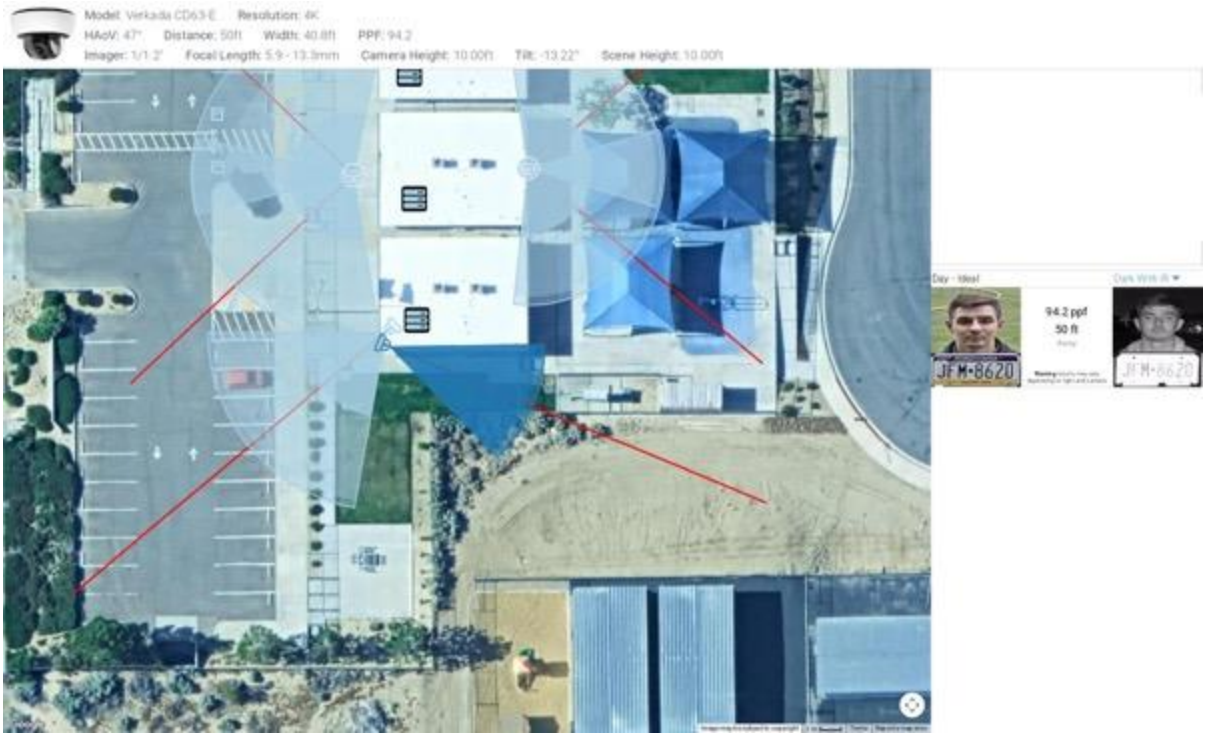
IPVM Designer Calculation — March 2026. This output is the work product of the individual who created it. IPVM does not guarantee nor warranty the work therein nor its implementation.



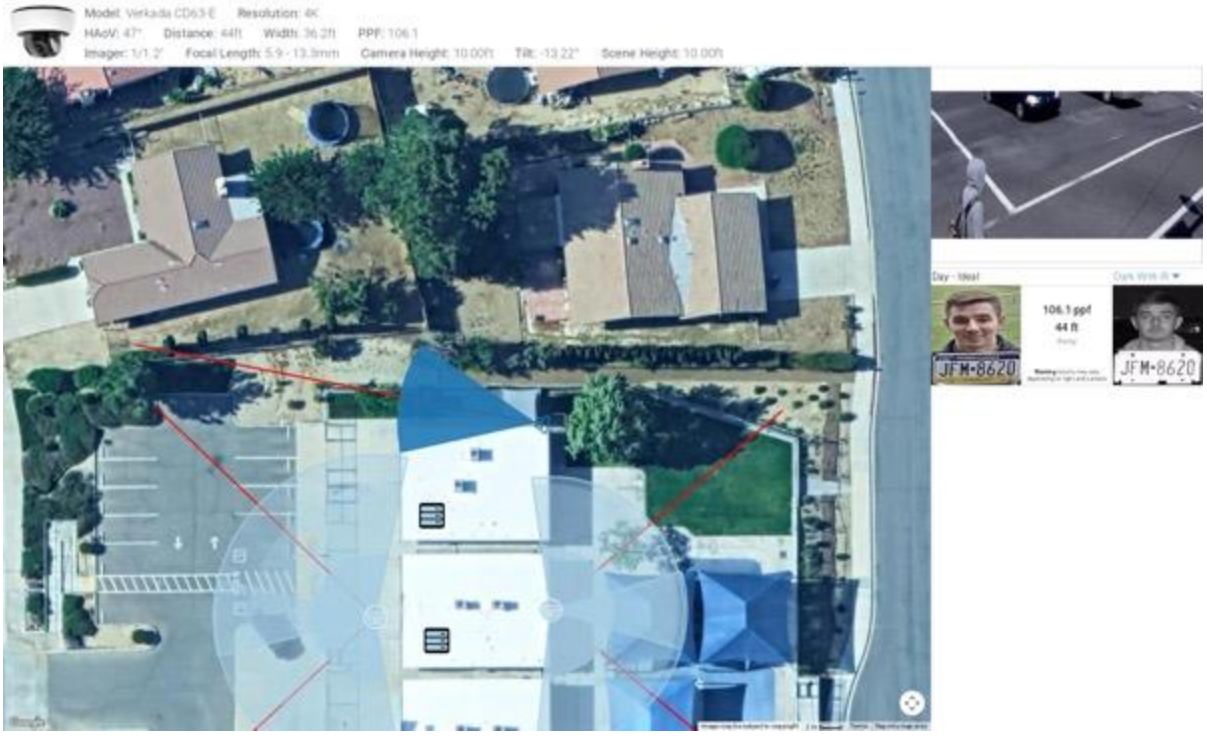
Overview



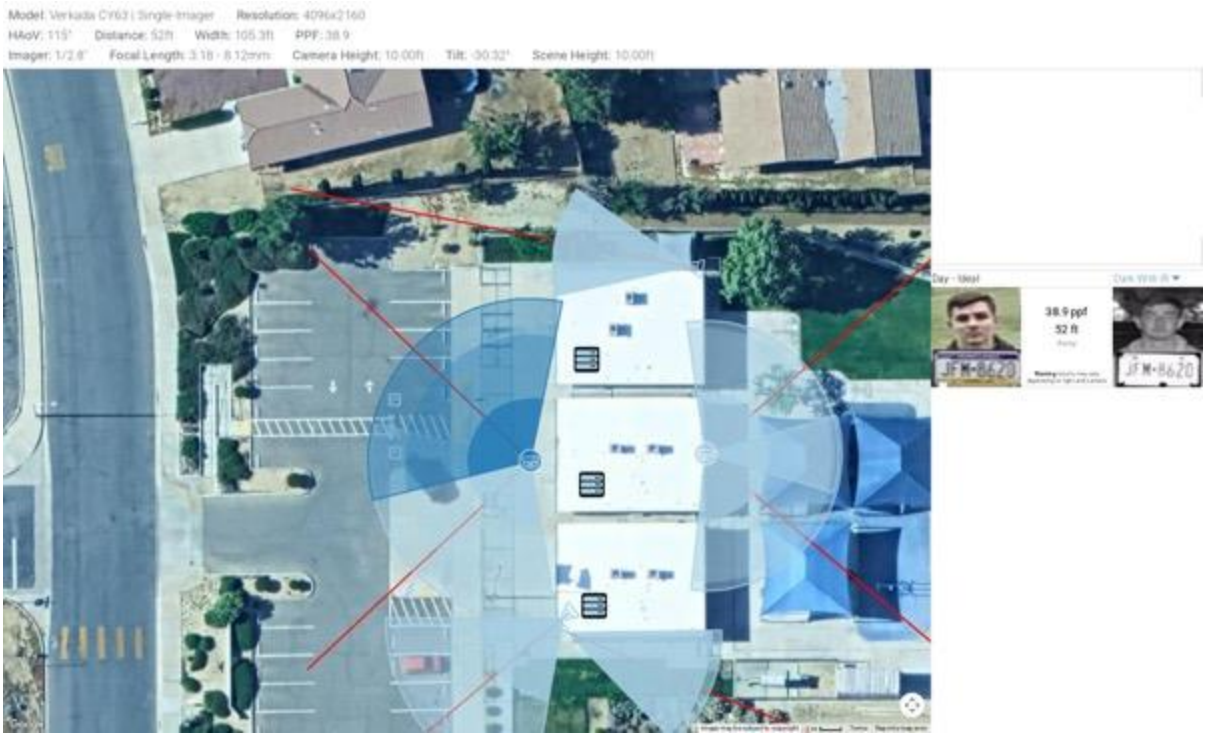
CD63E 1



CD63E 2



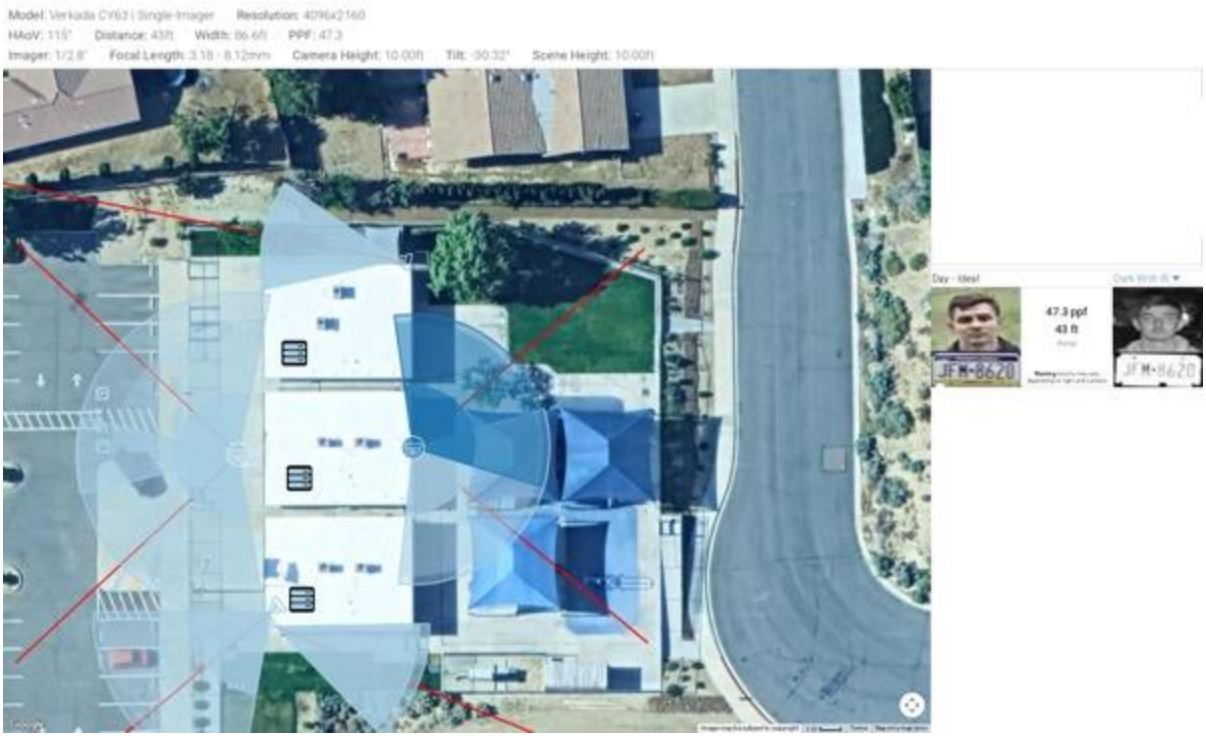
CD63E 3



CY63 1: Imager 1



CY63 1: Imager 2



CY63 2: Imager 1



CY63 2: Imager 2



Network Closet 1



Network Closet 2



Network Closet 3

Site Photographs



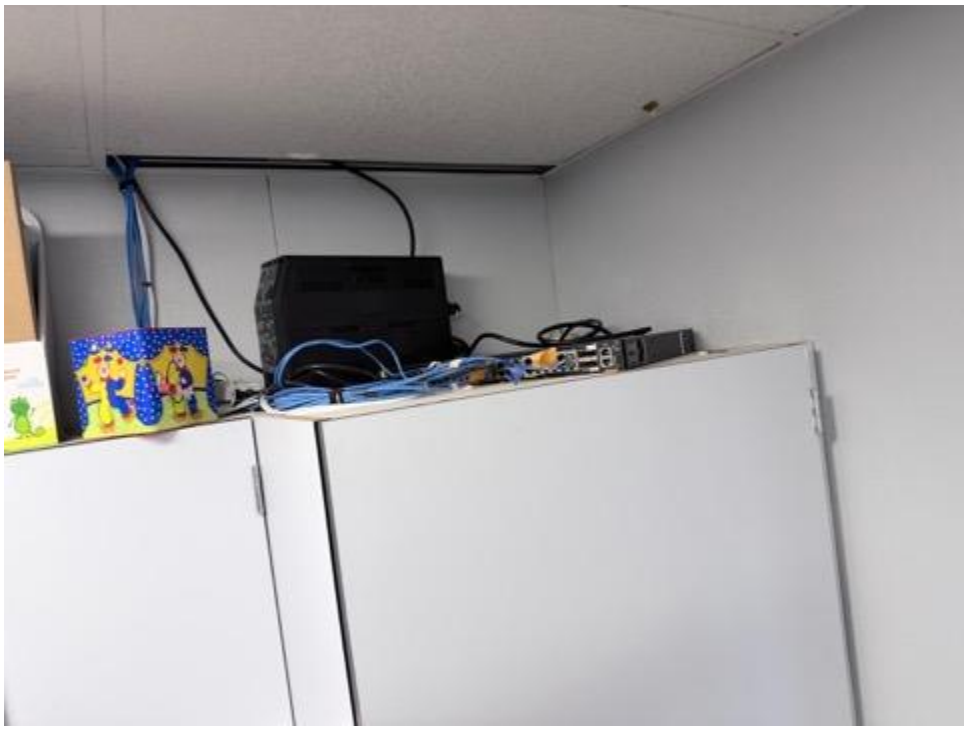
Site Photo 1



Site Photo 2



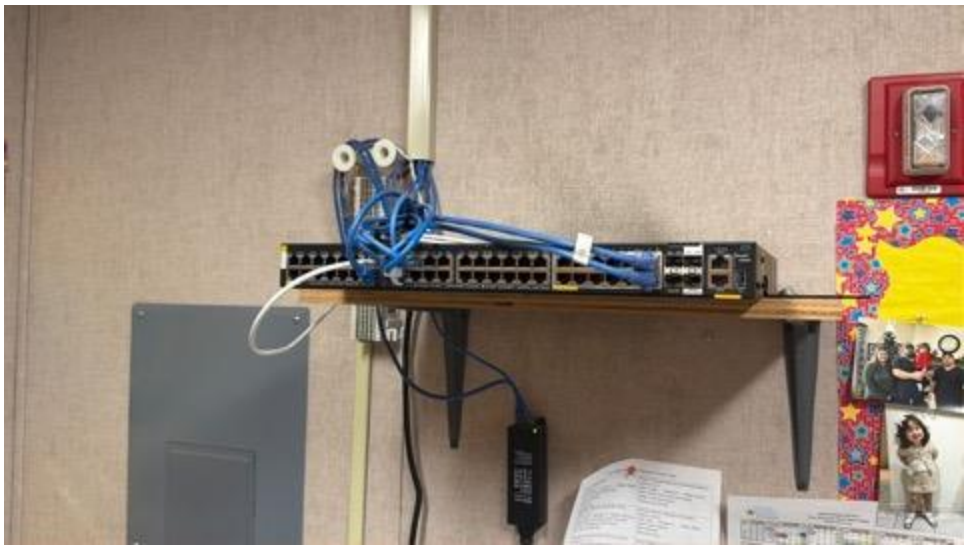
Site Photo 3



Site Photo 4



Site Photo 5



Site Photo 6

SCOPE OF WORK

Site 8: Mountain View Administration

San Bernardino County Superintendent of Schools • Verkada Video Surveillance System

Project	Owner	Camera Units	Document Date
SBCSS Verkada Video Surveillance	San Bernardino County Superintendent of Schools	6 camera units (owner-furnished)	March 2026

1. Scope Overview Summary

This Scope of Work describes the labor, materials, and services to be provided by the Contractor for the installation and commissioning of the Verkada video surveillance system at Mountain View Administration, a facility of the San Bernardino County Superintendent of Schools (SBCSS). All Verkada cameras, mounting accessories are Owner-furnished. The Contractor shall furnish structured cabling, conduit, pathways, consumables, and all other materials required to complete the installation.

The Mountain View Administration campus comprises a single main building. The facility is served by one Main Distribution Frame (MDF); refer to the site-specific documentation provided for exact locations.

The building features a mix of hard and soft ceiling construction, with access points distributed throughout. The contractor shall home-run all camera cabling to the most appropriate and nearest network location.

Specific to this location, two CD63E cameras are to be mounted on the roof; interior roof access is available from within the building.

The contractor shall furnish and install patch panels, keystones, and patch cables throughout. All infrastructure shall be clearly and consistently labeled in accordance with industry best practices.

2. Owner-Furnished Equipment

The following Verkada equipment will be provided by the Owner (SBCSS) for installation at this site. The Contractor shall acknowledge receipt of all materials prior to beginning work and report any discrepancies or damage in writing within 48 hours of delivery.

Item Description	Part Number	Qty	Category
Exterior Camera CD63E	CD63-512E-HW	3	Camera
Verkada CY63 Dual-Sensor Camera	CY63-1TBE-HW	3	Camera
Verkada CY Junction Box Mount	ACC-MNT-YJBOX-1	3	Mount

Parapet Camera Mount	AX-Parapet	2	Mount

Note: Owner-furnished equipment is provided for installation only. Contractor shall not substitute, modify, or return any Owner-furnished items without prior written authorization from SBCSS.

3. Contractor-Furnished Materials

The Contractor is responsible for furnishing all materials required to complete the installation that are not listed above as Owner-furnished. Contractor-furnished materials shall include, but are not limited to:

- Category 6A structured cabling (plenum-rated, UL listed) for all camera runs
- Conduit, fittings, and EMT raceway for all exposed cable runs (interior and exterior)
- Junction boxes, back boxes, and surface raceways as required for a complete and clean installation
- Weatherproof conduit fittings, seals, and duct seal compound for all exterior penetrations
- Patch panels, keystone jacks, and cable management as needed at network termination points
- Mounting hardware: screws, anchors, toggle bolts, masonry anchors, and structural backing as required
- Cable labels, permanent markers, and documentation materials
- Consumables: wire ties, lacing, split loom, and protective materials

4. Scope of Installation Services

The Contractor shall provide the following services for this site:

- Receive, inspect, and verify all Owner-furnished Verkada equipment upon delivery. Report discrepancies or damage to the Owner in writing within 48 hours.
- Perform a pre-installation site walk with the Owner's representative to confirm camera mounting locations, cabling routes, and any site-specific access requirements.
- Install 3 Verkada CD63E exterior dome cameras at Owner-approved locations. Mount at approved height using furnished hardware. Provide weatherproof cable entry seals at all exterior penetrations.
- Install 3 Verkada CY63 Dual-Sensor cameras using furnished CY Junction Box Mounts (ACC-MNT-YJBOX-1).
- Furnish and install all structured cabling (minimum Cat6A, plenum-rated where required). Run cabling from each camera location to the designated network closet or PoE switch. Test all runs with a calibrated cable tester and document results. Label both ends of all cables to match the camera naming convention established by the Owner.
- Install Parapet Camera Mounts (AX-Parapet) at roof parapet wall locations as directed. Coordinate with Owner prior to drilling or anchoring into the parapet wall. Apply weatherproof sealant at all penetrations. Ensure mount orientation and camera angle provide intended coverage of the area below.
- Claim all cameras into the SBCSS Verkada Command organization. Assign each camera to the correct site and apply the approved camera naming convention. Confirm all cameras report online in the Command portal.

- Configure image settings for each camera: adjust zoom and focus (varifocal cameras), enable WDR where required, verify night vision performance, and apply privacy masks at any locations required by Owner.
- Conduct a final walkthrough with the Owner's representative to verify coverage at all camera locations. Correct any pointing, focus, or obstruction issues identified during the walkthrough.
- Provide as-built documentation including: annotated floor plan showing all camera locations, cable schedule with cable ID, run length, and termination port, and a completed camera inventory list with serial numbers.

⚠ SPECIAL CONDITION: Two cameras at this site are to be mounted using Parapet Camera Mounts (AX-Parapet) on the building's roof parapet wall. Contractor shall coordinate anchor locations with Owner prior to drilling. Apply weatherproof sealant at all roof parapet penetrations and verify structural capacity of the parapet wall supports the mount and camera loading.

5. Work Not Included

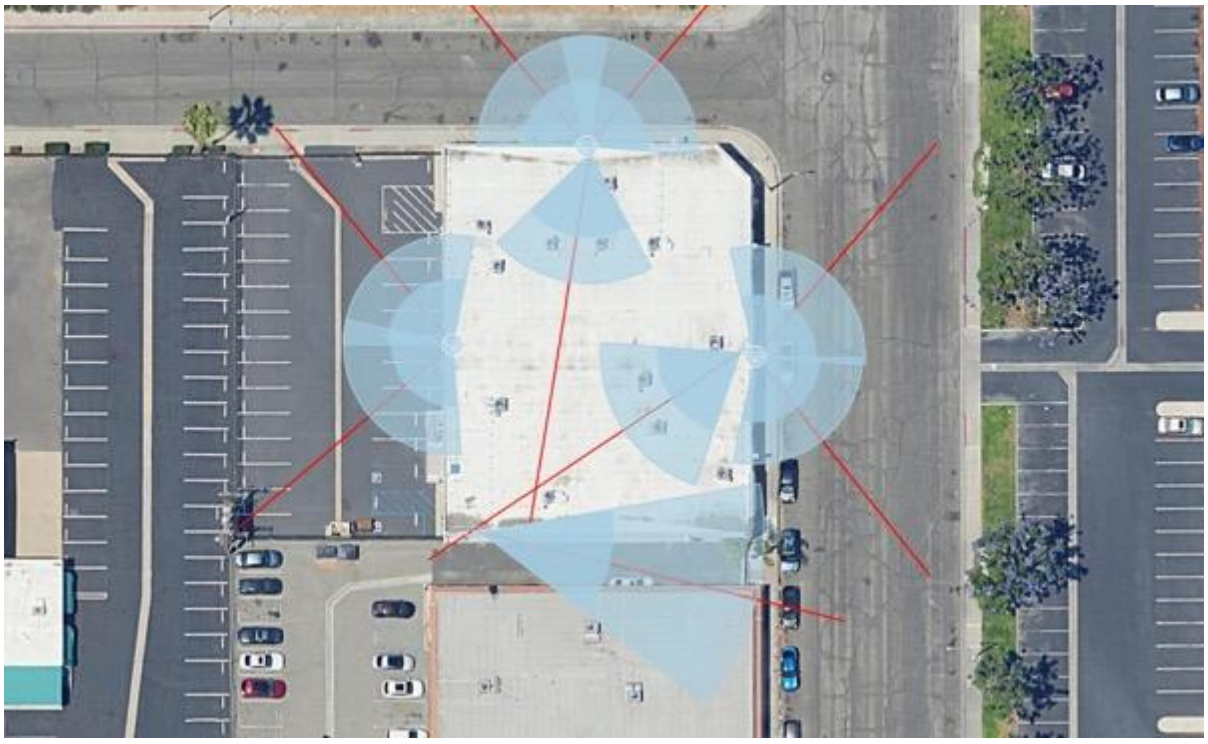
The following items are explicitly excluded from this Scope of Work:

- Procurement or replacement of Owner-furnished Verkada cameras, accessories, or software licenses
- Network switching infrastructure (PoE switches, routers, firewalls) unless listed as Owner-furnished or specifically included by addendum
- Internet service, broadband, or cellular data services
- Structural modifications to walls, ceilings, or roofing systems
- Painting, patching, or cosmetic restoration beyond standard cable pathway patching
- Verkada Command organizational setup beyond camera claiming, site assignment, and naming (user management and advanced configuration to be performed by SBCSS IT or authorized Verkada partner)
- Ongoing maintenance, service contracts, or warranty response after system acceptance

Mountain View Administration Site Survey & Camera Layout

IPVM Camera Coverage Analysis

IPVM Designer Calculation — March 2026. This output is the work product of the individual who created it. IPVM does not guarantee nor warranty the work therein nor its implementation.



Overview



CD63E 1



CD63E 2



CD63E 3



CY63 1: Imager 1



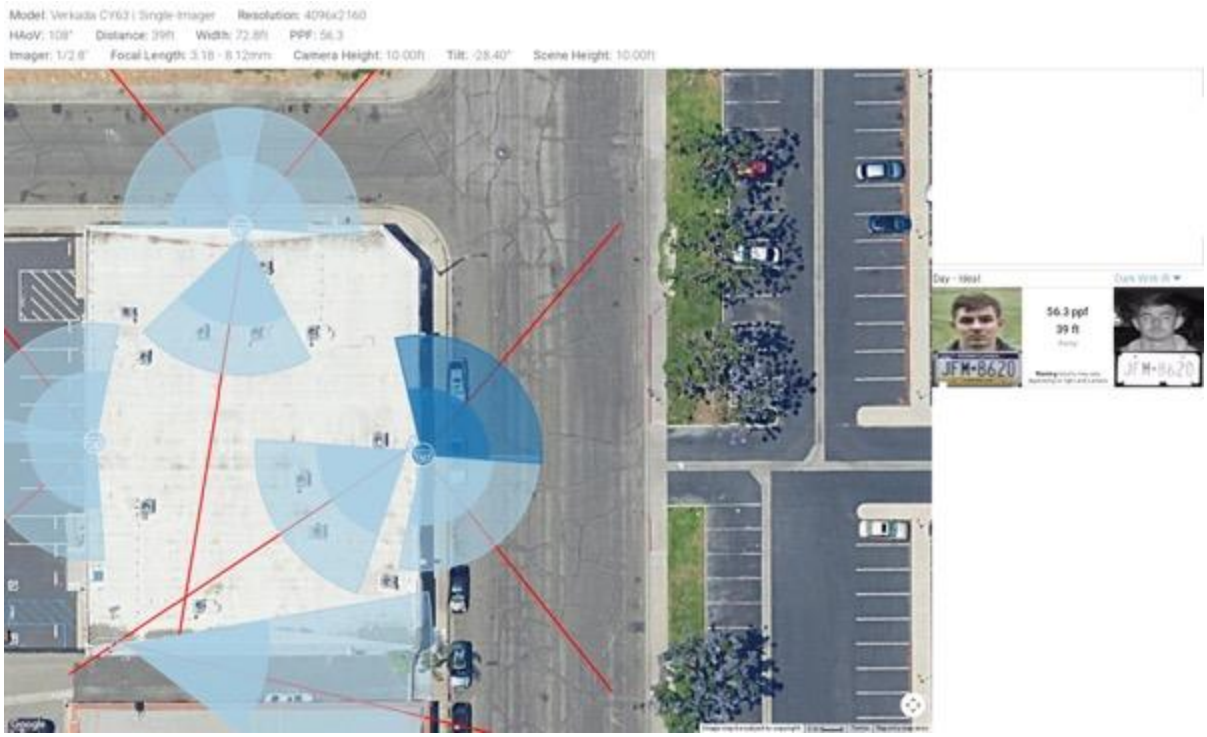
CY63 1: Imager 2



CY63 2: Imager 1



CY63 2: Imager 2

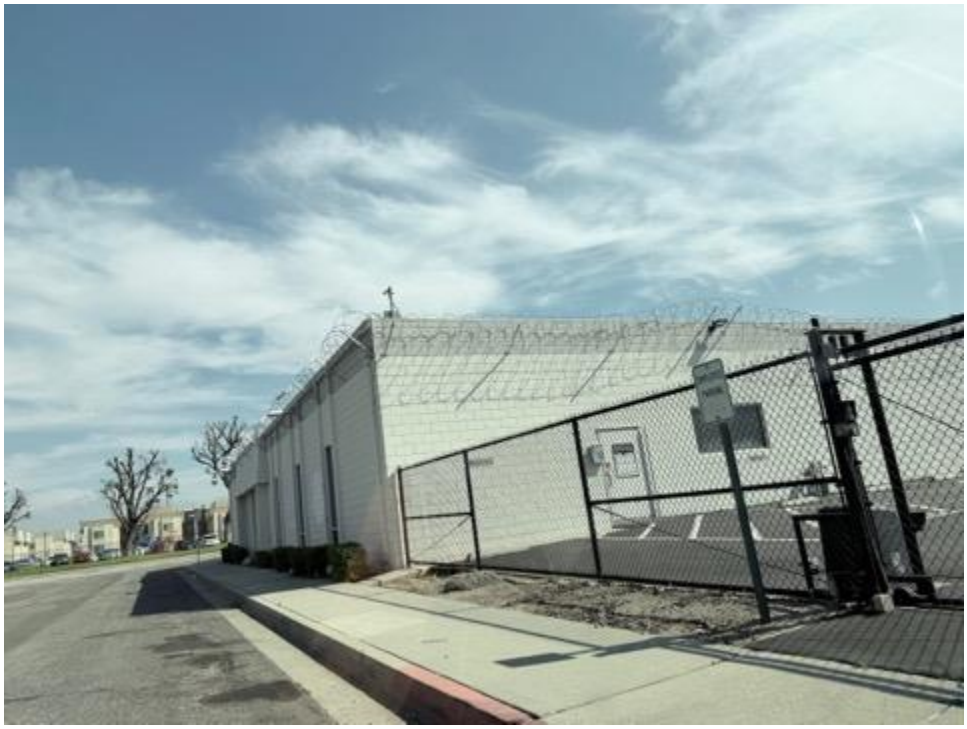


CY63 3: Imager 1



CY63 3: Imager 2

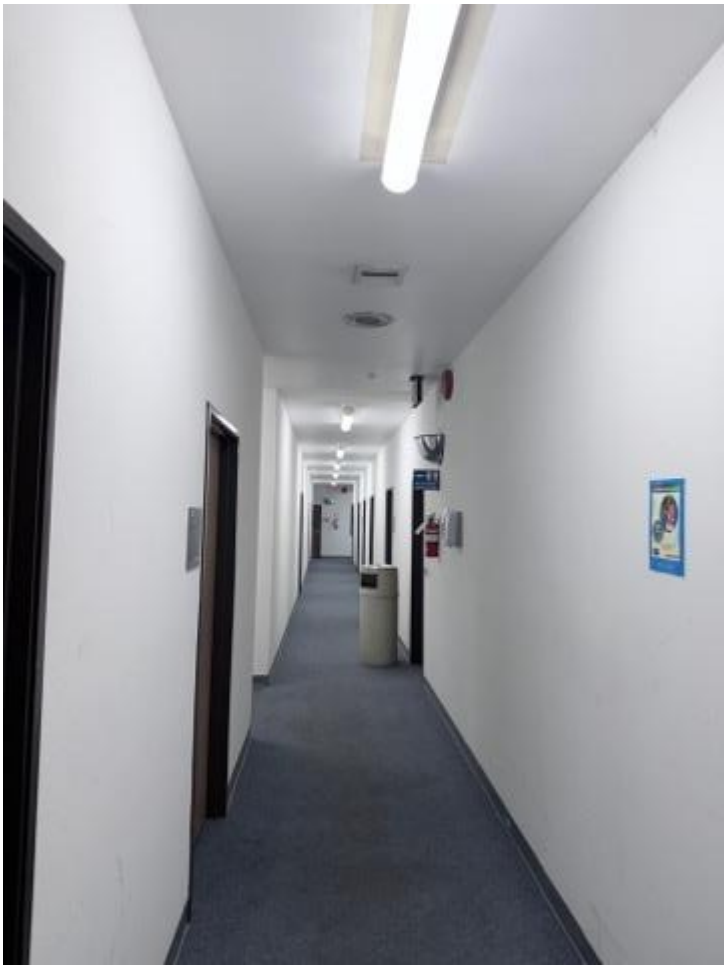
Site Photographs



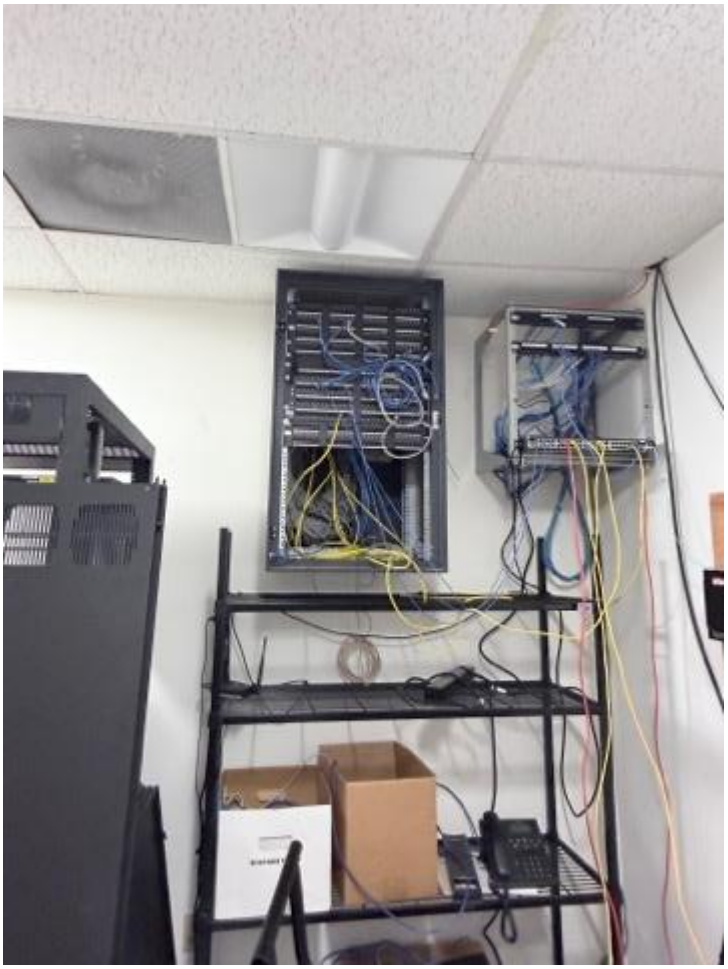
Site Photo 1



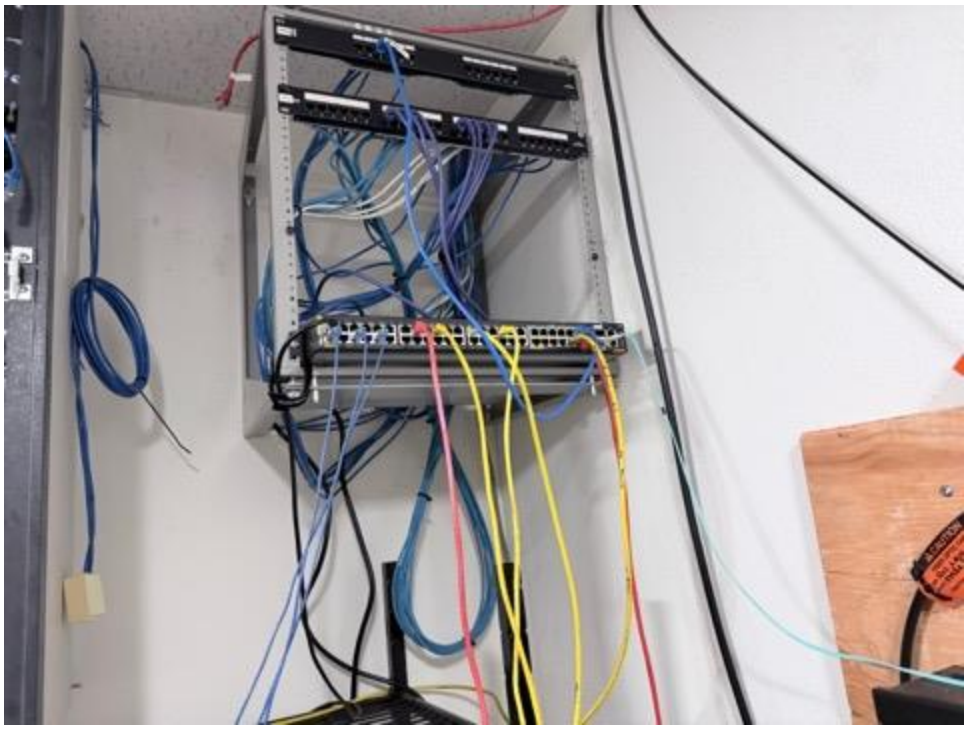
Site Photo 2



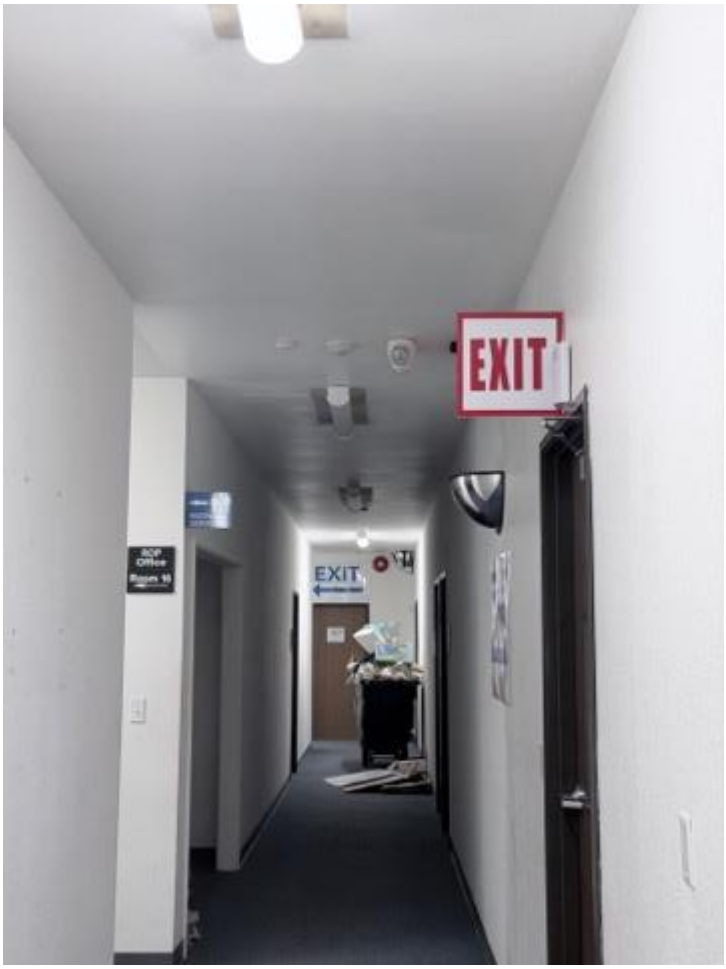
Site Photo 3



Site Photo 4



Site Photo 5



Site Photo 6



Site Photo 7



Site Photo 8

Overview – Verkada Command Platform

Verkada Command is a unified, cloud-based video security management platform that manages all Verkada devices from a single browser-based interface. Unlike traditional NVR/DVR systems, Verkada cameras store video onboard (edge storage) while simultaneously providing cloud access for live viewing, historical search, and system health monitoring with no on-site server required.

Platform Architecture
Verkada cameras operate as independent edge-computing devices. Video is stored locally on the camera's onboard SSD. Command provides centralized management, remote access, analytics, and notifications — all delivered through a secure HTTPS/SRTP encrypted cloud connection. No VPN, port forwarding, or on-site server is required.

1.1 Key Platform Capabilities

- Live view and historical playback from any browser or mobile device
- Edge-based video analytics: motion, person detection, license plate recognition (LPR), occupancy trends
- Centralized user and permission management with role-based access control
- Site-based organizational hierarchy to support multi-campus or multi-building deployments
- Proactive health monitoring with automated alerts for offline cameras, storage warnings, and tampering
- Firmware managed and distributed by Verkada – no manual updates required
- Open API for third-party integrations (access control, PSIM, building automation)

1.2 Access Points

Access Method	Description
Web Portal	app.verkada.com – primary administration and viewing interface (any modern browser)
Mobile App	iOS and Android – live view, playback, alerts, and motion search
Viewing Station	Dedicated local display device (VS52) for wall-mounted monitor or TV output
API	REST API and Python SDK available for integration with third-party platforms

2. Pre-Installation Planning

Thorough pre-installation planning ensures cameras are placed effectively, the network can support the deployment, and the system is configured to meet client operational and security objectives.

2.1 Site Survey Checklist

- Identify all coverage zones: entries, exits, parking, corridors, common areas, and high-value areas
- Determine camera mounting locations (walls, ceilings, poles, eaves) and confirm structural suitability
- Identify cabling routes from camera to nearest network closet or PoE switch
- Measure distances to confirm cabling falls within 100m (328 ft) Cat5e/6 run limit per IEEE 802.3af/at
- Document environmental conditions: direct sunlight exposure, rain, dust, temperature extremes, vandal risk
- Confirm power availability: PoE switch port count
- Document existing network infrastructure: available switch ports, VLAN capability, internet uplink capacity

> *BEST PRACTICE: Use Verkada's online Camera Placement Guide tool at verkada.com to model coverage zones and camera field of view before finalizing mounting locations.*

2.2 Network Requirements

Verkada cameras require only outbound internet access on TCP port 443. No inbound firewall rules, VPNs, or static IPs are needed. Confirm the following:

Requirement	Detail
Bandwidth (per camera)	Minimum 1 Mbps upload per camera for cloud access; 4–10 Mbps for high-motion environments. Idle bandwidth usage is very low.
DNS Resolution	Cameras must resolve *.command.verkada.com and *.verkada.com. Confirm DNS is not blocking these domains.
Firewall / Proxy	Allow outbound TCP 443 to Verkada IP ranges. Do not perform SSL inspection on Verkada traffic (uses certificate pinning).
PoE Standard	Cameras require IEEE 802.3at (PoE+, 30W) or 802.3bt (PoE++, 60W) depending on model. Verify switch port budget.
VLAN Segmentation	Recommended: place cameras on a dedicated VLAN with internet access only. Prevents lateral movement within the network.
NTP	Cameras sync time automatically via Verkada's cloud infrastructure. Ensure outbound NTP (UDP 123) is allowed if firewall restricts UDP.

3. Camera Mounting Best Practices

Proper mounting is critical to image quality, coverage effectiveness, and long-term reliability. The following standards apply to all Verkada camera installations.

3.1 General Mounting Standards

- Mount cameras at 8–10 feet (2.4–3.0m) above finished floor for indoor installations. This height captures facial detail while remaining above reach without a ladder.
- For outdoor perimeter cameras, mount at 10–14 feet (3.0–4.3m) to reduce vandal exposure while maintaining usable image angles.
- All exterior cameras must use a weatherproof back box or surface conduit fitting. Seal all conduit entries with appropriate weatherproof fittings or duct seal compound.
- Avoid mounting cameras where lens will face directly into the sun. East-facing cameras should be angled downward; west-facing cameras require WDR-capable models.
- Do not mount cameras directly adjacent to bright light fixtures. Backlit subjects wash out facial detail. Reposition or shield the light source where possible.
- Ensure mounting surface is structurally adequate. Use toggle bolts or masonry anchors for hollow walls or concrete. Do not rely on drywall anchors alone for exterior or high-traffic locations.
- Secure and support all cable runs. Use conduit for all exposed outdoor runs. Indoor low-voltage cable must be plenum-rated where run through air-handling spaces.

> ✔ *BEST PRACTICE: Maintain a minimum 30° downward tilt on dome cameras to avoid looking into lights and to capture subjects' faces rather than the tops of heads.*

3.2 Camera-Type Specific Guidance

Camera Type	Mounting Guidance
Indoor Mini Dome (CD/CB Series)	Ceiling or high wall mount. Use included J-box mount for finished ceilings. Ideal for corridors, offices, retail, and reception areas. Maintain clear sightlines; avoid obstructions within 3 ft.
Outdoor Dome (CD63E, CE63 Series)	Eave, soffit, or wall mount. Use Verkada angle mount (ACC-MNT-ANGLE) where surface angle does not provide adequate downward tilt. Ensure lens faces away from direct sun.
Multi-Sensor (CF83 Series)	Ceiling mount for large open areas: parking lots, gymnasiums, cafeterias. Requires 802.3bt PoE++. Confirm switch compatibility. Aim each sensor head to cover a distinct zone.
Dual-Sensor (CY63 Series)	Corner or ceiling mount. Two independent lenses cover 180°. Ideal for intersections, building entries, and T-shaped corridors. Use the Verkada CY Junction Box (ACC-MNT-YJBOX).
Bullet / Outdoor Telephoto (CB Series)	Pole, wall, or eave mount. Best for long-distance views of parking lot entrances, driveways, and perimeters. Aim lens along the path of travel (not perpendicular) for best LPR capture.
PTZ Cameras	Elevated pole or wall mount for maximum pan coverage. Must be mounted to a rigid, vibration-free structure. PTZ patrol routes should be programmed after installation and tested for all preset positions.

3.3 Junction Box and Wiring Standards

- Install an electrical back box or camera-specific junction box at each camera location prior to wiring. Flush mount preferred for finished interior spaces.
- Label both ends of every cable pull with a permanent label matching the camera name/number to be assigned in Command.
- Leave a minimum 12-inch service loop at each camera location to allow for future adjustments.
- Terminate all Cat6 runs at a patch panel in the IDF/MDF using T568B standard. Test all runs with a cable tester before camera installation.
- For runs exceeding 295 ft (90m): use a Verkada PoE extender or media converter to maintain PoE delivery. Do not exceed 100m total Cat6 run.

4. Adding Cameras to Verkada Command

Cameras are claimed into a Verkada organization using a unique serial number printed on the camera body and included in the camera's packaging. Claimed cameras appear immediately in Command once connected to the internet.

4.1 Claiming Cameras

1. Log in to app.verkada.com as an Organization Administrator.
2. Navigate to Cameras → Add Camera (or go to Devices → All Devices → Add Devices).
3. Enter the camera's serial number (found on the label on the camera body, usually 12 characters). Alternatively, scan the QR code on the camera with the Verkada mobile app.
4. Assign the camera to the correct Site at the time of claiming.
5. Click Claim. The camera will appear as "Offline" until it establishes a network connection, after which it will go Online within 2–5 minutes.

4.2 Bulk Camera Claiming (CSV)

For deployments of multiple cameras, bulk claiming via CSV is the most efficient method:

- Prepare a CSV file with columns: Serial Number, Site Name, Camera Name (optional), Location (optional).
- Navigate to Devices → Add Devices → Upload CSV in Command.
- Upload the file and verify the preview before confirming.
- All cameras in the CSV will be claimed and assigned to their designated sites in a single operation.

> *BEST PRACTICE: Request the camera serial number list from the equipment delivery documentation before installation day. Pre-populate the CSV with site assignments and camera names so cameras can be claimed and named immediately upon connection.*

4.3 Camera Naming Conventions

Consistent naming is critical for operational usability, especially in multi-site deployments. Establish and enforce a naming standard before deployment begins.

Element	Guidance
Recommended Format	[Site Abbreviation]-[Building/Zone]-[Camera Type]-[Number] Example: FROST-GYM-DOME-01, SIEGRIST-MAIN-ENTRY-02
Include Location Clues	Name should tell a viewer exactly where the camera is without needing to look at the live image. Avoid generic names like "Camera 1".
Building / Floor	For multi-story buildings, include floor reference: FROST-B1-HALL-01 (Building 1, Hallway, Camera 01).
Entry Points	Label all door and gate cameras with cardinal direction or door ID: MAIN-ENTRY-N, GATE-W, SIDE-DOOR-101.
Special Use	Label LPR, PTZ, and outdoor perimeter cameras distinctly: LPR-MAIN-ENTRY, PTZ-PARKING-LOT.

4.4 Assigning Tags and Custom Fields

- Use Command's Camera Tags feature to group cameras by function: Entry/Exit, Interior, Parking, LPR, PTZ, High-Value Area.
- Tags enable rapid filtering during incident investigation. Establish a tag taxonomy during initial deployment.
- Custom fields can capture asset data: installation date, serial number, PoE port, cabling label – visible in the device detail panel.

5. Image Quality – Best Standards and Practices

Verkada cameras ship with factory defaults that provide good general-purpose image quality. However, each deployment environment is unique. The following settings should be reviewed and adjusted at every camera location after physical installation.

5.1 Resolution and Frame Rate

Setting	Recommendation
Resolution	Set to the camera's maximum native resolution unless storage or bandwidth constraints require reduction. Higher resolution is critical for facial recognition and LPR use cases.
Frame Rate	20–30 fps is the standard for most security applications. 15 fps may be used for low-motion storage areas to reduce bitrate. Do not use less than 15 fps for areas requiring smooth playback.
Bitrate Mode	Verkada uses Variable Bitrate (VBR) with automatic optimization. Do not override unless troubleshooting. Higher scene complexity increases bitrate automatically.

> ✓ *BEST PRACTICE: Increase frame rate to 30 fps for high-speed vehicle entrances or athletic areas where fast motion must be clearly captured.*

5.2 Wide Dynamic Range (WDR)

WDR compensates for scenes with simultaneous bright and dark areas – common at building entries, lobbies with windows, and outdoor covered areas.

- Enable WDR for any camera facing a window, glass door, or strong backlight source.
- Set WDR level to Auto initially. Manually increase if subjects near windows remain silhouetted.
- WDR slightly increases camera processing load and may reduce very low-light performance. For cameras in consistently dim areas, WDR can be disabled.

> ⚠ *NOTE: WDR and night mode interact. For cameras that must handle both bright daytime backlight and very dark nights, test and tune settings at both times of day.*

5.3 Low-Light and Night Vision

Setting	Recommendation
Color Night Vision	All current Verkada dome cameras support color night vision. Enable "Low Light Mode" to automatically engage enhanced sensitivity at night.
IR Illumination	Bullet and some dome cameras have built-in IR. IR range varies by model (up to 100 ft). Ensure the IR illumination angle matches the camera's field of view.
Gain	Leave gain on Auto. Manual gain increases noise in low-light images. Only adjust if the scene is consistently too bright or too dark on Auto.

Shutter Speed	Auto shutter is preferred. In very dark scenes, slow shutter increases sensitivity but causes motion blur. Balance with frame rate for the environment.
Supplemental Lighting	For critical identification areas (building entries, reception desks), install supplemental white light or IR illuminators independent of the camera.

5.4 Focus, Lens, and Zoom

- On varifocal cameras, set the optical zoom to cover the intended coverage zone before locking focus. Do not rely on digital zoom as it degrades resolution.
- After adjusting zoom or angle, re-trigger autofocus via the Command interface. Confirm focus is sharp at the center of the frame and at the nearest expected subject distance.
- For LPR cameras: aim to capture license plates at 40–100 ft (12–30m) with sufficient zoom to make the plate clearly readable. The plate should occupy at least 10% of frame width.
- Confirm there are no obstructions (branches, fixtures, signs) that enter the camera's field of view – these cause false motion events and obscure subjects.

> ✓ *BEST PRACTICE: Use the Command live view's zoom and reference grid overlay during physical installation to verify effective coverage zones before fully tightening the mounting hardware.*

5.5 Exposure and Scene Optimization

Setting	Recommendation
Exposure Mode	Use "Auto" for most scenes. Switch to "Shutter Priority" for fast-moving subjects (vehicle entrances). Use "Manual" only for scenes with extreme consistent lighting.
Highlight Compensation	Enable for cameras facing parking lots or driveways with strong sunlight or vehicle headlights. Reduces blown-out bright areas.
Privacy Masking	Apply privacy masks to areas where recording is prohibited (neighboring property, restroom signs, locker room visibility). Masks are permanent black overlays on the image.
Rotate / Flip	Correct image orientation for ceiling mount (180° flip) or wall mount corner installations. Set in Camera Settings → Image → Orientation.
Defogging	Enable defogging filter for cameras covering outdoor areas subject to coastal marine layer, fog, or smoke. Slightly increases contrast at cost of shadow detail.

6. Video Retention Settings

Verkada cameras store video on built-in edge storage (onboard SSD). The retention period is determined by the camera's storage tier (30-day, 90-day, 365-day, or unlimited options available depending on the model purchased). Retention is managed per-camera in Command.

6.1 Retention Configuration

Item	Detail
Default Retention	Set by the camera's hardware model and storage tier. View current storage allocation under Cameras → Camera Name → Settings → Storage.
Overwrite Behavior	Cameras overwrite the oldest video first (circular buffer). There is no manual "delete clip" function during normal operation.
Event-Based Saving	Use Bookmarks and Alerts to flag and protect critical footage from overwrite. Bookmarked clips can be exported and archived externally.
Cloud Backup	Verkada does not provide automatic cloud video backup by default. Cloud is used for access/management only. Export critical footage manually to local storage.
Export Options	Clips can be exported as MP4, shared as time-limited web links, or downloaded in bulk via the Verkada API for long-term archival.

6.2 Retention Recommendations by Location Type

Location Type	Recommended Minimum Retention
Building Entries / Exits	Minimum 90 days. Incidents at entry points are frequently reported weeks after the event.
Parking Lots / Driveways	Minimum 90 days. Vehicle incidents and property crimes are commonly investigated weeks later.
Interior Corridors	30–90 days standard. Adjust based on facility security policy and incident history.
Common Areas (Cafeterias, Gyms)	30 days minimum. Increase to 90+ days for schools with a history of property incidents.
High-Security / Server Rooms	Minimum 90–365 days. Compliance requirements may dictate specific minimums.
LPR Cameras	Minimum 90 days to support investigation of delayed vehicle-related incidents.
Cameras with Known Compliance Requirements	365 days or greater. Consult legal and compliance teams for applicable retention minimums.

> *CLIENT DISCUSSION: Confirm required minimum retention periods with the client's legal, HR, and IT/security policy teams before finalizing camera model and storage tier selection. Some industries have mandated minimums (healthcare, education, government).*

6.3 Storage Health Monitoring

- Monitor storage health under Devices → Health → Storage. Command alerts when a camera's SSD health drops below threshold.
- Review "Days of Video" per camera to confirm actual retention is meeting the purchased storage tier. High-motion scenes consume storage faster and may result in shorter actual retention.

> ✔ *BEST PRACTICE: For high-traffic areas with continuous motion, consider selecting a higher storage tier at procurement to ensure the retention target is reliably met.*

7. User Management

Verkada Command uses role-based access control (RBAC) to determine what each user can view, configure, and manage. Users are added at the Organization level and assigned roles that may be global or limited to specific sites.

7.1 User Roles and Permission Levels

Role	Permissions	Typical Assignment
Organization Admin	Full access to all devices, sites, users, settings, and billing across the entire organization.	Security Director, IT Administrator, Security Integrator
Site Admin	Full control of cameras, users, and settings within assigned sites only. Cannot access billing or other sites.	Campus Principal, Facilities Manager, Site Security Lead
Standard User	Live view and playback only on assigned sites. Can bookmark and export clips. Cannot change any settings.	Campus Staff, Security Guard, Office Administrator
Viewer	Live view only on assigned cameras or sites. No playback, no clip export, no settings.	Non-security staff requiring limited awareness access (e.g., front office monitor)
Guest / Shared Link	Time-limited, read-only access to a specific shared clip or live view. No account required.	Law enforcement, Insurance adjusters, Temporary reviewers

> ☑ *BEST PRACTICE: Apply the principle of least privilege: grant users only the access level required for their role. Use Site Admin rather than Org Admin for campus-level administrators.*

7.2 Adding Users

6. Navigate to Admin → Users → Add User.
7. Enter the user's email address. An invitation email will be sent automatically.
8. Assign a Role and select which Sites the user can access.
9. Optionally assign specific Camera Groups or individual cameras for granular access control.
10. The user completes registration via the email invitation and sets their own password.

7.3 Single Sign-On (SSO) Integration

Verkada Command supports SSO via SAML 2.0. SSO integration allows users to authenticate with their existing organizational credentials (Microsoft Azure AD, Google Workspace, Okta, etc.).

- SSO is configured under Admin → Security → Single Sign-On.
- Once SSO is enabled, user accounts can be provisioned automatically via SCIM if supported by the identity provider.

- SSO does not override two-factor authentication (2FA) requirements – these are managed at the identity provider level.

> *CLIENT DISCUSSION: Discuss SSO integration requirements with the client's IT department. If SBCSS uses Microsoft Azure AD (Entra ID) or Google Workspace, SSO can streamline user onboarding and eliminate password management for Verkada separately.*

7.4 Two-Factor Authentication (2FA)

- Enable mandatory 2FA for all Organization Administrators and Site Administrators under Admin → Security → Authentication.
- 2FA can be enforced organization-wide, preventing users from disabling it on their own accounts.
- Supported 2FA methods: authenticator app (TOTP), SMS, and email one-time code.

> *BEST PRACTICE: Enforce 2FA for all admin-level accounts at minimum. For high-security deployments, enforce 2FA for all users regardless of role.*

8. Site Organization

Verkada Command's site structure is the primary organizational framework for multi-location deployments. A well-designed site hierarchy improves operational usability, simplifies access control delegation, and enables efficient incident response across campuses.

8.1 Site Structure Best Practices

Practice	Detail
One Site per Physical Location	Create a distinct site for each campus, building, or facility. Avoid grouping multiple physical locations into a single site, as this complicates per-location access control delegation.
Consistent Naming	Use a clear, agreed-upon naming convention: full campus name or established abbreviation. Example: Frost Elementary, Live Oak Middle, Siegrist Elementary.
Address / Location Data	Enter accurate address data for each site. This populates the Sites map view and assists responders.
Site Administrators	Assign a Site Admin to each campus. This person can manage cameras and users at their site without organization-wide access.
Camera Organization within Sites	Use Camera Groups within a site to logically organize cameras by building, floor, or zone: Building A – Interior, Parking Lot, Main Entries, Gymnasium.

8.2 Camera Groups

- Create Camera Groups within each site to enable one-click viewing of related cameras. Common groupings: All Entries, Interior Corridors, Parking, Gymnasium.
- Users and Site Admins can be given access to specific Camera Groups rather than all cameras at a site.
- Camera Groups are site-specific; they do not cross site boundaries.

8.3 Floor Plans and Maps

Verkada Command supports floor plan image uploads per site, allowing cameras to be placed on a visual map for intuitive access.

- Upload floor plans as PNG or JPG images under Sites → Floor Plans.
- Place each camera on the floor plan by dragging the camera icon to its physical location.
- Clicking a camera on the floor plan opens its live view directly – greatly improving response speed during incidents.
- Maintain floor plan accuracy as cameras are added, moved, or renamed.

> *CLIENT DISCUSSION: Request AutoCAD or PDF floor plans from the client or their facilities department at project kickoff. Even simplified building outlines imported as PNG images significantly improve operator usability.*

9. Optional Settings – Client Discussion Required

The following features and settings are available in Verkada Command but require client input and policy alignment before configuration. These items should be reviewed with the client during the project kickoff or commissioning phase.

9.1 Motion Detection and Alerts

Feature	Consideration
Motion Sensitivity	Adjustable per camera. Higher sensitivity increases alert frequency. Tune based on expected activity level at each location.
Motion Zones	Define specific zones within the camera frame where motion triggers alerts. Exclude areas with constant motion (flags, trees, road traffic) to reduce false positives.
Alert Notifications	Email and push notification alerts per camera. Configure which users receive which camera's alerts. Avoid alerting all users for all cameras – alert fatigue is a risk.
Motion Suppression Hours	Suppress alerts during school/business hours when motion is expected. Enable full alert mode during closed hours.
Smart Motion Detection	Person-only or vehicle-only detection reduces false alerts from environmental motion. Available on cameras with onboard analytics.

> *CLIENT DISCUSSION: Define alert policies with the client: who receives what alerts, at what hours, and for which cameras. Avoid over-alerting. Establish an escalation path for after-hours alerts.*

9.2 License Plate Recognition (LPR)

- LPR is an analytics feature available on designated LPR cameras (CD63, CB62 series with LPR enabled).
- Searchable log of all plates captured, with timestamps and associated video clips.
- Plate Watchlists: create lists of plates of interest (stolen vehicles, approved vehicles, banned individuals) with automated alerts on detection.
- Camera positioning for LPR: must capture plates head-on or at shallow angle (< 30°). Speed should be below 25 mph for reliable capture.

> *CLIENT DISCUSSION: Determine if LPR Watchlists will be used for access control, parking management, or security response. Define who will manage and update the Watchlist and what action is taken on a Watchlist hit.*

9.3 People Analytics and Occupancy Trends

- People Count: provides real-time and historical crowd density data. Useful for campus occupancy reporting and compliance.
- Occupancy Trends: aggregated entry and occupancy data over time. No personal data is retained – only counts.
- Face-based analytics are NOT used by Verkada's standard analytics features. People analytics use silhouette detection only.

> *CLIENT DISCUSSION: Occupancy analytics may require policy disclosure to building occupants in certain jurisdictions. Confirm with client's legal team before enabling.*

9.4 Access Control Integration

- Verkada Access (AC41/AC42 readers + Command portal) integrates natively with Verkada cameras in a unified interface.
- Non-Verkada access control systems (Lenel, Software House, Genetec, etc.) can integrate via the Verkada Open API.
- Integration enables synchronized door events with camera video: clicking an access event opens the associated camera clip automatically.

> *CLIENT DISCUSSION: If the client has an existing access control system or is planning a separate access control deployment, evaluate Verkada Access integration to unify the security management interface.*

9.5 Wireless and Cellular Connectivity

- Verkada Wi-Fi Gateway (WG41): extends camera coverage to areas without Cat6 infrastructure. Connect cameras wirelessly back to a wired gateway.
- Verkada Cellular Gateway (CG41): deploys cameras in locations with no internet infrastructure using LTE cellular. Requires data plan.
- Both options provide the same Command management experience as wired cameras.

> *CLIENT DISCUSSION: Evaluate wireless and cellular options for portable/temporary cameras, detached buildings, parking structures, and modular classrooms where running cable is not feasible.*

9.6 Viewing Stations

- Verkada Viewing Station (VS52): a dedicated hardware appliance that outputs a multi-camera view to a connected HDMI monitor or TV.
- Operates without a PC. Plug-and-play setup: connect to network and HDMI display, authenticate, and configure camera layout.
- Supports multiple layouts (1-up, 4-up, 9-up, 16-up). Layouts can be assigned to specific sites or camera groups.
- Ideal for security offices, reception desks, and dispatch centers requiring always-on display.

> *CLIENT DISCUSSION: Determine locations requiring a dedicated always-on display: main office, security/admin office, custodial office, or district operations center. Evaluate VS52 quantity and placement.*

9.7 Video Sharing and External Access

- Clip Sharing: export and share time-limited, password-protected MP4 links to specific clips without granting portal access. Useful for sharing with law enforcement or insurance.
- Guest Access: create time-limited guest accounts for specific cameras. Account expires automatically.
- API Video Access: video data accessible via REST API for integration into PSIM or custom applications.

> *CLIENT DISCUSSION: Define a policy for external video sharing: who is authorized to share clips externally, with whom, and under what circumstances. Ensure alignment with FERPA (for student-related footage) and applicable privacy laws.*

10. Firmware Updates and System Health Monitoring

Verkada manages firmware across all cameras centrally. System health monitoring is built into the Command platform and requires no third-party tools.

10.1 Firmware Updates

- Firmware is distributed by Verkada automatically. Cameras download and apply updates during low-activity periods (typically overnight).
- Updates require no action from the administrator. Review the Firmware Release Notes in the Verkada Help Center for details on each update.
- Organization Administrators can review current firmware versions per camera under Devices → Health → Firmware.
- If a camera fails to update, Command will flag it. Typical resolution: verify network connectivity and re-attempt via the camera's device settings.

> ✓ *BEST PRACTICE: Do not block outbound traffic to Verkada's update servers. Cameras behind overly restrictive firewalls may fall behind on security firmware updates.*

10.2 System Health Dashboard

Health Metric	Action
Offline Cameras	Cameras offline for > 5 minutes appear in the Health dashboard. Configure email alerts for offline events to prompt immediate investigation.
Storage Health	SSD health percentage per camera. Cameras with degraded storage will be flagged. Replacement may be needed under Verkada's hardware warranty.
Days of Video	Displays actual retention days per camera based on current storage usage. Review regularly to confirm retention targets are being met.
Firmware Version	Lists firmware version per camera. Flag cameras that have not received recent updates for network review.
Tamper Detection	Cameras alert when they detect physical tampering: sudden movement, cover removal, or lens obstruction. Review alerts promptly.
Network Status	Per-camera bandwidth and connection quality. Useful for identifying network congestion or PoE power delivery issues.

10.3 Archival and Long-Term Video Management

- Critical video (incidents, investigations) should be exported and archived externally before the retention window closes.
- Exports are saved as MP4 files. Define and communicate an archival procedure to facility security staff.
- For large-scale archival, use the Verkada API to automate video export to a local NAS or cloud storage service.

- Maintain an incident log with associated camera names, timestamps, and export file names for chain-of-custody documentation.

> *BEST PRACTICE: Establish a standing procedure: any incident requiring camera footage is formally logged within 48 hours and video is exported and stored to a designated secure archive location.*

11. Quick Reference – Commissioning Checklist

Use this checklist at project commissioning to confirm all configuration tasks have been completed before system handover.

Pre-Installation

- □ Site survey complete; all camera locations confirmed on floor plan
- □ Network infrastructure (PoE switch, VLAN, internet bandwidth) verified
- □ Cable labeling standard defined and shared with installation team

Hardware Installation

- □ All cameras mounted at correct height and angle
- □ All cable runs tested with cable tester; documentation on file
- □ PoE power confirmed at each camera location prior to camera claim
- □ Service loops left at each camera location

Verkada Command Setup

- □ All cameras claimed into organization and assigned to correct sites
- □ Camera naming convention applied to all cameras
- □ Camera tags applied (Entry, Interior, Parking, LPR, etc.)
- □ Cameras placed on site floor plans

Image Quality

- □ Resolution and frame rate confirmed per camera
- □ WDR enabled where required
- □ Low-light and night mode verified in actual nighttime conditions
- □ Privacy masks applied where required
- □ Focus confirmed on all varifocal cameras

Retention

- □ Retention period confirmed per camera; meets policy requirements
- □ Storage health verified (Days of Video at expected level)
- □ Export/archival procedure documented and shared with client

Users and Access

- □ Organization Administrators configured
- □ Site Administrators assigned to each campus
- □ Standard user accounts created for security/admin staff
- □ 2FA enforced for all admin accounts
- □ SSO integration configured (if applicable)

Alerts and Optional Features

- □ Motion zones configured per camera
- □ Alert notification recipients defined and tested
- □ LPR Watchlists configured (if applicable)
- □ Viewing Station(s) deployed and displaying correct layout (if applicable)
- □ Access control integration tested (if applicable)

Client Handover

- □ Client administrator training completed
- □ As-built camera list with names, serial numbers, and locations provided
- □ Verkada Command login credentials and SSO enrollment completed for all users
- □ Support contact information provided (Verkada support + integrator contact)

Verkada Command Integration & Administration Guide – End of Document

For current documentation visit verkada.com/docs

Section 6: Division 28 20 00 – Video Surveillance Specification

The following is the complete Division 28 20 00 Video Surveillance specification applicable to this project. This specification defines the products, materials, installation methods, and performance requirements for the Verkada video surveillance system deployment.

Part 1 – General

1. Summary

A. Section Includes:

1. Verkada cloud-based video surveillance solution including:
   a. Verkada Command cloud-based management platform
   b. Edge-based video analytics
   c. Indoor Dome Series cameras
   d. Outdoor Dome Series cameras
   e. Mini Series cameras
   f. Bullet Series cameras
   g. Fisheye Series cameras
   h. Multisensor Series cameras
   i. Pan-Tilt-Zoom (PTZ) cameras
   j. Remote cameras
   k. FIPS-Validated cameras
   l. Command Connector
   m. Viewing Station
   n. PoE Injectors
   o. Camera mounts, adapters, and accessories
   p. Cellular Gateways
   q. Wi-Fi Gateways
   r. Cloud-managed security trailer
2. Refer to the Verkada Camera Selector User Guide for assistance selecting the appropriate camera for field of view, form factor, zoom, resolution, video retention, and other selection factors.
3. Refer to the Verkada User Guide for Occupancy Trends for more information regarding the deployment of the Occupancy Trends People Analytics feature.
4. Refer to the Verkada User Guide for License Plate Recognition (LPR) for more information regarding camera selection as well as camera placement, installation, and setup for LPR use cases.
5. Refer to the Verkada User Guide for People Analytics for more information regarding key features, optimizing performance, camera selection and placement, lighting, privacy, and other selection factors.
6. Refer to the Verkada User Guide for Camera Setup Best Practices for more information regarding the following camera networking best practices:

B. Related Sections

1. 28 10 00 -- Access Control
2. 28 15 23 -- Intercom Entry Systems

3. 28 17 11 -- Visitor Management Systems
4. 28 30 00 -- Environmental Sensor
5. 28 31 00 -- Intrusion Detection

2. References

A. Published specifications, standards, tests, Codes, or recommended standards of trade, industry, or governmental organizations apply to work in these Sections, including:

1. ADA -- Americans with Disabilities Act
2. ANSI -- American National Standards Institute
3. ASCII -- American Standard Code for Information Interchange
4. ASTM -- American Society for Testing and Materials
5. IBC -- International Building Code
6. IEEE -- Institute of Electrical and Electronics Engineers
7. ISO/IEC -- International Organization for Standardization / International Electrotechnical Commission
8. NEC -- National Electrical Code
9. NEMA -- National Electrical Manufacturers' Association
10. NFPA -- National Fire Protection Association
11. TIA/EIA -- Telecommunications Industry Association / Electronic Industries Alliance
12. UL -- Underwriters Laboratories, Inc.

3. Definitions

A. Abbreviations:

1. ACS -- Access Control System
2. API -- Application Programming Interface
3. CCD -- Charge Coupled Device
4. CCTV -- Closed Circuit Television
5. CMOS -- Complementary Metal-Oxide Semiconductor
6. DHCP -- Dynamic Host Configuration Protocol
7. DNS -- Domain Name System
8. DPDT -- Double pole, double throw
9. FPS -- Frames Per Second
10. IP -- Internet Protocol
11. LAN -- Local Area Network
12. LPR -- License Plate Recognition
13. NFC -- Near Field Communications
14. NVR -- Network Video Recorder
15. ODBC -- Open Database Connectivity
16. PoE -- Power Over Ethernet
17. RAM -- Random Access Memory
18. SPDT -- Single pole, double throw
19. SSL -- Secure Sockets Layer
20. SSO -- Single sign-on
21. TCP -- Transport Control Protocol
22. UPS -- Uninterruptible Power Supply
23. VMS -- Video Management System
24. WDR -- Wide Dynamic Range

B. Definitions:

1. ADDITIONAL - NA

4. System Description

A. A hybrid cloud video surveillance system with storage and image processing on edge devices managed through the Verkada Command cloud platform.

B. Verkada Command Management Software

1. Access and management for all cameras and users across all sites. Command management functions include:
    a. Set up new cameras
    b. Create and manage sites at scale
    c. One-click device install:
    i. Add devices without assigning a site or configuring the device upfront.
        ii. New devices will be added to and "Unassigned Devices" list
        iii. Immediately check if device is online and see live data
    d. Manage camera device and system settings
    e. Access live and archived footage
    f. Manage users
    i. Filter users by status, roles, SCIM status, and more
        ii. Permanently delete users from trash, aligning with API and compliance standards
2. Security and Permissions:
    a. SAML/OAuth support for single sign-on
    b. 2-factor authentication options
    c. User permissions can be controlled at camera, site, and organization levels
    d. 802.1x Support
    e. Two-factor authentication for Organization Administrator Accounts
3. Remote Access
    a. Web app access
    b. Native apps for iOS, Android, and the Verkada VX52 Viewing Station
    c. Mobile app support for Guest, Gateways, LPR, My Account, Floorplans, and Intercom
    d. Gateway Subpage: View Wi-Fi network and data license details in the mobile app
4. Archiving and Sharing:
    a. Command licenses include unlimited cloud archiving.
    b. Export footage in MP4 format.
    c. Create and share Live Links via text or email
5. Extended Cloud Backup (ECB)
    a. Flexible Structure:
    i. Extend cloud backup in 30-day increments ("packs")
        ii. Packs can be stacked per device
    b. Self-Service Portal:
    i. Simple License Claiming: Admins can claim ECB licenses directly through the self-service portal.
        ii. Seamless License Management: Easily track usage, and support compliance with retention requirements -- all from one central dashboard.
        iii. Automatic Co-Terming: Eliminate the need to manually calculate renewal dates for ECB licenses. ECB licenses will now co-terminate with all other Command product licenses.

C. Analytics:

1. People Analytics:
    a. Intelligent edge-based video processing to identify individuals in a scene.
    b. Filter identified individuals by attributes, including:
    i. Date
        ii. Time
        iii. Appearance
        iv. Clothing color
    v. Backpack detection
        vi. Facial matches
2. AI-Powered Search:
    a. Use freeform text queries to search for people and vehicles.
    b. Reverse Image Analytics:
    i. Upload a photo of a person, vehicle, or object to obtain relevant search results.
3. History Player Search:
    a. Instantaneously find footage and construct a chronological timeline of where an individual appeared on multiple cameras across wide areas.
    b. Supports vehicle search and segmentation directly in the History Player.
4. Face Search: Quickly search for matching people by selecting an existing face from organizational records uploaded image.
5. Face Detection: Cameras keep an ongoing log of faces that appear on recorded footage.
6. Smart Lists: Create groups of individuals approved for specific areas within a building. Once enabled on specific cameras, Smart Lists will then display any people who do not match the list of pre-approved individuals.
7. Face Blur:
    a. Live Face Blur:
    i. Blur faces of individuals detected in camera live streams for privacy.
        ii. Admins can enable Live Face Blur by default for all cameras while also giving users the option to unblur faces in case of an incident.
    b. Selective Face Blur:
    i. Choose which archived faces to blur to support the privacy of individuals stored in an archive.
8. Person History:
    a. Browse through snapshots of people detected in frame.
    b. Save snapshots or access associated full-resolution video.
9. Occupancy Trends: Estimate how many people cross a designated line in a camera field of view.
10. Cross-Camera Tracking: Search video from different cameras of the same identified individual.
11. Person Line Crossing: Trigger an alarm if a person crosses a predetermined digital line in a specified direction.
12. Direction of Travel: Trigger an alarm by specified direction of travel detection.
13. Person Line Crossing: Trigger an alarm if a person crosses a predetermined digital line in a specified direction.
14. Person or Vehicle Loitering: Trigger an alarm if a person or vehicle is continuously detected in a pre-selected region beyond a certain time threshold.
15. Person of Interest (POI) and License Plate of Interest (LPOI):
    a. Receive real-time POI alerts on the live feed when viewing a single camera page.
    b. POI alerts display associated LPOI and vice versa.
    c. Create, manage, and apply custom POI lists for more flexible alerting and visibility control.

D. Vehicle Analytics:

1. Intelligent edge-based video processing to identify vehicles in a scene.
2. Filter identified vehicles by attributes, including:
    a. Date.
    b. Time.
    c. Vehicle make.
    d. Color.
    e. Vehicle body type.
3. Vehicle History:
    a. Browse through snapshots of vehicles detected in-frame.
    b. Save snapshots or associated full-resolution video
4. Cross-Camera Tracking:
    a. Search video from different cameras of the same identified vehicle.
5. Vehicle Number Tracking: draw a digital line on the video feed and get an estimate of how many vehicles crossed that line.
6. Vehicle Line Crossing: trigger an alarm if a vehicle crosses a predetermined digital line in a specified direction.
7. Vehicle Loitering: trigger an alarm if a vehicle is continuously detected in a pre-selected region beyond a certain time threshold.
8. License Plate Recognition:
    a. LPR coverage, monitoring, and search by plate number.
    b. Generate License Plate of Interest Alerts via SMS or email with an image or link to review the associated footage.
9. License Plate Recognition Unlock:
    a. LPR unlock utilizes a peer-to-peer communication protocol to facilitate secure device-to-device interactions between LPR-enabled CB52 and CB62 bullet cameras and Verkada's AC42 and AC62 door controllers.
    b. LPR camera results can be used as an input method for a gate, unlocking that gate anytime an authorized license plate is verified by the access controller.
    c. License plates can be added to any access user profile. All unlock events from a license plate are attributed to an access user.

E. Unified Alerts:

1. Set up and configure alerts for access control, cameras, alarms, and environmental sensors from the Alerts page in Command.
2. Alerts Inbox:
    a. Alarms in Alerts Inbox: See device issues alongside other system alerts in a centralized inbox.
    b. Guest in Alerts Inbox: Alert inbox includes visitor activity and screening alerts.
    c. Helix in Alerts Inbox: Alerts triggered by Helix events are visible in the alert feed.
3. Configure real-time alerts via SMS, email, Microsoft Teams, and Slack.
    a. Search Alert Inbox for alert names, filter across all alerts, star alerts, and create custom sections for related alerts.

F. Enhanced Sensor Alerts:

1. All sensors paired with a context camera to display:
    a. People detection thumbnails show all people detected before, during, and after a sensor alert.
    b. People activity overlay on the sensor alert graph to mark people’s activity.
2. Third-Party VMS Integrations for Air Quality Sensor Events:

a. Send sensor event alerts to the following third-party video management systems: Milestone XProtect, Wisenet WAVE, exacqVision.

G. AI-Powered Alerts:

1. Use freeform language to set up alerts on events of interest.
2. Create alerts based on AI-powered search queries.

H. Helix Alerts: Receive alerts on custom Helix events across all standard notification channels.

I. Shortcuts Navigation Tool:

1. Available for both live streams and historic views:
   a. Instantly jump between neighboring camera feeds to quickly track moving subjects during live investigations.
   b. Trace a subject's movements from camera to camera to review and archive a subject's path in historic views.

J. Adaptive Quality with Variable Bitrates: Cameras use variable bitrates for both SQ and HQ video allowing for video to be recorded at a lower bitrate during less complex scenes and a higher bitrate during more complex scenes.

K. Granular Privacy Regions: Increases privacy mask resolution from 10x10 to 60x60 for better masking.

L. PTZ Sentry Mode:

1. Patrol multiple scenes when a live operator is not available.
2. Select up to 25 preset views.
3. Configure how long Sentry Mode dwells on each scene (30 seconds to 24 hours).

M. Verkada Verify:

1. Browser-based tool that allows anyone in possession of footage from a Verkada camera to verify its authenticity.
2. Verify recorded footage by uploading the file at [verkada.com/verify](https://command.verkada.com/verify).

N. Enterprise Bandwidth Manager (EBM):

1. Set bandwidth limits for all camera upload traffic, including video archiving, cloud backup, and timelapse.
2. Monitor real-time bandwidth usage and selectively terminate active video streams to free up bandwidth.

O. Application Programming Interface:

1. Streaming API: Stream both live and historical footage from cameras; ingest footage into third-party Global Security Operations Center (GSOC) software for live monitoring or into customized analytics software for operational insights.
2. Occupancy Trend Data API: extract foot or vehicle traffic data for further analysis.
3. Access Events Webhooks: integrate real-time system insights into third-party applications.

P. AWS GovCloud:

1. Optional for US government deployments.
2. Continuous monitoring of the system.
3. FIPS encryption in transit and at rest.
4. Strengthened session and identity management capabilities.
5. GC31 & GC31-E are supported on AWS GovCloud.

Q. Data Hosting:

1. Option to process and store data, including image and video data, locally in Verkada data centers in the United States, European Union, or Australia.

2. Customize image and video storage location on an org-wide or camera-by-camera basis.

R. Camera Replacement Support: Maintain historic onboard footage from cameras undergoing RMAs.

5. Submittals

A. Provide the following submittals for review and approval:

1. Product Data and Shop Drawings
2. System Programming
3. Operation and Maintenance Manuals (O&M's)
4. "As-Built" Record Drawings

B. Submit Product Data and Shop Drawings submittals for review and approval prior to commencement of work:

1. Manufacturer’s name, brand name, exact part number, options, accessories, and catalog cutsheet references for all equipment supplied including cabling. Include manufacturer's published installation instructions. Indicate UL listings for system components.
2. Complete wiring diagrams for all components, including cable types and quantities, routings, floor plans indicating device locations, conduit sizes, and point-to-point termination and riser diagrams.
3. Device legend on the shop drawings that identifies the symbols used for all devices including mounting heights, back box requirements, part and model numbers, operating voltages (if applicable), wire and cabling requirements, label text, and panel termination points.
4. Fully dimensioned shop drawings including floorplans, enlarged plans, elevations, and installation details of all security devices, equipment rooms and closets, consoles, controllers, racks, enclosures, and fabricated equipment, showing locations of all major components including mounting details. Indicate UL system and rating listings for penetration firestop systems through rated partitions and floors.
5. Bill of Materials.
6. Material Safety Data Sheets (MSDS) for fire stopping materials and sealants.

C. Submit System Programming submittals for review and approval prior to commencement of work:

1. Proposed programming, including nomenclature conventions, device names and text descriptions, timings, camera call-up trigger alarms with associated cameras, and sequence of operations.
2. Approved device names and text descriptions as programmed into the security systems shall be reflected on the "As-Built" Record Drawings as well as on device and cable labels.

D. Submit Operation and Maintenance Manuals (O&M's) submittals for review and approval prior to the completion of the project:

1. Updated product data and shop drawings submittals reflecting the final conditions.
2. Warranty letter with start and end date.
3. Warranty service and maintenance contact information: including names, address, phone number, and website address. Provide specific instructions or forms as required to initiate a trouble ticket or work order request.
4. Letter indicating that all software and licensing is the sole property of the Owner.
5. Troubleshooting checklist information.
6. Replacement parts and consumables ordering information including the contact information for local sources.
7. Provide an updated System Programming submittal including:
    a. Final listing of doors, locations, and normal status in CSV format.
    b. System administration and management operating instructions.

c. Setting up Users, User Groups, Access Levels, Doors, Door Schedules, and Exceptions
d. Assigning Access Groups to all Users.
e. Monitoring system activity.
f. Running standard reports.
g. Setting up logins and permissions.

E. Submit "As-Built" Record Drawings submittals for review and approval prior to the completion of the project:

1. Maintain a complete set of "As-Built" Record Drawings at the project site updated with mark-ups of the actual installation conditions.
2. Prior to the completion of the project transfer all installation conditions mark-ups to electronic drawings and submit to the Owner in CAD and PDF formats.

6. Quality Assurance

A. Equipment shall be tested and found to comply with the limits for a Class A or B digital device, pursuant to part 15 of the FCC rules.

B. Security technology devices shall be mounted using compatible Verkada accessories.

C. Security technology devices shall be of the latest technology. No discontinued models or products are acceptable.

D. Installation technicians shall successfully complete the Verkada Certified Engineer (VCE) program prior to starting work. For more information, visit <http://www.verkada.com/partners/trainings>.

E. Contractor qualifications:

1. Minimum of two years of system design, engineering supervision, and installation experience in the access control industry.
2. Maintain a local office, with a service center staffed by trained technicians and must be adequately equipped to provide emergency phone service within 24 hours on a 24-hour, 365 days per year basis, whether or not the Owner purchases a maintenance contract with the Contractor.
3. Maintain an inventory of spare parts and other items critical to system operation, as necessary to meet the emergency service requirements.
4. Maintain an in-house engineering and project management capability consistent with the requirements of this project.
5. Provide a project manager who is actively engaged in the project. This person shall be the same individual throughout the course of the project and shall be the person responsible for the scheduling of the system programming, preparation of the submittals and project close-out documentation, training programs, system testing and report documentation, and the coordination of all subcontract labor. The Owner reserves the right to approve the Contractor's project manager.
6. Abide by and adhere to all Drug Free School Zone laws and participate in a drug-free workplace program.

7. Delivery, Storage, And Handling

A. Ship equipment in original packaging to prevent damage. All handling shall be in accordance with manufacturer recommendations. Inspect all products and materials for any damage immediately upon delivery to the project site.

B. Provide protective covering during construction.

C. Replace equipment and products damaged during shipping, handling, distribution, storage, installation, or construction with new equipment and products.

D. Equipment and products stored at the project site or at an off-site location shall be protected from dust, dirt, and foreign matter. Protect equipment and products from water, damage, dents, bumps, and scratches.

8. Scheduling

A. Submit proposed construction schedule detailing the task milestones, durations, and sequences for the project for review and approval prior to commencement of work.

B. When work is performed in a sensitive area or in an area occupied with ongoing business activities coordinate with the Owner and the affected department's representative to determine the best time to perform the work required.

9. Warranty

A. Provide one-year parts and labor project warranty. Parts and labor shall be guaranteed against defects in materials and workmanship for one year from written notification of acceptance.

B. All Verkada hardware purchases are backed by a 10-year limited warranty. For more information, visit [verkada.com/support/terms-of-sale](file:///Users/Theo/Downloads/verkada.com/support/terms-of-sale).

Part 2 – Products

1. Manufacturer

A. Manufacturer shall be Verkada Inc.

1. Headquarters: 405 E 4th Ave. San Mateo, CA 94401
2. Toll Free: (888) 829-0668
3. General: team@verkada.com
4. Sales: sales@verkada.com
5. Website: www.verkada.com
6. Non-Verkada Inc. products shall be limited to those identified as compatible within the product descriptions below.

2. Licensing

A. Provide all required licenses for the specified system components.

B. All system component licenses shall be 5 year licenses.

C. All system monitoring licenses shall be Verkada 5-Year Advanced Video Alarms License for 1 Site - LIC-BX-MA-5Y-CAP.

3. Indoor Dome Series

SEE SPECIFIED COMPONENTS LIST FOR DETAILS -- SPECIFICATIONS SUBJECT TO MANUFACTURER'S UPDATE

A. CD32 Indoor Dome Camera by Verkada Inc.

1. Onboard Storage: [256GB|512GB|768GB|1TB| 2TB] -- Select desired storage size for project CD32 cameras and delete non-applicable storage specs.
2. Sensor Resolution: 3MP (2048 x 1536 pixels)
3. Lens Type: Fixed
4. Image Sensor: 1/2.8" Progressive CMOS

5. Focal Length: 2.8mm
6. Iris: Fixed
7. Aperture: F1.6
8. Lens Distortion Correction (LDC): LDC crops the sensor field of view to deliver a rectified, undistorted output image.
9. Field of View (FoV after LDC):
    a. Horizontal: 97° (78°)
    b. Vertical: 71° (63°)
    c. Diagonal: 128° (91°)
10. IR Range: 15m / 50ft in low light
11. Audio: Yes
12. Resistance Ratings:
    a. IK08
    b. FCC
    c. IEC60950-1
13. Dimensions:
    a. With Mount Plate:
    i. Length: 146mm / 5.75in
        ii. Width: 146mm / 5.75in
        iii. Height: 104.3mm / 4.11in
    b. Without Mount Plate:
    i. Length: 146mm / 5.75in
        ii. Width: 146mm / 5.75in
        iii. Height: 99.8mm / 3.93in
14. Weight:
    a. With Mount Plate: 748g / 26.38oz
    b. Without Mount Plate: 608g / 21.45oz
15. Operating Power: 11W (IEEE 802.3af PoE)
16. Operating Temperature: -10°C to 50°C / 14°F to 122°F
17. Operating Humidity: 0% to 90%
18. Connectivity: Ethernet 10/100Mbps RJ-45 cable connector for Network/PoE connection

B. CD42 Indoor Dome Camera by Verkada Inc.

1. Onboard Storage: [256GB|512GB|768GB|1TB| 2TB] -- Select desired storage size for project CD42 cameras and delete non-applicable storage specs.
2. Sensor Resolution: 5MP (2688 x 1944 pixels)
3. Lens Type: Fixed
4. Image Sensor: 1/2.8" Progressive CMOS
5. Focal Length: 2.8mm
6. Iris: Fixed
7. Aperture: F1.6
8. Lens Distortion Correction (LDC): LDC crops the sensor field of view to deliver a rectified, undistorted output image.
9. Field of View (FoV after LDC):
    a. Horizontal: 97° (78°)
    b. Vertical: 71° (63°)
    c. Diagonal: 128° (91°)
10. IR Range: 15m / 49ft in low light
11. Audio: Yes

12. Resistance Ratings:
    a. IK08
    b. FCC
    c. IEC60950-1
13. Dimensions:
    a. With Mount Plate:
    i. Length: 146mm / 5.75in
        ii. Width: 146mm / 5.75in
        iii. Height: 104.3mm / 4.11in
    b. Without Mount Plate:
    i. Length: 146mm / 5.75in
        ii. Width: 146mm / 5.75in
        iii. Height: 99.8mm / 3.93in
14. Weight:
    a. With Mount Plate: 748g / 26.38oz
    b. Without Mount Plate: 608g / 21.45oz
15. Operating Power: 11W (IEEE 802.3af PoE)
16. Operating Temperature: -10°C to 50°C / 14°F to 122°F
17. Operating Humidity: 0% to 90%
18. Connectivity: Ethernet 10/100Mbps RJ-45 cable connector for Network/PoE connection

C. CD43 Indoor Dome Camera by Verkada Inc.

1. Onboard Storage: [256GB|512GB|768GB|1TB| 2TB] -- Select desired storage size for project CD42 cameras and delete non-applicable storage specs.
2. Sensor Resolution: 5MP (2688 x 1944 pixels)
3. Lens Type: Fixed
4. Image Sensor: 1/2.8" Progressive CMOS
5. Focal Length: 3.2mm
6. Iris: Fixed
7. Aperture: F1.6
8. Lens Distortion Correction (LDC): LDC crops the sensor field of view to deliver a rectified, undistorted output image.
9. Field of View (FoV after LDC):
    a. Horizontal: 101° (84°)
    b. Vertical: 73° (66°)
    c. Diagonal: 130° (99°)
10. IR Range: 20m / 66ft in low light
11. Audio: Yes
12. Resistance Ratings:
    a. IK08
    b. FCC
13. Dimensions:
    a. With Mount Plate:
    i. Length: 155mm / 6.10in
        ii. Width: 155mm / 6.10in
        iii. Height: 109.0mm / 4.29in
    b. Without Mount Plate:
    i. Length: 155mm / 6.10in
        ii. Width: 155mm / 6.10in

iii. Height: 109.9mm / 4.29in

14. Weight:
    a. With Mount Plate: 1144g / 40.36oz
    b. Without Mount Plate: 951g / 33.55oz
15. Operating Power:
    a. With IR: IEEE 802.3at Type 2 PoE+
    b. Without IR: IEEE 802.3af Type 1 PoE
16. Operating Temperature: -10°C to 50°C / 14°F to 122°F
17. Operating Humidity: 0% to 90%
18. Connectivity: Ethernet 10/100/1000Mbps RJ-45 cable connector for Network/PoE connection

D. CD52 Indoor Dome Camera by Verkada Inc.

1. Onboard Storage: [256GB|512GB|768GB|1TB| 2TB] -- Select desired storage size for project CD52 cameras and delete non-applicable storage specs.
2. Sensor Resolution: 5MP (2688 x 1944 pixels)
3. Lens Type: 3x Optical Zoom
4. Image Sensor: 1/2.8" Progressive CMOS
5. Focal Length: 2.8 to 8mm
6. Iris: P-Iris
7. Aperture: F1.3 to F2.4
8. Lens Distortion Correction (LDC): LDC crops the sensor field of view to deliver a rectified, undistorted output image.
9. Field of View (FoV after LDC):
    a. Horizontal: 41° to 93° (37° to 84°)
    b. Vertical: 31° to 76° (28° to 68°)
    c. Diagonal: 50° to 107° (45° to 97°)
10. IR Range: 30m / 98ft in low light
11. Audio: Yes
12. Resistance Rating:
    a. IK08
    b. FCC
    c. IEC60950-1
13. Dimensions:
    a. With Mount Plate:
    i. Length: 146mm / 5.75in
        ii. Width: 146mm / 5.75in
        iii. Height: 104.3mm / 4.11in
    b. Without Mount Plate:
    i. Length: 146mm / 5.75in
        ii. Width: 146mm / 5.75in
        iii. Height: 99.8mm / 3.93in
14. Weight:
    a. With Mount Plate: 916g / 32.31oz
    b. Without Mount Plate: 776g / 27.37oz
15. Operating Power: 11W (IEEE 802.3af PoE)
16. Operating Temperature: -10°C to 50°C / 14°F to 122°F
17. Operating Humidity: 0% to 90%
18. Connectivity: Ethernet 10/100Mbps RJ-45 cable connector for Network/PoE connection

E. CD53 Indoor Dome Camera by Verkada Inc.

1. Onboard Storage: [256GB|512GB|768GB|1TB| 2TB] -- Select desired storage size for project CD52 cameras and delete non-applicable storage specs.
2. Sensor Resolution: 5MP (2688 x 1944 pixels)
3. Lens Type: Varifocal; motorized zoom
4. Image Sensor: 1/2.8" Progressive CMOS
5. Focal Length: 2.8 to 8mm
6. Iris: P-Iris
7. Aperture: F1.3 to F2.4
8. Lens Distortion Correction (LDC): LDC crops the sensor field of view to deliver a rectified, undistorted output image.
9. Field of View (FoV after LDC):
    a. Horizontal: 109° to 39° (91° to 36°)
    b. Vertical: 80° to 29° (71° to 28°)
    c. Diagonal: 150° to 48° (107° to 44°)
10. IR Range: 30m / 98ft in low light
11. Audio: Yes
12. Resistance Rating:
    a. IK08
    b. FCC
13. Dimensions:
    a. With Mount Plate:
    i. Length: 155mm / 6.10in
        ii. Width: 155mm / 6.10in
        iii. Height: 109.0mm / 4.29in
    b. Without Mount Plate:
    i. Length: 155mm / 6.10in
        ii. Width: 155mm / 6.10in
        iii. Height: 101.9mm / 4.01in
14. Weight:
    a. With Mount Plate: 1156g / 40.78oz
    b. Without Mount Plate: 963g / 33.97oz
15. Operating Power:
    a. With IR: IEEE 802.3at Type 2 PoE+
    b. Without IR: IEEE 802.3af Type 1 PoE
16. Operating Temperature: -10°C to 50°C / 14°F to 122°F
17. Operating Humidity: 0% to 90%

F. Connectivity: Ethernet 10/100Mbps RJ-45 cable connector for Network/PoE connection

G. CD62 Indoor Dome Camera by Verkada Inc.

1. Onboard Storage: [512GB|768GB|1TB| 2TB] -- Select desired storage size for project CD62 cameras and delete non-applicable storage specs.
2. Sensor Resolution: 4K (3840 x 2160 pixels)
3. Lens Type: 3x Optical Zoom
4. Image Sensor: 1/2.8" Progressive CMOS
5. Focal Length: 2.8 to 8mm
6. Iris: P-Iris
7. Aperture: F1.3 to F2.4

8. Lens Distortion Correction (LDC): LDC crops the sensor field of view to deliver a rectified, undistorted output image.
9. Field of View (FoV after LDC):
    a. Horizontal: 44° to 97° (40° to 87°)
    b. Vertical: 26° to 63° (23° to 57°)
    c. Diagonal: 50° to 106° (45° to 95°)
10. IR Range: 30m / 98ft in low light
11. Audio: Yes
12. Resistance Rating:
    a. IK08
    b. FCC
    c. IEC60950-1
13. Dimensions:
    a. With Mount Plate:
    i. Length: 146mm / 5.75in
        ii. Width: 146mm / 5.75in
        iii. Height: 104.3mm / 4.11in
    b. Without Mount Plate:
    i. Length: 146mm / 5.75in
        ii. Width: 146mm / 5.75in
        iii. Height: 99.8mm / 3.93in
14. Weight:
    a. With Mount Plate: 916g / 32.31oz
    b. Without Mount Plate: 776g / 27.37oz
15. Operating Power: 11W (IEEE 802.3af PoE)
16. Operating Temperature: -10°C to 50°C / 14°F to 122°F
17. Operating Humidity: 0% to 90%
18. Connectivity: Ethernet 10/100Mbps RJ-45 cable connector for Network/PoE connection

H. CD63 Indoor Dome Camera by Verkada Inc.

1. Onboard Storage: [512GB|768GB|1TB|2TB|3TB] -- Select desired storage size for project CD63 cameras and delete non-applicable storage specs.
2. Sensor Resolution: 4K (3840 x 2160 pixels)
3. Lens Type: Varifocal; motorized zoom
4. Image Sensor: 1/1.2" Progressive CMOS
5. Focal Length: 5.9 to 13.3mm
6. Iris: P-Iris
7. Aperture: F1.5 to F2.9
8. Lens Distortion Correction (LDC): LDC crops the sensor field of view to deliver a rectified, undistorted output image.
9. Field of View (FoV after LDC):
    a. Horizontal: 75° to 109° (72° to 102°)
    b. Vertical: 45° to 58° (44° to 58°)
    c. Diagonal: 82° to 1113° (80° to 107°)
10. IR Range: 40m / 130ft in low light
11. Audio: Yes
12. Resistance Rating:
    a. IK08
    b. FCC

c. ICES

13. Dimensions:
    a. With Mount Plate:
    i. Length: 155mm / 6.1in
        ii. Width: 155mm / 6.1in
        iii. Height: 111.4mm / 4.4in
    b. Without Mount Plate:
    i. Length: 155mm / 6.1in
        ii. Width: 155mm / 6.1in
        iii. Height: 104.4mm / 4.1in
14. Weight:
    a. With Mount Plate: 1517g / 53.5oz
    b. Without Mount Plate: 1324g / 46.7oz
15. Operating Power:
    a. With IR: IEEE 802.3at Type 2 PoE+
    b. Extended temperature range: IEEE 802.3at Type 2 PoE+
16. Operating Temperature: -10°C to 50°C / 14°F to 122°F
17. Operating Humidity: 0% to 90%
18. Connectivity: Ethernet 10/100/1000Mbps RJ-45 cable connector for Network/PoE connection

Outdoor Dome Series

SEE SPECIFIED COMPONENTS LIST FOR DETAILS --
SPECIFICATIONS SUBJECT TO MANUFACTURER'S UPDATE

I. CD32-E Outdoor Dome Camera by Verkada Inc.

1. Onboard Storage: [256GB|512GB|768GB|1TB| 2TB] -- Select desired storage size for project CD32 cameras and delete non-applicable storage specs.
2. Sensor Resolution: 3MP (2048 x 1536 pixels)
3. Lens Type: Fixed
4. Image Sensor: 1/2.8" Progressive CMOS
5. Focal Length: 2.8mm
6. Iris: Fixed
7. Aperture: F1.6
8. Lens Distortion Correction (LDC): LDC crops the sensor field of view to deliver a rectified, undistorted output image.
9. Field of View (FoV after LDC):
    a. Horizontal: 97° (78°)
    b. Vertical: 71° (63°)
    c. Diagonal: 128° (91°)
10. IR Range: 15m / 50ft in low light
11. Audio: Yes
12. Resistance Ratings:
    a. IK08
    b. FCC
    c. IEC60950-1
13. Dimensions:
    a. With Mount Plate:
    i. Length: 146mm / 5.75in
        ii. Width: 146mm / 5.75in

iii. Height: 104.3mm / 4.11in
b. Without Mount Plate:
i. Length: 146mm / 5.75in
ii. Width: 146mm / 5.75in
iii. Height: 99.8mm / 3.93in
14. Weight:
a. With Mount Plate: 748g / 26.38oz
b. Without Mount Plate: 608g / 21.45oz
15. Operating Power: 11W (IEEE 802.3af PoE)
16. Operating Temperature: -10°C to 50°C / 14°F to 122°F
17. Operating Humidity: 0% to 90%
18. Connectivity: Ethernet 10/100Mbps RJ-45 cable connector for Network/PoE connection

J. CD42-E Outdoor Dome Camera by Verkada Inc.

1. Onboard Storage: [256GB|512GB|768GB|1TB| 2TB] -- Select desired storage size for project CD42-E cameras and delete non-applicable storage specs.
2. Sensor Resolution: 5MP (2688 x 1944 pixels)
3. Lens Type: Fixed
4. Image Sensor: 1/2.8" Progressive CMOS
5. Focal Length: 2.8mm
6. Iris: Fixed
7. Aperture: F1.6
8. Lens Distortion Correction (LDC): LDC crops the sensor field of view to deliver a rectified, undistorted output image.
9. Field of View (after LDC):
a. Horizontal: 87° (78°)
b. Vertical: 70° (63°)
c. Diagonal: 101° (91°)
10. IR Range: 15m / 50ft in low light
11. Audio: Yes
12. Resistance Rating:
a. IK10
b. IP67
c. FCC
d. IEC60950-1
13. Dimensions:
a. With Mount Plate:
i. Length: 155mm / 6.1in
ii. Width: 155mm / 6.1in
iii. Height: 114.6mm / 4.51in
b. Without Mount Plate:
i. Length: 155mm / 6.1in
ii. Width: 155mm / 6.1in
iii. Height: 107.6mm / 4.24in
14. Weight:
a. With Mount Plate: 1021g / 36.01oz
b. Without Mount Plate: 847g / 29.88oz
15. Operating Power:
a. With IR: IEEE 802.3af Type 1 PoE

b. Without IR: IEEE 802.3af Type 1 PoE
c. Extended temperature range: IEEE 802.3at Type 2 PoE+

16. Operating Temperature:
    a. PoE 802.3af: -20°C to 50°C / -4°F to 122°F
    b. PoE 802.3at: -40°C to 50°C / -40°F to 122°F
17. Operating Humidity: 0% to 90%
18. Connectivity: Ethernet 10/100Mbps RJ-45 cable connector for Network/PoE connection

K. CD43-E Outdoor Dome Camera by Verkada Inc.

1. Onboard Storage: [256GB|512GB|768GB|1TB| 2TB] -- Select desired storage size for project CD42 cameras and delete non-applicable storage specs.
2. Sensor Resolution: 5MP (2688 x 1944 pixels)
3. Lens Type: Fixed
4. Image Sensor: 1/2.8" Progressive CMOS
5. Focal Length: 3.2mm
6. Iris: Fixed
7. Aperture: F1.6
8. Lens Distortion Correction (LDC): LDC crops the sensor field of view to deliver a rectified, undistorted output image.
9. Field of View (FoV after LDC):
    a. Horizontal: 101° (84°)
    b. Vertical: 73° (66°)
    c. Diagonal: 130° (99°)
10. IR Range: 20m / 66ft in low light
11. Audio: Yes
12. Resistance Ratings:
    a. IK10
    b. FCC
    c. IP66/IP67
13. Dimensions:
    a. With Mount Plate:
    i. Length: 155mm / 6.10in
        ii. Width: 155mm / 6.10in
        iii. Height: 111.4mm / 4.39in
    b. Without Mount Plate:
    i. Length: 155mm / 6.10in
        ii. Width: 155mm / 6.10in
        iii. Height: 104.4mm / 4.11in
14. Weight:
    a. With Mount Plate: 1293g / 45.61oz
    b. Without Mount Plate: 1100g / 38.80oz
15. Operating Power:
    a. With IR: IEEE 802.3at Type 2 PoE+
    b. Without IR: IEEE 802.3af Type 1 PoE
    c. Extended temperature range: IEEE 802.3at Type 2 PoE+
16. Operating Temperature: -40°C to 50°C / -40°F to 122°F
17. Operating Humidity: 0% to 90%
18. Connectivity: Ethernet 10/100/1000Mbps RJ-45 cable connector for Network/PoE connection

L. CD52-E Outdoor Dome Camera by Verkada Inc.

1. Onboard Storage: [256GB|512GB|768GB|1TB| 2TB] -- Select desired storage size for project CD52-E cameras and delete non-applicable storage specs.
2. Sensor Resolution: 5MP (2688 x 1944 pixels)
3. Lens Type: 3x Optical Zoom
4. Image Sensor: 1/2.8" Progressive CMOS
5. Focal Length: 2.8 to 8mm
6. Iris: P-Iris
7. Aperture: F1.3 to F2.4
8. Lens Distortion Correction (LDC): LDC crops the sensor field of view to deliver a rectified, undistorted output image.
9. Field of View (FoV after LDC):
    a. Horizontal: 41° to 93° (37° to 84°)
    b. Vertical: 31° to 76° (28° to 68°)
    c. Diagonal: 50° to 107° (45° to 97°)
10. IR Range: 30m / 98ft in low light
11. Audio: Yes
12. Resistance Rating:
    a. IK10
    b. IP67
    c. FCC
    d. IEC60950-1
13. Dimensions:
    a. With Mount Plate:
    i. Length: 155mm / 6.1in
        ii. Width: 155mm / 6.1in
        iii. Height: 114.6mm / 4.51in
    b. Without Mount Plate:
    i. Length: 155mm / 6.1in
        ii. Width: 155mm / 6.1in
        iii. Height: 107.6mm / 4.24in
14. Weight:
    a. With Mount Plate: 1244g / 43.88oz
    b. Without Mount Plate: 1070g / 37.74oz
15. Operating Power:
    a. With IR: IEEE 802.3af Type 1 PoE
    b. Without IR: IEEE 802.3af Type 1 PoE
    c. Extended temperature range: IEEE 802.3at Type 2 PoE+
16. Operating Temperature:
    a. PoE 802.3af: -20°C to 50°C / -4°F to 122°F
    b. PoE 802.3at: -40°C to 50°C / -40°F to 122°F
17. Operating Humidity: 0% to 90%
18. Connectivity: Ethernet 10/100Mbps RJ-45 cable connector for Network/PoE connection

M. CD53-E Outdoor Dome Camera by Verkada Inc.

1. Onboard Storage: [256GB|512GB|768GB|1TB| 2TB] -- Select desired storage size for project CD52 cameras and delete non-applicable storage specs.
2. Sensor Resolution: 5MP (2688 x 1944 pixels)
3. Lens Type: Varifocal; motorized zoom

4. Image Sensor: 1/2.8" Progressive CMOS
5. Focal Length: 2.8 to 8mm
6. Iris: P-Iris
7. Aperture: F1.3 to F2.4
8. Lens Distortion Correction (LDC): LDC crops the sensor field of view to deliver a rectified, undistorted output image.
9. Field of View (FoV after LDC):
    a. Horizontal: 109° to 39° (91° to 36°)
    b. Vertical: 80° to 29° (71° to 28°)
    c. Diagonal: 150° to 48° (107° to 44°)
10. IR Range: 30m / 98ft in low light
11. Audio: Yes
12. Resistance Rating:
    a. IK10
    b. IP66/67
13. Dimensions:
    a. With Mount Plate:
    i. Length: 155mm / 6.10in
        ii. Width: 155mm / 6.10in
        iii. Height: 111.4mm / 4.39in
    b. Without Mount Plate:
    i. Length: 155mm / 6.10in
        ii. Width: 155mm / 6.10in
        iii. Height: 104.4mm / 4.11in
14. Weight:
    a. With Mount Plate: 1330g / 46.92oz
    b. Without Mount Plate: 1137g / 40.11oz
15. Operating Power:
    a. With IR: IEEE 802.3at Type 2 PoE+
    b. Without IR: IEEE 802.3af Type 1 PoE
    c. Extended temperature range: IEEE 802.3at Type 2 PoE+
16. Operating Temperature: -40°C to 50°C / -40°F to 122°F
17. Operating Humidity: 0% to 90%

N. CD62-E Outdoor Dome Camera by Verkada Inc.

1. Onboard Storage: [512GB|768GB|1TB| 2TB] -- Select desired storage size for project CD62-E cameras and delete non-applicable storage specs.
2. Sensor Resolution: 4K (3840 x 2160 pixels)
3. Lens Type: 3x Optical Zoom
4. Image Sensor: 1/2.8" Progressive CMOS
5. Focal Length: 2.8 to 8mm
6. Iris: P-Iris
7. Aperture: F1.3 to F2.4
8. Lens Distortion Correction (LDC): LDC crops the sensor field of view to deliver a rectified, undistorted output image.
9. Field of View (FoV after LDC):
    a. Horizontal: 44° to 97° (40° to 87°)
    b. Vertical: 26° to 63° (23° to 57°)
    c. Diagonal: 50° to 106° (45° to 95°)

10. IR Range: 30m / 98ft in low light
11. Audio: Yes
12. Resistance Rating:
    a. IK10
    b. IP67
    c. FCC
    d. IEC60950-1
13. Dimensions:
    a. With Mount Plate:
    i. Length: 155mm / 6.1in
        ii. Width: 155mm / 6.1in
        iii. Height: 114.6mm / 4.51in
    b. Without Mount Plate:
    i. Length: 155mm / 6.1in
        ii. Width: 155mm / 6.1in
        iii. Height: 107.6mm / 4.24in
14. Weight:
    a. With Mount Plate: 1168g / 41.2oz
    b. Without Mount Plate: 994g / 35.06oz
15. Operating Power:
    a. With IR: IEEE 802.3af Type 1 PoE
    b. Without IR: IEEE 802.3af Type 1 PoE
    c. Extended temperature range: IEEE 802.3at Type 2 PoE+
16. Operating Temperature:
    a. PoE 802.3af: -20°C to 50°C / -4°F to 122°F
    b. PoE 802.3at: -40°C to 50°C / -40°F to 122°F
17. Operating Humidity: 0% to 90%
18. Connectivity: Ethernet 10/100Mbps RJ-45 cable connector for Network/PoE connection

O. CD63-E Outdoor Dome Camera by Verkada Inc.

1. Onboard Storage: [512GB|768GB|1TB| 2TB|3TB] -- Select desired storage size for project CD62-E cameras and delete non-applicable storage specs.
2. Sensor Resolution: 4K (3840 x 2160 pixels)
3. Lens Type: Varifocal; motorized zoom
4. Image Sensor: 1/1.2" Progressive CMOS
5. Focal Length: 5.9 to 13mm
6. Iris: P-Iris
7. Aperture: F1.5 to F2.9
8. Lens Distortion Correction (LDC): LDC crops the sensor field of view to deliver a rectified, undistorted output image.
9. Field of View (FoV after LDC):
    a. Horizontal: 75° to 109° (72° to 102°)
    b. Vertical: 45° to 58° (44° to 58°)
    c. Diagonal: 82° to 113° (80° to 107°)
10. IR Range: 40m / 130ft in low light
11. Audio: Yes
12. Resistance Rating:
    a. IK10
    b. IP66/IP67

c. FCC
d. ICES

13. Dimensions:
    a. With Mount Plate:
    i. Length: 155mm / 6.1in
        ii. Width: 155mm / 6.1in
        iii. Height: 111.4mm / 4.4in
    b. Without Mount Plate:
    i. Length: 155mm / 5.1in
        ii. Width: 155mm / 5.1in
        iii. Height: 104.4mm / 4.1in
14. Weight:
    a. With Mount Plate: 1579g / 55.7oz
    b. Without Mount Plate: 1386g / 48.9oz
15. Operating Power:
    a. With IR: IEEE 802.3at Type 2 PoE+
    b. Extended temperature range: IEEE 802.3at Type 2 PoE+
16. Operating Temperature: -40°C to 50°C / -40°F to 122°F
17. Operating Humidity: 0% to 90%
18. Connectivity: Ethernet 10/100/1000Mbps RJ-45 cable connector for Network/PoE connection

4. Mini Series

A. CM22 Interior Mini Dome Camera by Verkada Inc.

1. Onboard Storage: [256GB|512GB|768GB] -- Select desired storage size for project CM22 cameras and delete non-applicable storage specs.
2. Sensor Resolution: 3MP (2048 x 1536 pixels)
3. Lens Type: Fixed
4. Image Sensor: 1/2.8" Progressive CMOS
5. Focal Length: 2.8mm
6. Iris: Fixed
7. Aperture: F1.6
8. Lens Distortion Correction (LDC): LDC crops the sensor field of view to deliver a rectified, undistorted output image.
9. Field of View (FoV after LDC):
    a. Horizontal: 95° (79°)
    b. Vertical: 69° (62°)
    c. Diagonal: 130° (96°)
10. IR Range: 10m / 33ft in low light
11. Audio: No
12. Resistance Rating:
    a. EN 50155
13. Dimensions:
    a. Length: 124.5mm / 4.9in
    b. Width: 124.5mm / 4.9in
    c. Height: 71.5mm / 2.8in
14. Weight:
    a. With Mount Plate: 388g / 13.69oz
    b. Without Mount Plate: 290g / 10.23oz

15. Operating Power:
    a. With IR: IEEE 802.3af Type 1 PoE
    b. Without IR: IEEE 802.3af Type 1 PoE
    c. Extended temperature range: N/A
16. Operating Temperature: -10°C to 50°C / 14°F to 122°F
17. Operating Humidity: 0% to 90%
18. Connectivity: Ethernet RJ-45 cable connector for network/PoE connection; 10/100/1000 Mbps

B. CM41 Interior Mini Dome Camera by Verkada Inc.

1. Onboard Storage: [128GB|256GB|512GB|768GB|2TB] -- Select desired storage size for project CM41 cameras and delete non-applicable storage specs.
2. Sensor Resolution: 5MP (2688 x 1944 pixels)
3. Lens Type: Fixed
4. Image Sensor: 1/2.8" Progressive CMOS
5. Focal Length: 2.8mm
6. Iris: Fixed
7. Aperture: F1.6
8. Lens Distortion Correction (LDC): LDC crops the sensor field of view to deliver a rectified, undistorted output image.
9. Field of View (FoV after LDC):
    a. Horizontal: 86° (77°)
    b. Vertical: 69° (62°)
    c. Diagonal: 100° (90°)
10. IR Range: 15m / 49ft in low light
11. Audio: Yes
12. Resistance Rating: IK08
13. Dimensions:
    a. Length: 100mm / 3.94in
    b. Width: 100mm / 3.94in
    c. Height: 63mm / 2.48in
14. Weight: 228g / 8.04oz
15. Operating Power: 6W (IEEE 802.3af PoE)
16. Operating Temperature: -10°C to 50°C / 14°F to 122°F
17. Operating Humidity: 0% to 90%
18. Connectivity: Ethernet 10/100Mb RJ-45 Cable Connector for Network/PoE Connection

C. CM41-E Exterior Mini Dome Camera by Verkada Inc.

1. Onboard Storage: [128GB|256GB|512GB|768GB| 2TB] -- Select desired storage size for project CM41-E cameras and delete non-applicable storage specs.
2. Sensor Resolution: 5MP (2688 x 1944 pixels)
3. Lens Type: Fixed
4. Image Sensor: 1/2.8" Progressive CMOS
5. Focal Length: 2.8mm
6. Iris: Fixed
7. Aperture: F1.6
8. Lens Distortion Correction (LDC): LDC crops the sensor field of view to deliver a rectified, undistorted output image.
9. Field of View (FoV after LDC):
    a. Horizontal: 86° (77°)

b. Vertical: 69° (62°)
c. Diagonal: 100° (90°)
10. IR Range: 15m / 49ft in low light
11. Audio: Yes
12. Resistance Rating:
a. IK10
b. IP67
c. IP6K9K
13. Dimensions:
a. Length: 121mm / 4.76in
b. Width: 121mm / 4.76in
c. Height: 72mm / 2.83in
14. Weight: 401g / 14.14oz
15. Operating Power: 12W (IEEE 802.3af PoE)
16. Operating Temperature: -40°C to 55°C / -40°F to 131°F
17. Operating Humidity: 0% to 90%
18. Connectivity: Ethernet 10/100Mb RJ-45 Cable Connector for Network/PoE Connection

D. CM41-S Modular Mini Dome Camera by Verkada Inc.

1. Onboard Storage: [128GB|256GB|512GB|768GB| 2TB] -- Select desired storage size for project CM41-S cameras and delete non-applicable storage specs.
2. Sensor Resolution: 5MP (2688 x 1944)
3. Lens Type: Fixed
4. Image Sensor: 1/2.8" Progressive CMOS
5. Focal Length: 2.8mm
6. Iris: Fixed
7. Aperture: F1.6
8. Lens Distortion Correction (LDC): LDC crops the sensor field of view to deliver a rectified, undistorted output image.
9. Field of View (FoV after LDC):
a. Horizontal: 86° (77°)
b. Vertical: 69° (62°)
c. Diagonal: 100° (90°)
10. IR Range: N/A
11. Audio: No
12. Resistance Rating: N/A
13. Dimensions:
a. Camera Head
i. Length: 35.22mm / 1.39in
ii. Width: 55.22mm / 2.17in
iii. Height: 47.9mm / 1.89in
b. Base:
i. Length: 94.18mm / 3.71in
ii. Width: 94.18mm / 3.71in
iii. Height: 27.64mm / 1.09in
14. Weight:
a. With Mount Plate: 254g / 8.96oz
b. Without Mount Plate: 199g / 7.02oz
15. Operating Power: 4.5W (IEEE 802.3af PoE)

16. Operating Temperature: -10°C to 50°C / 14°F to 122°F
17. Operating Humidity: 0% to 90%
18. Connectivity: Ethernet 10/100Mb RJ-45 Cable Connector for Network/PoE Connection

E. CM42-S Mini Split Camera by Verkada Inc.

1. Onboard Storage: [256GB|768GB] -- Select desired storage size for project CM41-S cameras and delete non-applicable storage specs.
2. Card: MicroSD, SDXC
3. Sensor Resolution: 5MP (2592 x 1944)
4. Lens Type: Fixed
5. Image Sensor: 1/2.8" Progressive CMOS
6. Focal Length: 3.2mm
7. Iris: Fixed
8. Aperture: F1.6
9. Lens Distortion Correction (LDC): LDC crops the sensor field of view to deliver a rectified, undistorted output image.
10. Field of View (FoV after LDC):
    a. Horizontal: 99° (80°)
    b. Vertical: 71° (63°)
    c. Diagonal: 107° (92°)
11. IR Range: 15m / 49 ft
12. Audio: Yes
13. Resistance Rating: N/A
14. Dimensions:
    a. Camera Sensor Unit:
    i. Length: 40.2mm / 1.6in
        ii. Width: 36.4mm / 1.4in
        iii. Height: 47.4mm / 1.9in
    b. Camera Main Unit:
    i. Length: 152.0mm / 6.0in
        ii. Width: 89.0mm / 3.5in
        iii. Height: 25.5mm / 1.0in
15. Weight:
    a. Camera Main Unit: 242.8g / 8.6oz
    b. Camera Sensor Unit: 110.2g / 3.9o
    c. USB-C Cable: 79.9g / 2.8oz
16. Operating Power:
    a. With IR: IEEE 802.3af Type 1 PoE
    b. Without IR: IEEE 802.3af Type 1 PoE
17. Operating Temperature: -10°C to 50°C / 14°F to 122°F
18. Operating Humidity: 0% to 90%
19. Connectivity: Ethernet 10/100/1000Mb RJ-45 Cable Connector for Network/PoE Connection

5. Bullet Series

A. CB52-E Wide View Exterior Bullet Camera by Verkada Inc.

1. Onboard Storage: [256GB|512GB|768GB| 2TB] -- Select desired storage size for project CB52-E cameras and delete non-applicable storage specs.
2. Sensor Resolution: 5MP (2688 x 1944 pixels)
3. Lens Type: Varifocal; Motorized Zoom

4. Image Sensor: 1/2.8" Progressive CMOS
5. Focal Length: 2.8mm to 8mm
6. Iris: P-Iris
7. Aperture: F1.5 to F2.8
8. Lens Distortion Correction (LDC): LDC crops the sensor field of view to deliver a rectified, undistorted output image.
9. Field of View (FoV after LDC):
    a. Horizontal: 41° to 99° (39° to 95°)
    b. Vertical: 30° to 74° (30° to 74°)
    c. Diagonal: 50° to 125° (48° to 110°)
10. IR Range: 30m / 98ft in low light
11. Audio: No
12. Resistance Rating:
    a. IK10
    b. IP67
13. Dimensions:
    a. Length: 254mm / 10in
    b. Width: 85mm / 3.35in
    c. Height: 85mm / 3.35in
14. Weight
    a. With Mount Plate: 1497g / 52.81oz
    b. Without Mount Plate: 1464g / 51.64oz
15. Operating Power:
    a. With IR: IEEE 802.3at Type 2 PoE+
    b. Without IR: IEEE 802.3af Type 1 PoE
    c. Extended temperature range: IEEE 802.3at Type 2 PoE+
16. Operating Temperature: -40°C to 50°C / -40°F to 122°F
17. Operating Humidity: 0% to 90%
18. Connectivity: Ethernet 10/100Mb RJ-45 Cable Connector for Network/PoE Connection

B. CB52-TE Narrow View Exterior Bullet Camera by Verkada Inc.

1. Onboard Storage: [256GB|512GB|768GB| 2TB] -- Select desired storage size for project CB52-TE cameras and delete non-applicable storage specs.
2. Sensor Resolution: 5MP (2688 x 1944 pixels)
3. Lens Type: Varifocal; Motorized Zoom
4. Image Sensor: 1/2.8" Progressive CMOS
5. Focal Length: 2.8mm to 8mm
6. Iris: P-Iris
7. Aperture: F1.5 to F2.8
8. Lens Distortion Correction (LDC): LDC crops the sensor field of view to deliver a rectified, undistorted output image.
9. Field of View (FoV after LDC):
    a. Horizontal: 16° to 38° (16° to 37°)
    b. Vertical: 12° to 28° (12° to 27°)
    c. Diagonal: 19° to 48° (19° to 44°)
10. IR Range: 50m / 164ft in low light
11. Audio: No
12. Resistance Rating:
    a. IK10

b. IP67

13. Dimensions:
    a. Length: 254mm / 10in
    b. Width: 85mm / 3.35in
    c. Height: 85mm / 3.35in
14. Weight:
    a. With Mount Plate: 1511g / 53.3oz
    b. Without Mount Plate: 1478g / 52.13oz
15. Operating Power:
    a. With IR: IEEE 802.3at Type 2 PoE+
    b. Without IR: IEEE 802.3af Type 1 PoE
    c. Extended temperature range: IEEE802.3at Type 2 PoE+
16. Operating Temperature: -40°C to 50°C / -40°F to 122°F
17. Operating Humidity: 0% to 90%
18. Connectivity: Ethernet 10/100Mb RJ-45 Cable Connector for Network/PoE Connection

C. CB62-E Wide View Exterior Bullet Camera by Verkada Inc.

1. Onboard Storage: [256GB|512GB|768GB| 2TB] -- Select desired storage size for project CB62-E cameras and delete non-applicable storage specs.
2. Sensor Resolution: 4K (3840 x 2160 pixels)
3. Lens Type: Varifocal; Motorized Zoom
4. Image Sensor: 1/2.8" Progressive CMOS
5. Focal Length: 2.8mm to 8mm
6. Iris: P-Iris
7. Aperture: F1.5 to F2.8
8. Lens Distortion Correction (LDC): LDC crops the sensor field of view to deliver a rectified, undistorted output image.
9. Field of View (FoV after LDC):
    a. Horizontal: 43° to 107° (41° to 106°)
    b. Vertical: 24° to 62° (24° to 62°)
    c. Diagonal: 49° to 126° (48° to 119°)
10. IR Range: 30m / 98ft in low light
11. Audio: No
12. Resistance Rating:
    a. IK10
    b. IP67
13. Dimensions:
    a. Length: 254mm / 10in
    b. Width: 85mm / 3.35in
    c. Height: 85mm / 3.35in
14. Weight
    a. With Mount Plate: 1497g / 52.81oz
    b. Without Mount Plate: 1464g / 51.64oz
15. Operating Power:
    a. With IR: IEEE 802.3at Type 2 PoE+
    b. Without IR: IEEE 802.3af Type 1 PoE
    c. Extended temperature range: IEEE 802.3at Type 2 PoE+
16. Operating Temperature: -40°C to 50°C / -40°F to 122°F
17. Operating Humidity: 0% to 90%

18. Connectivity: Ethernet 10/100Mb RJ-45 Cable Connector for Network/PoE Connection

D. CB62-TE Narrow View Exterior Bullet Camera by Verkada Inc.

1. Onboard Storage: [256GB|512GB|768GB| 2TB] -- Select desired storage size for project CB62-TE cameras and delete non-applicable storage specs.
2. Sensor Resolution: 4K (3840 x 2160 pixels)
3. Lens Type: Varifocal; Motorized Zoom
4. Image Sensor: 1/2.8" Progressive CMOS
5. Focal Length: 2.8mm to 8mm
6. Iris: P-Iris
7. Aperture: F1.5 to F2.8
8. Lens Distortion Correction (LDC): LDC crops the sensor field of view to deliver a rectified, undistorted output image.
9. Field of View (FoV after LDC):
    a. Horizontal: 17° to 42° (17° to 41°)
    b. Vertical: 9° to 23° (9° to 23°)
    c. Diagonal: 19° to 48° (19° to 46°)
10. IR Range: 50m / 164ft in low light
11. Audio: No
12. Resistance Rating:
    a. IK10
    b. IP67
13. Dimensions:
    a. Length: 254mm / 10in
    b. Width: 85mm / 3.35in
    c. Height: 85mm / 3.35in
14. Weight:
    a. With Mount Plate: 1511g / 53.3oz
    b. Without Mount Plate: 1478g / 52.13oz
15. Operating Power:
    a. With IR: IEEE 802.3af Type 2 PoE+
    b. Without IR: IEEE 802.3af Type 1 PoE
    c. Extended temperature range: IEEE802.3at Type 2 PoE+
16. Operating Temperature: -40°C to 50°C / -40°F to 122°F
17. Operating Humidity: 0% to 90%
18. Connectivity: Ethernet 10/100Mb RJ-45 Cable Connector for Network/PoE Connection

6. Fisheye Series

A. CF81-E Fisheye Camera by Verkada Inc.

1. Onboard Storage: [512GB|1TB| 2TB] -- Select desired storage size for project CF81-E cameras and delete non-applicable storage specs.
2. Sensor Resolution: 12MP (4056 x 3040 pixels)
3. Lens Type: Fixed Zoom
4. Image Sensor: 1/2.3" Progressive CMOS
5. Focal Length: 1.18mm
6. Iris: Fixed
7. Aperture: F2.18
8. Lens Distortion Correction (LDC): LDC crops the sensor field of view to deliver a rectified, undistorted output image.

9. Field of View after LDC:
    a. Horizontal: 180°
    b. Vertical: 180°
    c. Diagonal: 180°
10. IR Range: 20m / 66ft in low light
11. Audio: Yes
12. Resistance:
    a. FCC
    b. CE - EN55035
    c. IK10
    d. IP67
13. Dimensions
    a. With Mount Plate:
    i. Length: 155mm / 6.1in
        ii. Width: 155mm / 6.1in
        iii. Height: 71.62mm / 2.82in
    b. Without Mount Plate:
    i. Length: 155mm / 6.1in
        ii. Width: 155mm / 6.1in
        iii. Height: 64.42mm / 2.54in
14. Weight:
    a. With Mount Plate: 1202g / 42.4oz
    b. Without Mount Plate: 1023g / 36.1oz
15. Operating Power:
    a. With IR: IEEE 802.3af Type 1 PoE/IEEE 802.3at Type 2 PoE+
    b. Extended temperature range: IEEE802.3at Type 2 PoE+
16. Operating Temperature: -40°C to 50°C / -40°F to 122°F
17. Operating Humidity: 0% - 90%
18. Connectivity: Ethernet RJ-45 cable connector for network/PoE connection; 10/100 Mbps

B. CF83-E Fisheye Camera by Verkada Inc.

1. Onboard Storage: [512GB|1TB|2TB|3TB] -- Select desired storage size for project CF83-E cameras and delete non-applicable storage specs.
2. Sensor Resolution: 12.5MP (3536 x 3535 pixels)
3. Lens Type: Fixed Zoom
4. Image Sensor: 1/1.6" Progressive CMOS
5. Focal Length: 1.7mm
6. Iris: Fixed
7. Aperture: F2.0
8. Lens Distortion Correction (LDC): LDC crops the sensor field of view to deliver a rectified, undistorted output image.
9. Field of View after LDC:
    a. Horizontal: 180°
    b. Vertical: 180°
    c. Diagonal: 180°
10. IR Range: 20m / 66ft in low light
11. Audio: Yes
12. Resistance:
    a. IK10

b. IP66/67
13. Dimensions
a. With Mount Plate:
i. Length: 155mm / 6.1in
ii. Width: 155mm / 6.1in
iii. Height: 76.2mm / 3.0in
b. Without Mount Plate:
i. Length: 155mm / 6.1in
ii. Width: 155mm / 6.1in
iii. Height: 69.2mm / 2.7in
14. Weight:
a. With Mount Plate: 1564g / 75.1oz
b. Without Mount Plate: 1368g / 48.2oz
15. Operating Power:
a. With IR: IEEE 802.3at Type 2 PoE+
b. Extended temperature range: IEEE802.3at Type 2 PoE+
16. Operating Temperature: -40°C to 50°C / -40°F to 122°F
17. Operating Humidity: 0% - 90%
18. Connectivity: Ethernet RJ-45 cable connector for network/PoE connection; 10/100/1000 Mbps

Multisensor Series

SEE SPECIFIED COMPONENTS LIST FOR DETAILS --
SPECIFICATIONS SUBJECT TO MANUFACTURER'S UPDATE
A. CH52-E Multisensor Camera by Verkada Inc.

19. Onboard Storage: [1TB| 2TB|4TB|8TB] -- Select desired storage size for project CH52-E cameras and delete non-applicable storage specs.
20. Sensor Resolution: 4 x 5MP (2688 x 1944 pixels)
21. Lens Type: Varifocal; motorized zoom
22. Image Sensor: 4 x 1 / 2.8" Progressive CMOS
23. Focal Length: 3.7-7.7mm
24. Iris: N/A
25. Aperture: F1.9 - F2.9
26. Sensor Movement:
a. Tilt: +0°-105° for each lens from horizon
b. Pan: +/- 90° for each lens
c. Rotation: +/- 90° for each lens
27. Lens Distortion Correction (LDC): LDC crops the sensor field of view to deliver a rectified, undistorted output image.
28. Field of View (FoV after LDC):
a. Horizontal: 37° to 89° (35° to 82°)
b. Vertical: 29° to 65° (26° to 60°)
c. Diagonal: 46° to 99° (43° to 92°)
29. IR Range: 30m / 98ft
30. Audio: Not supported
31. Resistance:
a. IK10
b. IP67

32. Dimensions
    a. With Mount Plate:
    i. Length: 275mm / 10.83in
        ii. Width: 275mm / 10.83in
        iii. Height: 118mm / 4.65in
    b. Without Mount Plate:
    i. Length: 267mm / 10.51in
        ii. Width: 267mm / 10.51in
        iii. Height: 114mm / 4.49in
33. Weight:
    a. With Mount Plate: 3436g / 121.2oz
    b. Without Mount Plate: 2900g / 102.29oz
34. Operating Power:
    i. With IR: IEEE 802.3bt Type 3 PoE++
        ii. Without IR: IEEE 802.3at Type 2 PoE+
        iii. Extended temperature range: IEEE 802.3bt Type 3 PoE++
35. Operating Temperature: -40°C to 50°C / -40°F to 122°F
36. Operating Humidity: 0% to 90%
37. Connectivity: Ethernet RJ-45 cable connector for network/PoE connection; 10/100 Mbps

C. CH53-E Multisensor Camera by Verkada Inc.

1. Onboard Storage: [1TB | 2TB | 3TB | 4TB | 8TB] -- Select desired storage size for project CH53-E cameras and delete non-applicable storage specs.
2. Sensor Resolution: 4 x 5MP (2592 x 1944 pixels)
3. Lens Type: Varifocal; motorized zoom
4. Image Sensor: 4 x 1 / 2.8" Progressive CMOS
5. Focal Length: 3.18-8.12mm
6. Iris: N/A
7. Aperture: F1.9 - F3.24
8. Sensor Movement:
    a. Tilt: +25° to +90° from horizon
    b. Pan: +/- 180°
    c. Rotation: +/- 90° for each lens
9. Lens Distortion Correction (LDC): LDC crops the sensor field of view to deliver a rectified, undistorted output image.
10. Field of View (FoV after LDC):
    a. Horizontal: 105° to 39° (92° to 38°)
    b. Vertical: 76° to 29° (70° to 28°)
    c. Diagonal: 145° to 47° (116° to 44°)
11. IR Range: 30m / 98ft; non-adjustable
12. Audio: Supported - Built-in microphone, one-way audio, effective range 5m / 16ft
13. Resistance:
    a. IK10
    b. IP66/IP67
14. Dimensions
    a. With Mount Plate:
    i. Diameter: 262.0mm / 10.32in
        ii. Height: 117.0mm / 4.61in
    b. Without Mount Plate:

i. Diameter: 262.0mm / 10.32in
ii. Height: 115.0mm / 4.53in

15. Weight:
    a. Camera: 3425g / 120.81oz
    b. Mount Plate: 528g / 18.62oz
16. Operating Power:
    a. With IR: IEEE 802.3bt Type 3 PoE++ (43-57V, 0.82-0.69A, 35.0W)
    b. Without IR: IEEE 802.3bt Type 3 PoE++ (37-57V, 0.51-0.33A, 19.0W)
    c. Extended temperature range: IEEE 802.3bt Type 3 PoE++ (43-57V, 1.20-0.90A, 51.0W)
17. Operating Temperature: -40°C to 50°C / -40°F to 122°F
18. Operating Humidity: 0% to 90%
19. Connectivity: Ethernet RJ-45 cable connector for network/PoE connection; 10/100/1000 Mbps

D. CH63-E Multisensor Camera by Verkada Inc.

1. Onboard Storage: [1TB | 2TB | 3TB | 4TB | 8TB] -- Select desired storage size for project CH53-E cameras and delete non-applicable storage specs.
2. Sensor Resolution: 4 x 5MP (2592 x 1944 pixels)
3. Lens Type: Varifocal; motorized zoom
4. Image Sensor: 4 x 1 / 2.8" Progressive CMOS
5. Focal Length: 3.18-8.12mm
6. Iris: N/A
7. Aperture: F1.9 - F3.24
8. Sensor Movement:
    a. Tilt: +25° to +90° from horizon
    b. Pan: +/- 180°
    c. Rotation: +/- 90° for each lens
9. Lens Distortion Correction (LDC): LDC crops the sensor field of view to deliver a rectified, undistorted output image.
10. Field of View (FoV after LDC):
    a. Horizontal: 105° to 39° (92° to 38°)
    b. Vertical: 76° to 29° (70° to 28°)
    c. Diagonal: 145° to 47° (116° to 44°)
11. IR Range: 30m / 98ft; non-adjustable
12. Audio: Supported - Built-in microphone, one-way audio, effective range 5m / 16ft
13. Resistance:
    a. IK10
    b. IP66/IP67
14. Dimensions
    a. With Mount Plate:
    i. Diameter: 262.0mm / 10.32in
        ii. Height: 117.0mm / 4.61in
    b. Without Mount Plate:
    i. Diameter: 262.0mm / 10.32in
        ii. Height: 115.0mm / 4.53in
15. Weight:
    a. Camera: 3425g / 120.81oz
    b. Mount Plate: 528g / 18.62oz
16. Operating Power:

a. With IR: IEEE 802.3bt Type 3 PoE++ (43-57V, 0.82-0.69A, 35.0W)
b. Without IR: IEEE 802.3bt Type 3 PoE++ (37-57V, 0.51-0.33A, 19.0W)
c. Extended temperature range: IEEE 802.3bt Type 3 PoE++ (43-57V, 1.20-0.90A, 51.0W)

17. Operating Temperature: -40°C to 50°C / -40°F to 122°F
18. Operating Humidity: 0% to 90%
19. Connectivity: Ethernet RJ-45 cable connector for network/PoE connection; 10/100/1000 Mbps

E. CY53-E Two-Camera Multisensor Camera by Verkada Inc.

1. Onboard Storage: [512GB|1TB|2TB] -- Select desired storage size for project CY53-E cameras and delete non-applicable storage specs.
2. Sensor Resolution: 2 x 5MP (2592 x 1944 pixels)
3. Lens Type: Varifocal; motorized zoom
4. Image Sensor: 2 x 1 / 2.8" Progressive CMOS
5. Focal Length: 3.18-8.12mm
6. Iris: N/A
7. Aperture: F1.9 -- F3.24
8. Sensor Movement:
   a. Tilt: +0°-60° for each lens from horizon
   b. Pan: +/- 90° for each lens
   c. Rotation: +/- 90° for each lens
9. Lens Distortion Correction (LDC): LDC crops the sensor field of view to deliver a rectified, undistorted output image.
10. Field of View (FoV after LDC):
    a. Horizontal: 97° to 38° (88° to 35°)
    b. Vertical: 69° to 28° (65° to 26°)
    c. Diagonal: 131° to 46° (111° to 43°)
11. IR Range: 30m / 98ft
12. Audio: Supported
13. Resistance:
    a. IK10
    b. IP66
    c. IP67
14. Dimensions
    a. With Mount Plate:
    i. Length: 253mm / 9.96in
        ii. Width: 143mm / 15.63in
        iii. Height: 115mm / 4.53in
    b. Without Mount Plate:
    i. Length: 253mm / 9.96in
        ii. Width: 143mm / 15.63in
        iii. Height: 110mm / 4.33in
15. Weight:
    a. With Mount Plate: 2400g / 84.66oz
    b. Without Mount Plate: 2000g / 70.55oz
16. Operating Power:
    a. With IR: 37-57V, 0.60-0.45A, 25.5W
    b. Without IR: 37-57V, 0.37-0.24A, 13.5W
    c. Extended temperature range: 37-57V, 0.60-0.45A, 25.5W

17. Operating Temperature: -40°C to 50°C / -40°F to 122°F
18. Operating Humidity: 0% to 90%
19. Connectivity: Ethernet RJ-45 cable connector for network/PoE connection; 10/100 Mbps

F. CY63-E Two-Camera Multisensor Camera by Verkada Inc.

1. Onboard Storage: [1TB | 2TB | 3TB | 4TB] -- Select desired storage size for project CY63-E cameras and delete non-applicable storage specs.
2. Sensor Resolution: 2 x 4K (3856 x 2228 pixels)
3. Lens Type: Varifocal; motorized zoom
4. Image Sensor: 2 x 1 / 2.8" Progressive CMOS
5. Focal Length: 3.18-8.12mm
6. Iris: N/A
7. Aperture: F1.9 - F3.24
8. Sensor Movement:
    a. Tilt: +0° to 60° for each lens from upright
    b. Pan: +/- 90° for each lens
    c. Rotation: +/- 90° for each lens
9. Lens Distortion Correction (LDC): LDC crops the sensor field of view to deliver a rectified, undistorted output image.
10. Field of View (FoV after LDC):
    a. Horizontal: 115° to 44° (107° to 42°)
    b. Vertical: 61° to 25° (60° to 24°)
    c. Diagonal: 142° to 48° (123° to 48°)
11. IR Range: 30m / 98ft; non-adjustable
12. Audio: Supported - Built-in microphone, one-way audio, effective range 5m / 16ft
13. Resistance:
    a. IK10
    b. IP66/IP67
14. Dimensions
    a. With Mount Plate:
    i. Length: 253.0mm / 9.96in
        ii. Width: 143.0mm / 5.63in
        iii. Height: 115.0mm / 4.53in
    b. Without Mount Plate:
    i. Length: 253.0mm / 9.96in
        ii. Width: 143.0mm / 5.63in
        iii. Height: 110.0mm / 4.33in
15. Weight:
    a. Camera: 2000g / 70.55oz
    b. Mount Plate: 400g / 14.11oz
16. Operating Power:
    a. With IR: IEEE 802.3at Type 2 PoE+ (37-57V, 0.60-0.45A, 25.5W)
    b. Without IR: IEEE 802.3at Type 2 PoE+ (37-57V, 0.37-0.24A, 13.5W)
    c. Extended temperature range: IEEE 802.3at Type 2 PoE+ (37-57V, 0.60-0.45A, 25.5W)
17. Operating Temperature: -40°C to 50°C / -40°F to 122°F
18. Operating Humidity: 0% to 90%
19. Connectivity: Ethernet RJ-45 cable connector for network/PoE connection; 10/100/1000 Mbps

7. Pan-tilt-zoom Series

A. CP52-E PTZ Camera by Verkada Inc.

1. Onboard Storage: [512GB|1TB|1.5TB|3TB] -- Select desired storage size for project CP52-E cameras and delete non-applicable storage specs.
2. Sensor Resolution: 5MP (2688 x 1944 pixels)
3. Lens Type: Varifocal; motorized zoom
4. Image Sensor: 1/2.3" Progressive CMOS
5. Focal Length: 4.94-148.24mm
6. Iris: DC Iris
7. Aperture: F1.3 - F4.8
8. Lens Distortion Correction (LDC): LDC crops the sensor field of view to deliver a rectified, undistorted output image.
9. Field of View after LDC:
    a. Horizontal: 55°-2°
    b. Vertical: 42°-1.5°
    c. Diagonal: 66°-2.5°
10. IR Range: 100m / 328ft
11. Audio: Not supported
12. Resistance:
    a. IK10
    b. IP66
13. Dimensions
    a. With Pendant Cap:
    i. Length: 256mm / 10.1in
        ii. Width: 256mm / 10.1in
        iii. Height: 406mm / 16in
    b. Without Pendant Cap:
    i. Length: 256mm / 10.1in
        ii. Width: 256mm / 10.1in
        iii. Height: 336mm / 13.2in
14. Weight:
    a. With Pendant Cap: 7484.27g / 264oz
    b. Without Pendant Cap: 7076.04g / 249.6oz
15. Operating Power:
    a. With IR: IEEE 802.3bt Type 3 PoE++
    b. Without IR: IEEE 802.3at Type 2 PoE+
    c. Extended temperature range: IEEE 802.3bt Type 3 PoE++
16. Operating Temperature: -40°C to 50°C / -40°F to 122°F
17. Operating Humidity: 0% - 90%
18. Connectivity: Ethernet RJ-45 cable connector for network/PoE connection; 10/100/1000 Mbps

B. CP63-E PTZ Camera by Verkada Inc.

1. Onboard Storage: [1TB|2TB|3TB] -- Select desired storage size for project CP63-E cameras and delete non-applicable storage specs.
2. Sensor Resolution: 4K (3840 x 2160 pixels)
3. Lens Type: Varifocal; motorized zoom
4. Image Sensor: 1/1.8" Progressive CMOS

5. Focal Length: 6.5-212mm
6. Iris: P-Iris
7. Aperture: F1.4 - F4.9
8. Lens Distortion Correction (LDC): LDC crops the sensor field of view to deliver a rectified, undistorted output image.
9. Field of View after LDC:
    a. Horizontal: 63.5°-2°
    b. Vertical: 37.4°-1.1°
    c. Diagonal: 70.7°-2.3°
10. IR Range: 100m / 328ft
11. Audio: Not supported
12. Resistance:
    a. IK10
    b. IP66
13. Dimensions
    a. With Pendant Cap:
    i. Length: 256mm / 10.1in
        ii. Width: 256mm / 10.1in
        iii. Height: 406mm / 16in
    b. Without Pendant Cap:
    i. Length: 256mm / 10.1in
        ii. Width: 256mm / 10.1in
        iii. Height: 336mm / 13.2in
14. Weight:
    a. With Pendant Cap: 7940g / 280oz
    b. Without Pendant Cap: 7053g / 265.6oz
15. Operating Power:
    a. With IR: IEEE 802.3bt Type 3 PoE++
    b. Without IR: IEEE 802.3at Type 2 PoE+
    c. Extended temperature range: IEEE 802.3bt Type 3 PoE++
16. Operating Temperature: -40°C to 50°C / -40°F to 122°F
17. Operating Humidity: 0% - 90%
18. Connectivity: Ethernet RJ-45 cable connector for network/PoE connection; 10/100/1000 Mbps

8. Remote Cameras

A. CR-63-E Remote Camera with LTE by Verkada Inc.

1. Onboard Storage: [512GB | 1TB | 2TB | 3TB] -- Select desired storage size for project CR63-E cameras and delete non-applicable storage specs.
2. Sensor Resolution: 4K (3840 x 2160 pixels)
3. Lens Type: Varifocal; motorized zoom (2.25x)
4. Image Sensor: 1 / 1.2" Progressive CMOS
5. Focal Length: 5.9-13.3mm
6. Iris: P-Iris
7. Aperture: F1.5 - F2.9
8. Sensor Movement:
    a. Tilt: 0° to 90°
    b. Pan: 360°

c. Rotation: 360°

9. Lens Distortion Correction (LDC): LDC crops the sensor field of view to deliver a rectified, undistorted output image.
10. Field of View (FoV after LDC):
    a. Horizontal: 109° to 49° (102° to 47°)
    b. Vertical: 58° to 28° (58° to 27°)
    c. Diagonal: 113° to 55° (107° to 53°)
11. IR Range: 30m / 98ft; non-adjustable
12. Audio: Supported - Built-in microphone, one-way audio, effective range 5m / 16ft
13. Resistance:
    a. IK10
    b. IP66/IP67
14. Dimensions
    a. Length: 254.0mm / 10.00in
    b. Width: 101.6mm / 4.00in
    c. Height: 317.5mm / 12.50in
15. Weight: 3700g / 130.51oz
16. Operating Power:
    a. 54VDC, 1.2A, 65W Barrel Jack (6.5/3mm OD/ID)
    b. 48-57V, 1.35-1.14A, 65W Passive PoE
    c. 16-40V, 6-2.4A, 96W, DC Solar input
17. Operating Temperature: -40°C to 50°C / -40°F to 122°F
18. Operating Humidity: 0% to 90%
19. Connectivity:
    a. Network: RJ-45 cable connector for passive PoE connection
    b. Cellular: LTE cellular CAT 6 MIMO 2x2 DL MIMO
    c. SIM: 2 SIM slots (Nano 4FF), Dual SIM/auto SIM failover
    d. Supported Carriers: Verizon, AT&T, T-Mobile

9. FIPS-Validated Cameras

A. CD42-F Indoor Dome Camera by Verkada Inc.

1. Onboard Storage: [256GB|512GB|768GB|1TB| 2TB] -- Select desired storage size for project CD42-F cameras and delete non-applicable storage specs.
2. Sensor Resolution: 5MP (2688 x 1944 pixels)
3. Lens Type: Fixed
4. Image Sensor: 1/2.8" Progressive CMOS
5. Focal Length: 2.8mm
6. Iris: Fixed
7. Aperture: F1.6
8. Lens Distortion Correction (LDC): LDC crops the sensor field of view to deliver a rectified, undistorted output image.
9. Field of View (FoV after LDC):
    a. Horizontal: 97° (78°)
    b. Vertical: 71° (63°)
    c. Diagonal: 128° (91°)
10. IR Range: 15m / 49ft in low light
11. Audio: Yes
12. Resistance Ratings:

a. IK08
b. FCC
c. IEC60950-1

13. Dimensions:
    a. With Mount Plate:
    i. Length: 146mm / 5.75in
        ii. Width: 146mm / 5.75in
        iii. Height: 104.3mm / 4.11in
    b. Without Mount Plate:
    i. Length: 146mm / 5.75in
        ii. Width: 146mm / 5.75in
        iii. Height: 99.8mm / 3.93in
14. Weight:
    a. With Mount Plate: 748g / 26.38oz
    b. Without Mount Plate: 608g / 21.45oz
15. Operating Power: 11W (IEEE 802.3af PoE)
16. Operating Temperature: -10°C to 50°C / 14°F to 122°F
17. Operating Humidity: 0% to 90%
18. Connectivity: Ethernet 10/100Mbps RJ-45 cable connector for Network/PoE connection
19. Security:
    a. Meets the FIPS 140-2 standard, as certified by NIST
    b. TAA and FY2019 NDAA compliant

B. CD52-F Indoor Dome Camera by Verkada Inc.

1. Onboard Storage: [256GB|512GB|768GB|1TB| 2TB] -- Select desired storage size for project CD52 cameras and delete non-applicable storage specs.
2. Sensor Resolution: 5MP (2688 x 1944 pixels)
3. Lens Type: 3x Optical Zoom
4. Image Sensor: 1/2.8" Progressive CMOS
5. Focal Length: 2.8 to 8mm
6. Iris: P-Iris
7. Aperture: F1.3 to F2.4
8. Lens Distortion Correction (LDC): LDC crops the sensor field of view to deliver a rectified, undistorted output image.
9. Field of View (FoV after LDC):
    a. Horizontal: 41° to 93° (37° to 84°)
    b. Vertical: 31° to 76° (28° to 68°)
    c. Diagonal: 50° to 107° (45° to 97°)
10. IR Range: 30m / 98ft in low light
11. Audio: Yes
12. Resistance Rating:
    a. IK08
    b. FCC
    c. IEC60950-1
13. Dimensions:
    a. With Mount Plate:
    i. Length: 146mm / 5.75in
        ii. Width: 146mm / 5.75in
        iii. Height: 104.3mm / 4.11in

b. Without Mount Plate:
i. Length: 146mm / 5.75in
ii. Width: 146mm / 5.75in
iii. Height: 99.8mm / 3.93in

14. Weight:
a. With Mount Plate: 916g / 32.31oz
b. Without Mount Plate: 776g / 27.37oz
15. Operating Power: 11W (IEEE 802.3af PoE)
16. Operating Temperature: -10°C to 50°C / 14°F to 122°F
17. Operating Humidity: 0% to 90%
18. Connectivity: Ethernet 10/100Mbps RJ-45 cable connector for Network/PoE connection
19. Security:
a. Meets the FIPS 140-2 standard, as certified by NIST
b. TAA and FY2019 NDAA compliant

C. CD42-E-F Outdoor Dome Camera by Verkada Inc.

1. Onboard Storage: [256GB|512GB|768GB|1TB| 2TB] -- Select desired storage size for project CD42-E cameras and delete non-applicable storage specs.
2. Sensor Resolution: 5MP (2688 x 1944 pixels)
3. Lens Type: Fixed
4. Image Sensor: 1/2.8" Progressive CMOS
5. Focal Length: 2.8mm
6. Iris: Fixed
7. Aperture: F1.6
8. Lens Distortion Correction (LDC): LDC crops the sensor field of view to deliver a rectified, undistorted output image.
9. Field of View (after LDC):
a. Horizontal: 87° (78°)
b. Vertical: 70° (63°)
c. Diagonal: 101° (91°)
10. IR Range: 15m / 50ft in low light
11. Audio: Yes
12. Resistance Rating:
a. IK10
b. IP67
c. FCC
d. IEC60950-1
13. Dimensions:
a. With Mount Plate:
i. Length: 155mm / 6.1in
ii. Width: 155mm / 6.1in
iii. Height: 114.6mm / 4.51in
b. Without Mount Plate:
i. Length: 155mm / 6.1in
ii. Width: 155mm / 6.1in
iii. Height: 107.6mm / 4.24in
14. Weight:
a. With Mount Plate: 1021g / 36.01oz
b. Without Mount Plate: 847g / 29.88oz

15. Operating Power:
    a. With IR: IEEE 802.3af Type 1 PoE
    b. Without IR: IEEE 802.3af Type 1 PoE
    c. Extended temperature range: IEEE 802.3at Type 2 PoE+
16. Operating Temperature:
    a. PoE 802.3af: -20°C to 50°C / -4°F to 122°F
    b. PoE 802.3at: -40°C to 50°C / -40°F to 122°F
17. Operating Humidity: 0% to 90%
18. Connectivity: Ethernet 10/100Mbps RJ-45 cable connector for Network/PoE connection
19. Regulatory Compliance:
    a. Meets the FIPS 140-2 standard, as certified by NIST
    b. TAA and FY2019 NDAA compliant

D. CD52-E-F Outdoor Dome Camera by Verkada Inc.

1. Onboard Storage: [256GB|512GB|768GB|1TB| 2TB] -- Select desired storage size for project CD52-E cameras and delete non-applicable storage specs.
2. Sensor Resolution: 5MP (2688 x 1944 pixels)
3. Lens Type: 3x Optical Zoom
4. Image Sensor: 1/2.8" Progressive CMOS
5. Focal Length: 2.8 to 8mm
6. Iris: P-Iris
7. Aperture: F1.3 to F2.4
8. Lens Distortion Correction (LDC): LDC crops the sensor field of view to deliver a rectified, undistorted output image.
9. Field of View (FoV after LDC):
    a. Horizontal: 41° to 93° (37° to 84°)
    b. Vertical: 31° to 76° (28° to 68°)
    c. Diagonal: 50° to 107° (45° to 97°)
10. IR Range: 30m / 98ft in low light
11. Audio: Yes
12. Resistance Rating:
    a. IK10
    b. IP67
    c. FCC
    d. IEC60950-1
13. Dimensions:
    a. With Mount Plate:
    i. Length: 155mm / 6.1in
        ii. Width: 155mm / 6.1in
        iii. Height: 114.6mm / 4.51in
    b. Without Mount Plate:
    i. Length: 155mm / 6.1in
        ii. Width: 155mm / 6.1in
        iii. Height: 107.6mm / 4.24in
14. Weight:
    a. With Mount Plate: 1244g / 43.88oz
    b. Without Mount Plate: 1070g / 37.74oz
15. Operating Power:
    a. With IR: IEEE 802.3af Type 1 PoE

b. Without IR: IEEE 802.3af Type 1 PoE
c. Extended temperature range: IEEE 802.3at Type 2 PoE+

16. Operating Temperature:
    a. PoE 802.3af: -20°C to 50°C / -4°F to 122°F
    b. PoE 802.3at: -40°C to 50°C / -40°F to 122°F
17. Operating Humidity: 0% to 90%
18. Connectivity: Ethernet 10/100Mbps RJ-45 cable connector for Network/PoE connection
19. Regulatory Compliance:
    a. Meets the FIPS 140-2 standard, as certified by NIST
    b. TAA and FY2019 NDAA compliant

E. CD63-F Indoor Dome Camera by Verkada Inc.

1. Onboard Storage: [512GB|768GB|1TB|2TB|3TB] -- Select desired storage size for project CD63-F cameras and delete non-applicable storage specs.
2. Sensor Resolution: 4K (3840 x 2160 pixels)
3. Lens Type: Varifocal; motorized zoom
4. Image Sensor: 1/1.2" Progressive CMOS
5. Focal Length: 5.9 to 13.3mm
6. Iris: P-Iris
7. Aperture: F1.5 to F2.9
8. Lens Distortion Correction (LDC): LDC crops the sensor field of view to deliver a rectified, undistorted output image.
9. Field of View (FoV after LDC):
    a. Horizontal: 75° to 109° (72° to 102°)
    b. Vertical: 45° to 58° (44° to 58°)
    c. Diagonal: 82° to 1113° (80° to 107°)
10. IR Range: 40m / 130ft in low light
11. Audio: Yes
12. Resistance Rating:
    a. IK08
    b. FCC
    c. ICES
13. Dimensions:
    a. With Mount Plate:
    i. Length: 155mm / 6.1in
        ii. Width: 155mm / 6.1in
        iii. Height: 111.4mm / 4.4in
    b. Without Mount Plate:
    i. Length: 155mm / 6.1in
        ii. Width: 155mm / 6.1in
        iii. Height: 104.4mm / 4.1in
14. Weight:
    a. With Mount Plate: 1517g / 53.5oz
    b. Without Mount Plate: 1324g / 46.7oz
15. Operating Power:
    a. With IR: IEEE 802.3at Type 2 PoE+
    b. Extended temperature range: IEEE 802.3at Type 2 PoE+
16. Operating Temperature: -10°C to 50°C / 14°F to 122°F
17. Operating Humidity: 0% to 90%

18. Connectivity: Ethernet 10/100/1000Mbps RJ-45 cable connector for Network/PoE connection
19. Regulatory Compliance:
    a. Meets the FIPS 140-2 standard, as certified by NIST
    b. TAA and FY2019 NDAA compliant
    c. FedRAMP Ready status at the Moderate impact level

F. CD63-E-F Outdoor Dome Camera by Verkada Inc.

1. Onboard Storage: [512GB|768GB|1TB| 2TB|3TB] -- Select desired storage size for project CD62-E cameras and delete non-applicable storage specs.
2. Sensor Resolution: 4K (3840 x 2160 pixels)
3. Lens Type: Varifocal; motorized zoom
4. Image Sensor: 1/1.2" Progressive CMOS
5. Focal Length: 5.9 to 13mm
6. Iris: P-Iris
7. Aperture: F1.5 to F2.9
8. Lens Distortion Correction (LDC): LDC crops the sensor field of view to deliver a rectified, undistorted output image.
9. Field of View (FoV after LDC):
    a. Horizontal: 75° to 109° (72° to 102°)
    b. Vertical: 45° to 58° (44° to 58°)
    c. Diagonal: 82° to 113° (80° to 107°)
10. IR Range: 40m / 130ft in low light
11. Audio: Yes
12. Resistance Rating:
    a. IK10
    b. IP66/IP67
    c. FCC
    d. ICES
13. Dimensions:
    a. With Mount Plate:
    i. Length: 155mm / 6.1in
        ii. Width: 155mm / 6.1in
        iii. Height: 111.4mm / 4.4in
    b. Without Mount Plate:
    i. Length: 155mm / 5.1in
        ii. Width: 155mm / 5.1in
        iii. Height: 104.4mm / 4.1in
14. Weight:
    a. With Mount Plate: 1579g / 55.7oz
    b. Without Mount Plate: 1386g / 48.9oz
15. Operating Power:
    a. With IR: IEEE 802.3at Type 2 PoE+
    b. Extended temperature range: IEEE 802.3at Type 2 PoE+
16. Operating Temperature: -40°C to 50°C / -40°F to 122°F
17. Operating Humidity: 0% to 90%
18. Connectivity: Ethernet 10/100/1000Mbps RJ-45 cable connector for Network/PoE connection
19. Regulatory Compliance:
    a. Meets the FIPS 140-2 standard, as certified by NIST
    b. TAA and FY2019 NDAA compliant

c. FedRAMP Ready status at the Moderate impact level

G. CF83-E-F Fisheye Camera by Verkada Inc.

1. Onboard Storage: [512GB|1TB|2TB|3TB] -- Select desired storage size for project CF83-E cameras and delete non-applicable storage specs.
2. Sensor Resolution: 12.5MP (3536 x 3535 pixels)
3. Lens Type: Fixed Zoom
4. Image Sensor: 1/1.6" Progressive CMOS
5. Focal Length: 1.7mm
6. Iris: Fixed
7. Aperture: F2.0
8. Lens Distortion Correction (LDC): LDC crops the sensor field of view to deliver a rectified, undistorted output image.
9. Field of View after LDC:
   a. Horizontal: 180°
   b. Vertical: 180°
   c. Diagonal: 180°
10. IR Range: 20m / 66ft in low light
11. Audio: Yes
12. Resistance:
    a. IK10
    b. IP66/67
13. Dimensions
    a. With Mount Plate:
    i. Length: 155mm / 6.1in
       ii. Width: 155mm / 6.1in
       iii. Height: 76.2mm / 3.0in
    b. Without Mount Plate:
    i. Length: 155mm / 6.1in
       ii. Width: 155mm / 6.1in
       iii. Height: 69.2mm / 2.7in
14. Weight:
    a. With Mount Plate: 1564g / 75.1oz
    b. Without Mount Plate: 1368g / 48.2oz
15. Operating Power:
    a. With IR: IEEE 802.3at Type 2 PoE+
    b. Extended temperature range: IEEE802.3at Type 2 PoE+
16. Operating Temperature: -40°C to 50°C / -40°F to 122°F
17. Operating Humidity: 0% - 90%
18. Connectivity: Ethernet RJ-45 cable connector for network/PoE connection; 10/100/1000 Mbps
19. Regulatory Compliance:
    a. FIPS 140-2 validated
    b. TAA and FY2019 NDAA compliant

H. CH52-E-F Multisensor Camera by Verkada Inc.

1. Onboard Storage: [1TB| 2TB|4TB|8TB] -- Select desired storage size for project CH52-E cameras and delete non-applicable storage specs.
2. Sensor Resolution: 4 x 5MP (2688 x 1944 pixels)
3. Lens Type: Varifocal; motorized zoom

4. Image Sensor: 4 x 1 / 2.8" Progressive CMOS
5. Focal Length: 3.7-7.7mm
6. Iris: N/A
7. Aperture: F1.9 - F2.9
8. Sensor Movement:
    a. Tilt: +0°-105° for each lens from horizon
    b. Pan: +/- 90° for each lens
    c. Rotation: +/- 90° for each lens
9. Lens Distortion Correction (LDC): LDC crops the sensor field of view to deliver a rectified, undistorted output image.
10. Field of View (FoV after LDC):
    a. Horizontal: 37° to 89° (35° to 82°)
    b. Vertical: 29° to 65° (26° to 60°)
    c. Diagonal: 46° to 99° (43° to 92°)
11. IR Range: 30m / 98ft
12. Audio: Not supported
13. Resistance:
    a. FCC
    b. CE - EN55035
    c. IK10
    d. IP67
14. Dimensions
    a. With Mount Plate:
    i. Length: 275mm / 10.83in
        ii. Width: 275mm / 10.83in
        iii. Height: 118mm / 4.65in
    b. Without Mount Plate:
    i. Length: 267mm / 10.51in
        ii. Width: 267mm / 10.51in
        iii. Height: 114mm / 4.49in
15. Weight:
    a. With Mount Plate: 3436g / 121.2oz
    b. Without Mount Plate: 2900g / 102.29oz
16. Operating Power:
    i. With IR: IEEE 802.3bt Type 3 PoE++
        ii. Without IR: IEEE 802.3at Type 2 PoE+
        iii. Extended temperature range: IEEE 802.3bt Type 3 PoE++
17. Operating Temperature: -40°C to 50°C / -40°F to 122°F
18. Operating Humidity: 0% to 90%
19. Connectivity: Ethernet RJ-45 cable connector for network/PoE connection; 10/100 Mbps
20. Regulatory Compliance:
    a. FIPS 140-2 validated
    b. TAA and FY2019 NDAA compliant

I. CP52-E-F PTZ Camera by Verkada Inc.

1. Onboard Storage: [512GB|1TB|1.5TB|3TB] -- Select desired storage size for project CP52-E cameras and delete non-applicable storage specs.
2. Sensor Resolution: 5MP (2688 x 1944 pixels)
3. Lens Type: Varifocal; motorized zoom

4. Image Sensor: 1/2.8" Progressive CMOS
5. Focal Length: 5.2-148.15mm
6. Iris: DC Iris
7. Aperture: F1.3 - F4.8
8. Lens Distortion Correction (LDC): LDC crops the sensor field of view to deliver a rectified, undistorted output image.
9. Field of View after LDC:
    a. Horizontal: 55°-2°
    b. Vertical: 42°-1.5°
    c. Diagonal: 66°-2.5°
10. IR Range: 100m / 328ft
11. Audio: Not supported
12. Resistance:
    a. IK10
    b. IP66
13. Dimensions
    a. With Pendant Cap:
    i. Length: 256mm / 10.1in
        ii. Width: 256mm / 10.1in
        iii. Height: 406mm / 16in
    b. Without Pendant Cap:
    i. Length: 256mm / 10.1in
        ii. Width: 256mm / 10.1in
        iii. Height: 336mm / 13.2in
14. Weight:
    a. With Pendant Cap: 8.01Kg / 16.5lbs
    b. Without Pendant Cap: 7.07kg / 15.6lbs
15. Operating Power:
    a. With IR: IEEE 802.3bt Type 3 PoE++
    b. Without IR: IEEE 802.3at Type 2 PoE+
    c. Extended temperature range: IEEE 802.3bt Type 3 PoE++
16. Operating Temperature: -40°C to 50°C / -40°F to 122°F
17. Operating Humidity: 0% - 90%
18. Connectivity: Ethernet RJ-45 cable connector for network/PoE connection; 10/100/1000 Mbps
19. Regulatory Compliance:
    a. FIPS 140-2 validated
    b. TAA and FY2019 NDAA compliant

J. CP63-E-F PTZ Camera by Verkada Inc.

1. Onboard Storage: [1TB|2TB|3TB] -- Select desired storage size for project CP63-E cameras and delete non-applicable storage specs.
2. Sensor Resolution: 4K (3840 x 2160 pixels)
3. Lens Type: Varifocal; motorized zoom
4. Image Sensor: 1/1.8" Progressive CMOS
5. Focal Length: 6.5-212mm
6. Iris: P-Iris
7. Aperture: F1.4 - F4.9

8. Lens Distortion Correction (LDC): LDC crops the sensor field of view to deliver a rectified, undistorted output image.
9. Field of View after LDC:
    a. Horizontal: 63.5°-2°
    b. Vertical: 37.4°-1.1°
    c. Diagonal: 70.7°-2.3°
10. IR Range: 100m / 328ft
11. Audio: Not supported
12. Resistance:
    a. IK10
    b. IP66
13. Dimensions
    a. With Pendant Cap:
    i. Length: 256mm / 10.1in
        ii. Width: 256mm / 10.1in
        iii. Height: 406mm / 16in
    b. Without Pendant Cap:
    i. Length: 256mm / 10.1in
        ii. Width: 256mm / 10.1in
        iii. Height: 336mm / 13.2in
14. Weight:
    a. With Pendant Cap: 7940g / 280oz
    b. Without Pendant Cap: 7053g / 265.6oz
15. Operating Power:
    a. With IR: IEEE 802.3bt Type 3 PoE++
    b. Without IR: IEEE 802.3at Type 2 PoE+
    c. Extended temperature range: IEEE 802.3bt Type 3 PoE++
16. Operating Temperature: -40°C to 50°C / -40°F to 122°F
17. Operating Humidity: 0% - 90%
18. Connectivity: Ethernet RJ-45 cable connector for network/PoE connection; 10/100/1000 Mbps
19. Regulatory Compliance:
    a. FIPS 140-2 validated
    b. TAA and FY2019 NDAA compliant

10. Comman Connector

A. Command Connector by Verkada Inc.

1. Description:
    a. The Command Connector allows adding non-Verkada cameras to Command.
    b. Supports many features on native Verkada cameras, including video analytics, easy remote administration, simplified retention, and a single management platform.
    c. ONVIF Profile S conformant and can ingest RTSP feeds.
    d. Dual ethernet support adds WAN/LAN split for isolated camera networks without routing complexity.
    e. FIPS-validated version of this model, the CC700-F, is available.
    f. Support for non-Verkada PTZ controls to manipulate non-Verkada PTZ cameras.
2. Key Features:
    a. Support for recording and playback ranging from 5MP (or less) to 4K resolutions

b. RAID10 for high reliability
c. People and vehicle analytics
d. AI-powered search
e. 5-year warranty

3. Storage and video recording:
   a. 4TB-32TB of onboard storage
   b. 30-90 days of continuous video recording per channel
   c. Adaptive quality recording automatically triggers HQ recording when motion is detected
4. Technical Specifications:
   a. CPU: Inteli9-13900K
   b. Power Input: Single PSU 600W
   c. Power Input Voltage: 90-264VAC
   d. Power Input Frequency: 47-63Hz
   e. Connectivity: Dual 2.5Gbps RJ45 Ethernet
   f. Memory: 32GB RAM
   g. Dimensions:
   i. Width:18.87in / 479.4mm
      ii. Height: 1.73in / 44mm
      iii. Depth: 22.13in / 562.1mm
   h. Operating Temperature: 0° to 40° C / 32°F to 104°F
   i. Storage Temperature: -20° to 70° C / -4°F to 158°F
   j. Operating Humidity: 0%-90% (non-condensing)
   k. System Rack Size: 1U
   l. Storage:
   i. CC300: 4TB-8TB
      ii. CC500: 8TB-16TB
      iii. CC700: 16TB-32TB
      iv. CC700-F: 16TB
   m. Certifications:
   i. FCC Class A
      ii. NDAA compliant
      iii. ICES

11. Viewing Station

A. VX52 Video Surveillance Viewing Station by Verkada Inc.

1. Description:

   a. The VX52 is a dedicated device that streams up to 300 camera feeds (30 cameras per page, up to 10 pages) to any display with ultra-low latency, crisp video playback, customizable Smart Tiles and layouts. Built on the powerful Apple TV 4K platform, the VX52 is the viewing platform of choice for customers with mission-critical real-time viewing requirements.

   b. Administrator Managed Device -- Admins can remotely manage the VX52, select video feeds and Smart Tiles to display as well as customize layouts. Non-admin viewers do not need accounts, cannot access historical footage, and cannot modify display settings.

   c. Plug-and-Play by Design -- Simply connect the device to your network via ethernet or WiFi and project on a display. The VX52 is ready to stream in minutes with zero configuration needed.

d. Stable and Resilient -- Streams play continuously without interruption for both local and remote streaming. There is no need to reset the device or relaunch a browser or application, streams restart automatically after a power outage.

e. Supported by Verkada -- Admins configure the VX52 in Command, just like their cameras. The VX52 is backed by our industry-leading 10-year warranty and the dedicated Verkada customer support team.

2. Key Features:
   a. Stream up to 300 cameras across 10 pages on a single display
   b. Ultra-low latency with crisp video playback
   c. Administrator managed device without requiring additional accounts
   d. Plug-and-play with zero local configuration needed
   e. Easily configure Smart Tiles and layout display from Command
   f. Automatically restarts after a power outage
   g. 10-year warranty
3. Technical Specifications:
   a. Supported Displays: One display per station
   b. Number of Streams:
   i. 30 streams per page
      ii. 300 streams total
   c. Processor: A12 Bionic chip
   d. Dimensions:
   i. Length: 99.1mm / 3.9in
      ii. Width: 99.1mm / 3.9in
      iii. Height: 35.6mm / 1.4in
   e. Weight: Weight: 425g / 15oz
   f. Operating Temperature: 0° to 35° C / 32°F to 95°F
   g. Operating Humidity: 0% to 95%
   h. Operating Altitude: Up to 3,000m / 10,000ft
   i. Display Resolution Supported: Up to 4096 x 2160 pixels
   j. Included accessories:
   i. HDMI cord
      ii. setup guide
      iii. power cord
      iv. Apple TV remote
   k. Connectors:
   i. HDMI 2.1 port
      ii. Gigabit Ethernet
   l. Connectivity: 10/100/1000BASE-T Gigabit Ethernet (RJ-45), 802.11 ax WiFi 6

12. PoE Injectors

A. INJ-POE-PLUS Power over Ethernet+ Injector by Verkada Inc.

1. Description: Verkada's INJ-POE-PLUS is a single port, high-power solution for remote powering of PoE enabled hardware, including Verkada security cameras, access control, and environmental sensors. Generating up to 30W, the INJ-POE-PLUS enables remote power for a new range of applications including 802.11n Access Points and pan-tilt-zoom (PTZ) cameras. It complies to IEEE 802.3at PoE standard and is backward compatible to IEEE802.3af. It can power both existing 10/100Base-T network devices and emerging wireless 1000Base-T devices such as WiMAX and wireless IEEE 802.11n access points.

2. Key Features:

a. IEEE 802.3at compliant with 2-event classification
b. IEEE 802.3af backward compatible
c. Output power of 30W is guaranteed
d. Supports 10/100/1000Base-T applications
e. Compatible with IEEE 802.3af devices
f. Safe -- low power devices receive only the power they need
g. Automatic Detection and Protection of non-standard Ethernet terminals
h. Compact design fits easily in WLAN Access Point and IP Cameras installations

3. Technical Specifications
a. Data Rates: 10/100/1000 Mbps
b. Power over Ethernet Output:
c. Pin Assignment and Polarity: Spare Pairs 7/8 (-) and 4/5 (+)
d. Output Power Voltage: 55 VDC
e. User Port Power: 30W (Guaranteed)
f. Input Power Requirements:
i. AC Input Voltage: 100VAC to 240VAC (±10%)
ii. AC Input Current: 0.67A @ 100VAC to 240VAC
iii. AC Frequency: 50 to 60Hz
g. Dimensions:
i. Length: 160.5mm / 6.32in
ii. Width: 51.8mm / 2.04in
iii. Height: 34.8mm / 1.37in
h. Weight: 200g / 7.05oz
i. Connectors:
i. Shielded RJ-45
ii. EIA 568A
iii. EIA 568B
j. Environmental Conditions:
i. Operating Ambient Temperature:
A. -4°F to 104°F (-20 °C to 40°C) @30W
B. -4°F to 131°F (-20 °C to 55°C) @22.5W
k. Operating Humidity: 0% to 90%
l. Operating Altitude: -304.8m to 3,048m / -1,000ft to 10,000 ft
m. MTBF: 100,000 hrs @ 25°C
n. Thermal Rating: 20 BTU/Hr (@240VAC)
o. Regulatory Compliance:
i. IEEE 802.3af (PoE)
ii. RoHS Compliant
iii. WEEE Compliant
iv. CE
p. Electromagnetic Emission and Immunity:
i. FCC Part 15, Class B
ii. EN 55032 Class B (Emissions)
iii. EN 55024 (Immunity)
iv. VCCI
q. Safety: UL/EN/IEC 60950-1 (Ed.2)

B. ACC-POE-60W Power over Ethernet++ Injector by Verkada Inc.

Description: Verkada's ACC-POE-60W converts two inputs -- a

power cable and an Ethernet cable -- to a single PoE ++ port (IEEE 802.3bt standard, type 3 compliant) with up to 60W of power. The ACC-POE-60W is designed to power the CH52-E Multisensor camera, but it is also backwards compatible and safe to use with any IEEE 802.3af/at terminals in other Verkada devices. The ACC-POE-60W comes with a US power cord (for US customers) and a UK power cord (for Europe customers) and is wall mountable.

1. Key Features
   a. IEEE 802.bt Type 3 compliant
   b. IEEE 802.3af/at backward compatible
   c. Output power of 60W over 4--pairs
   d. Supports 10/100/1000 Base--T applications
   e. Safe: low--power devices receive only the power they need
   f. Automatic detection and protection of non--standard Ethernet terminals
   g. Compact design fits easily in WLAN access point and IP camera installations
2. Technical Specifications
   a. Data Rates: 10/100/1000 Mbps
   b. Power over Ethernet Output:
   i. Data Pairs:
      A. 1/2 (-)
      B. 3/6 (+)
   ii. Spare Pairs:
      A. 7/8 (-)
      B. 4/5 (+)
   iii. Output Voltage: 55 V nominal
   c. Output Power Voltage: 55 VDC
   d. User Port Power: 30W (Guaranteed)
   e. Input Power Requirements:
   i. AC Input Voltage: 100 to 240V
   ii. AC Input Current: 1.5A
   iii. AC Frequency: 50 / 60Hz
   f. Dimensions:
   i. Length: 151mm / 5.94in
   ii. Width: 62mm / 2.44in
   iii. Height: 38mm / 1.5in
   g. Weight: 500g / 17.64oz
   h. Connectors:
   i. Shielded RJ-45
   ii. EIA 568A
   iii. EIA 568B
   i. Environmental Conditions:
   i. Operating Ambient Temperature:
      A. -20°C to 40°C / 14°F to 104°F @ 60W
      B. -20°C to 55°C / 14°F to 131°F @ 30W
   j. Operating Humidity: 0% to 90%
   k. Operating Altitude: -400m to 3,048m / -1,312ft to 10,000 ft
   l. MTBF: 240,000 hrs @ 25°C

m. Thermal Rating: 34 BTU/Hr
n. Regulatory Compliance: IEEE 802.3bt
o. Electromagnetic Emission and Immunity:
i. FCC Part 15, Class B
ii. EN 55032 Class B
iii. EN 55024
iv. VCCI
p. Safety: CE/UL/IEC/EN 62368-1

13. Accessories

A. ACC-MNT-2 Mounting Arm Kit by Verkada Inc.

1. Description: Wall mounted extender arm with built-in 1.5" female NPT thread.
2. Material: Aluminum Alloy
3. Dimensions:
   a. Length: 230.5mm / 9.07in
   b. Width: 86mm / 3.39in
   c. Height: 117mm / 4.61in
4. Color: White
5. Weight: 700g / 24.69oz

B. ACC-MNT-3 Wall Mounted L-Shaped Bracket Kit by Verkada Inc.

1. Description: Compact bracket for mounting camera perpendicular to wall.
2. Material: Aluminum Alloy
3. Dimensions:
   a. Length: 170mm / 6.69in
   b. Width: 150mm / 5.91in
   c. Height: 110mm / 4.33in
4. Color: White
5. Weight: 577g / 20.35oz

C. ACC-MNT-5 Mini Pendant Cap Mount Kit by Verkada Inc.

1. Description: Two-piece threaded cap for mounting a Mini camera to 3/4" NPT threaded drop pipe. Cap piece can be removed and mounted independently with its 1.5" male NPT thread.
2. Material: Aluminum Alloy
3. Dimensions:
   a. Length: 100mm / 3.94in
   b. Width: 100mm / 3.94in
   c. Height: 102.8mm / 4.05in
4. Color: Dark grey
5. Weight: 240g / 8.47oz
6. Included Accessories:
   a. Fasteners
   b. Set screw
   c. Hex key

D. ACC-MNT-6 Mini Camera Junction Box Mount Adapter by Verkada Inc.

1. Description: For mounting a Mini camera to a standard junction box.
2. Material: Steel Mount Plate, Plastic Cover
3. Dimensions:
   a. Length: 130mm / 5.12in

   b. Width: 130mm / 5.12in
   c. Height: 7.5mm / 0.3in
4. Color: Grey Mount Plate, White Plastic Cover
5. Weight: 160g / 5.64oz
6. Included Accessories:
   a. Fasteners

E. ACC-MNT-7 Angle Mount by Verkada Inc.

1. Description: Mounts fisheye and dome cameras 30° from wall for improved field of view.
2. Material: Aluminum Alloy
3. Dimensions:
   a. Length: 155mm / 6.1in
   b. Width: 149mm / 5.87in
   c. Height: 82mm / 3.23in
4. Color: White
5. Weight: 390g / 13.76oz
6. Included Accessories:
   a. Metal mount ring
   b. 3x countersink screws
   c. 3x thumbscrews
   d. Rubber plug

F. ACC-MNT-8 Pendant Cap Mounting Adapter Kit by Verkada Inc.

1. Description: Threaded cap adapter enables mounting of Indoor Dome Series, Outdoor Dome Series, Fisheye Series, and Multisensor Series cameras to hardware with 3/4" female NPT and 1.5" male NPT threads, including ACC-MNT-2 Mounting Arm Kit by Verkada Inc.
2. Material: Aluminum Alloy
3. Dimensions:
   a. Length: 155mm / 6.1in
   b. Width: 155mm / 6.1in
   c. Height: 42mm / 1.65in
4. Color: White
5. Weight: 300g / 10.58oz
6. Included Accessories:
   a. Set screw
   b. 3x thumbscrews.

G. ACC-MNT-9 Pole Mount Adapter by Verkada Inc.

1. Description: For mounting a camera to a circular pole.
2. Mounting Pole Diameter: 32mm to 152.4mm / 1.25in to 6in
3. Material: Steel
4. Dimensions:
   a. Length: 160mm / 6.3in
   b. Width: 160mm / 6.3in
   c. Height: 68mm / 2.68in
5. Color: White
6. Weight: 742g / 26.17oz
7. Included Accessories:
   a. Adapter plate
   b. 2x Metal strap set

c. Fasteners for compatible mounts

H. ACC-MNT-10 Corner Mount by Verkada Inc.

1. Description: Versatile bracket for mounting a range of accessories and cameras on corners.
2. Material: Steel
3. Dimensions:
   a. Length: 190mm / 7.48in
   b. Width: 263mm / 10.35in
   c. Height: 170mm / 6.69in
4. Color: White
5. Weight: 1,890g / 66.67oz

I. ACC-MNT-11 Square Junction Box

1. Description: Square junction box for mounting Bullet Series cameras.
2. Material: Aluminum alloy
3. Dimensions:
   a. Length: 128mm / 5.04in
   b. Width: 128mm / 5.04in
   c. Height: 40mm / 1.57in
4. Color: White
5. Weight: 303g / 10.69oz
6. Included Accessories:
   a. 2x ¾in NPT plugs
   b. 4x buttonhead screws

J. ACC-CAM-SHIELD-1

1. Description: Weather shield for protecting Dome Series and Fisheye Series cameras.
2. Material: Steel mount plate, polycarbonate visor
3. Dimensions:
   a. Length: 192mm / 7.56in
   b. Width: 185mm / 7.28in
   c. Height: 78mm / 3.07in
4. Color:
   a. Black mount plate
   b. White and black visor
5. Weight: 173g / 6.1oz
6. Included Accessories:
   a. Mounting fasteners

14. Cellular Gateways

A. GC31 Indoor Cellular Gateway

1. Description:
   a. Indoor cellular gateway to send both power and data to any Verkada device via PoE.
   b. Flexible power options.
   c. Verkada data plan or BYO plan.
   d. Cloud-managed in Verkada Command.
2. Technical Specifications:
   a. Cellular:
   i. Connectivity: LTE cellular CAT 12

ii. SIM: 2 SIM slots (Nano 4FF), dual SIM/auto SIM failover
iii. Antennas: 2 x SMA
b. Inputs and Outputs:
i. Ethernet: 2 x GigE RJ45 outputs
ii. Power Input: 54VDC Barrel Jack (6.5/3.55mm OD/ID), 100-240VAC AC/DC power adaptor included (region specific)
iii. Power Output: 2 x PoE RJ45 outputs @ 60W total (2 x IEEE 802.3at Type 2 PoE+ 30W or 1 x IEEE 802.3bt Type 3 PoE++ 60W)
c. Dimensions:
i. Length: 125mm / 4.9in
ii. Width: 125mm / 4.9in
iii. Height: 30mm / 1.2in
d. Weight: 0.6kg / 1.3lb
e. Operating Temperature: -10°C to 50°C / 14°F to 122°F
f. Operating Humidity: 5% to 90%
g. Compliance:
i. FCC
ii. CE
iii. IC
iv. UL/IEC 62368-1
v. CSA C22.2 No. 62368-1
vi. PTCRB
vii. Verizon
viii. AT&T
ix. FirstNet
h. Included Accessories:
i. 2 x SMA antennas
ii. AC/DC power adapter and cord
i. Mounting Hardware: Mounting plate, 4 x wall anchors, T10 security torx screwdriver, 4 M4 x 25mm PH2 wall screws, RJ45 port cover

B. GC31-E Outdoor Cellular Gateway

1. Description:
   a. Outdoor cellular gateway to send both power and data to any Verkada device via PoE.
   b. Flexible power options.
   c. Verkada data plan or BYO plan.
   d. Cloud-managed in Verkada Command.
2. Technical Specifications:
   a. Cellular:
   i. Connectivity: LTE cellular CAT 12
   ii. SIM: 2 SIM slots (Nano 4FF), dual SIM/auto SIM failover
   iii. Antennas: 2 x N Type
   b. Inputs and Outputs:
   i. Ethernet: 1 x GigE RJ45 input, 2 x GigE RJ45 outputs
   ii. Power Input: 54VDC Barrel Jack (6.5/3mm OD/ID), IEEE 802.3bt Type 4 PoE++ 90W, 12-36VDC Terminal Block
   iii. Power Output: 2 x PoE RJ45 outputs @ 60W total (2 x IEEE 802.3at Type 2 PoE+ 30W or 1 x IEEE 802.3bt Type 3 PoE++ 60W)
   c. Dimensions:
   i. Length: 243mm / 9.6in

ii. Width: 148mm / 5.9in
iii. Height: 33mm / 1.3in
d. Weight: 1.4kg / 3.0lb
e. Operating Temperature: -40°C to 50°C / -40°F to 122°F
f. Operating Humidity: 5% to 90%
g. Compliance:
i. FCC
ii. CE
iii. IC
iv. UL/IEC 62368-1
v. CSA C22.2 No. 62368-1
vi. PTCRB
vii. Verizon
viii. AT&T
ix. FirstNet
x. IP66
h. Included Accessories:
i. 2 x N type antennas
i. Mounting Hardware: Mounting plate, 2 x pole straps, 4 x wall anchors, 4 x wall screws, T10 security torx screwdriver, 4 x 7-9 mm cable grommets, 1 x 3-5mm cable grommet, 1 x 3-wire cable grommet

15. Wi-Fi Gateways

A. GW31-E Outdoor Cellular Gateway

1. Description:
   a. Outdoor Wi-Fi gateway to provide to send both power and data to any Verkada devices.
   b. Flexible power options (AC receptacles, solar/batteries, light poles).
   c. Built-in PoE switch.
   d. Cloud-managed in Verkada Command.
   e. Store updated Wi-Fi credentials in advance to avoid connectivity drops.
   f. Can be connected to hidden network SSIDs.
   g. Supports video monitoring on forklifts and heavy equipment fleets.
2. Technical Specifications:
   a. Connectivity:
   i. Wi-Fi Standards: 802.11a/b/g/n/ac/ax (Wi-Fi 6); 2.4 or 5 GHz (single radio)
   ii. Wi-Fi Security: WPA2/3 PSK; WPA2/3 Enterprise
   iii. Wi-Fi Operating Mode: Client/STA
   iv. Wi-Fi Antennas: 2 x external omni (N-type male); ACC-ANT-20 Directional Antenna also available
   v. Networking Interface: 3 x GigE RJ45 ports (2 x LAN and 1 x WAN/LAN configurable)
   b. Power:
   i. Power Consumption: 9W above -25°C / -13°F; 19W below -25°C / -13°F (does not include connected devices)
   ii. Power Input: 54V DC Barrel Jack (6.5/3.0mm OD/ID); 802.3bt Type 4 PoE 90W; 12-36V DC Terminal Block
   iii. Power Output: 2 x 802.3bt PoE++ capable ports; 60W total power budget
   c. Dimensions:
   i. Length: 243mm / 9.6in
   ii. Width: 148mm / 5.9in

iii. Height: 33mm / 1.3in

d. Weight: 1.4kg / 3.0lb

e. Operating Temperature: -40°C to 50°C / -40°F to 122°F

f. Operating Humidity: 5% to 90%

g. Compliance:

i. FCC

ii. CE

iii. IC

iv. UKCA

v. RCM

vi. MIC

vii. UL/IEC 62368-1

viii. CSA C22.2 No. 62368-1

ix. IP66

h. Included Accessories:

i. 2 x N type antennas

i. Mounting Hardware: Mounting plate, 2 x pole straps, 4 x wall anchors, 4 x wall screws, T10 security torx screwdriver, 4 x 7-9 mm cable grommets, 1 x 3-5mm cable grommet, 1 x 3-wire cable grommet

16. Cloud-Managed Security Trailer

A. MT81-6KWH / MT81-13KWH Mobile Surveillance Trailer by Verkada Inc.

1. Description: Solar-powered mobile surveillance trailer with 24-foot telescoping mast for temporary or remote deployments. Features integrated power system, network infrastructure, and multi-camera support for complete site coverage without permanent installation.

2. Technical Specifications:

a. Solar Panel Capacity: 1,600W (high-efficiency photovoltaic solar modules)

b. Solar Array: Electric actuator-tilt

c. Solar Controller: Smart MPPT (Maximum Power Point Tracking) charge controller and communicator

d. Batteries: 29V lithium-ion

e. Battery Capacity:

i. MT81-6KWH: 6.6 kWh usable total capacity

ii. MT81-13KWH: 13.2 kWh usable total capacity

f. Battery Housing: Single / dual battery box with bolted lid

g. Battery Charger: 40A, AC input compatible

h. Power Inverter: 375W

i. Control Box: Aluminum with 3-point locking door (24"W x 34"H x 10"D), ventilated with cooling fan

j. System Monitoring: Verkada Command

k. Inputs and Outputs:

i. Uplink Port: 1x GigE RJ45 port, 802.3bt Type 4 PoE

ii. Ethernet Ports for Devices: 7x GigE RJ45 ports, 802.3bt Type 4 PoE

iii. Total PoE Budget: 720W

l. Tower and Mounting:

i. Tower: 24’ telescoping mast

ii. Rotation: 355°

iii. Actuation: Electric-powered winch for raising and lowering

iv. Camera Mount: Multi-head camera box

v. Wind Rating: Up to 65 mph at full mast with stabilizers deployed
vi. Camera Arms: 6x Verkada-compatible arm mounts (1-1/2" NPT) with hole for safety screw
vii. Mounting Patterns:
A. Mounting pattern for Verkada outdoor gateway
B. Mounting pattern for Verkada horn speaker
viii. Cabling: 1x Cat6 cable, 6x Cat5e cables, 1x 16/2 power cable
ix. Strobe Light: Blue LED flashing beacon on head unit
x. Max Weight for Winch: 150 lb

Part 3 – Execution

1. Installers

A. Installation shall be performed by technicians that have successfully completed the Verkada Certified Engineer (VCE) program. For more information, visit www.verkada.com/partners/trainings.

2. Examination

A. Installation surfaces shall be clean and free from dust, dirt, and obstructions.

B. Examine pathway elements intended for cables. Check raceways, cable trays, and other elements for compliance with space allocations, installation tolerances, hazards to cable installation, and other conditions affecting installation.

C. Examine rough-in for LAN and control cable conduit systems to server, PCs, controllers, cameras, and other cable-connected devices to verify actual locations of conduit and back boxes before device installation.

D. Proceed with installation only after unsatisfactory conditions have been corrected.

3. Preparation

A. Refer to the Verkada Quick Start Guide applicable to each product.

B. Pre-Installation Conference: Prior to installation arrange conference between supplier, Owner, and related trades to review materials, procedures, and coordinating related work.

C. Furnish or coordinate any inserts required for building into concrete, masonry, and other work, to support and attach work of this Section. Furnish or coordinate in ample time to comply with schedule of work into which inserts are built.

D. Verify that power and outlets are in correct locations.

E. Verify that building structure is properly prepared for mounting, attachment, and support of equipment.

F. Prior to installation of systems components and devices, verify all required preparations have been properly performed and that substrates are acceptable for installation.

1. Verify all rough-ins and field dimensions.

G. Report in writing to the Owner's representative any prevailing conditions that will adversely affect satisfactory execution of work in this Section.

1. Owner or their representative reserves the right to review proposed methods of construction and installation, reject proposed methods, and have the installation done in a satisfactory method at the Contractor’s cost.

4. Installation

A. Refer to the Verkada Quick Start Guide applicable to each product.

B. For support, proceed to www.verkada.com/support.

C. Sequencing: The work shall be performed in the following sequence, unless directed otherwise by Owner or their representative:

1. Installation of cables and network.
2. Installation of new cameras.
3. Installation of front-end equipment.
4. Commissioning of the new system components.
5. End User training

D. Install work in accordance with manufacturer's recommendations and instructions as well as final shop drawings. All components should be installed so as to allow easy access for service in the future.

E. Anchor components securely in place, plumb, level, and accurately aligned.

F. For solution products located in equipment traffic areas, and that are exposed to damage due to collision or impact from forklifts, or manually moved carts, carriers, or other equipment used by the Owner, provide protective bollards, railings, coverings etc. to ensure that all products installed are properly protected from such damage.

G. Provide fastenings, plates, and other incidental items required for complete and operational installation.

H. Provide required electrical work in accordance with Code requirements.

I. Security and protection:

1. Maintain strict security during the installation of equipment and software. Rooms housing the control station, and workstations that have been powered up shall be locked and secured during periods when a qualified operator in the employ of Contractor is not present.
2. Equipment protection: Provide protective covers, fenders, and barriers as necessary to maintain work of this Section in same condition as installed until time of substantial completion.

J. Cable requirements:

1. Twisted, shielded, plenum-rated type cable shall be used.
2. All exposed cables shall be in rigid conduit, electrical metallic tubing (EMT) raceway, or wire mold as approved by the Owner.
3. All concealed cables routed in j-hook pathways shall be fastened to the structure at least every four feet.

5. Labeling

A. Equipment and product labels shall be printed on self-adhesive labels. Handwritten labels or writing directly on the equipment enclosures is not acceptable.

B. Label equipment and products with the device address as programmed into the security systems and as reflected on the "As-Built" Record Drawings.

C. Label networked equipment enclosures with the IP address.

D. Cables shall be individually labeled at origin and termination.

6. Programming

A. Complete all Verkada Command configuration programming.

B. Add all Verkada Cameras to Command via serial number.

C. Contract will coordinate with the Owner to ensure that new components have appropriate network connections.

D. Coordinate with the Owner to ensure that new components will be properly programmed into the system.

E. Change default passwords to new custom secure passwords as directed by the Owner.

7. Acceptance Testing

A. Final Test and Acceptance Plan

1. Develop a final test and acceptance plan to identify each new system component, intent of test, test method, and expected results.
2. Each component listed in the plan shall include space for test part signatures, brief comments, time of test and pass/fail check boxes.
3. Test all equipment, products, and devices in accordance with the plan to ensure completely operational and fully functional security systems. Submit a written final test and acceptance report for review and approval.
4. The report shall be submitted to the Owner's representative at least 30 days prior to the scheduled system acceptance test.
5. System acceptance of the access control system shall be conditioned upon successful completion and operational demonstration of all system functions and components as documented in the final test and acceptance report.

B. System Acceptance

1. System acceptance shall not occur until after the following activities have been successfully completed:
    a. Correction of all deficiencies and punch list items noted on the final test and acceptance report.
    b. Acceptance of final test and acceptance report.
    c. Acceptance of all project close-out submittals.
    d. Delivery of final project close-out documentation.
    e. Successful training and demonstration, including operation of systems, systems administration, and system management.
    f. Purging of Contractor user privileges and return of all credentials.

8. Owner Personnel Training

A. On-site operator training:

1. Instruct operating staff in proper operation, including hands-on training.
2. Minimum of two, four-hour sessions covering the operations for each system installed.
3. Training sessions shall be provided to supervisors, end-user staff, security staff, maintenance personnel, IT personnel, and any other personnel designated by the Owner.
4. Provide training sessions on all work shifts, including day, evening, and night shifts.

B. On-site administrator training:

Instruct security system administrators for each system installed,
including hands-on training.

1. Minimum of two, four-hour sessions covering the operations for each system installed.

2. Training shall cover all administrative and management functions, including features and controls, for each system.

End of Section 28 20 00 -- Video Surveillance

End of Section 28 20 00 – Video Surveillance