DSA **140**

APPLICATION FOR SUBMITTAL OF POST-APPROVAL DOCUMENT

This application is for submittal of documents, after the initial approval of the project (post-approval documents), that require Division of the State Architect (DSA) review and approval.This form shall be completed by the Design Professional in General Responsible Charge of the project, in accordance with California Code of Regulations, Title 24, Part 1, Sections 4-317, 4-323 and 4-338 and in compliance with DSA IR A-6: Construction Change Document Submittal and Approval Process.

DSA documents referenced within this form are available on the DSA Forms or DSA Publications webpages.

1. SUBMITTAL TYPE: (Is this a resubmittal? Yes ☐ No ☑)

Deferred Submittal ☐	Addendum Number: 1	Revision Number:	CCD Number: Category A ☐ or B ☐

2. PROJECT INFORMATION:

School District/Owner: Murrieta Valley Unified School District	DSA File Number: 33 H18
Project Name/School: Vista Murrieta High School	DSA Application Number 04 125020

3. APPLICANT INFORMATION:

Date Submitted: 02/16/26	Attached Pages? No ☐ Yes ☑ Number of pages? 14		
Firm Name: DLR Group	Contact Name: Mehdi Hezaveh		
Work Email: mhezaveh@DLRGROUP.com	Work Phone: (619) 795-7665		
Firm Address: 770 first Ave. Suite 300 San Diego CA 92101	City: San Diego	State: CA	Zip Code: 92101

4. REASON FOR SUBMITTAL: (Check applicable boxes)

☑ For revision or addendum prior to construction.

☐ For a project currently under construction.

☐ For a project that has a form *DSA 301-N: Notification of Requirement for Certification*, *DSA 301-P: Posted Notification of Requirement for Certification* or a 90-Day Letter issued.

☐ To obtain DSA approval of an existing uncertified building or buildings.

☐ For Category B CCD this is: ☐ a voluntary submittal, ☐ a DSA required submittal (attach DSA notice requiring submission).

5. DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE:

Name of the Design Professional In General Responsible Charge: Alfred Gessel

Professional License Number: C30244 Discipline: Architect

Design Professional in General Responsible Charge Statement: The attached post-approval documents have been examined by me for design intent and appear to meet the appropriate requirements of Title 24, California Code of Regulations and the project specifications. They are acceptable for incorporation into the construction of the project.

Signature: _____

DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE

6. CONFIRMATION, DESCRIPTION AND LISTING OF DOCUMENTS:

For addenda, revisions, or CCDs: CHECK THIS BOX ☑ to confirm that *all* post-approval documents have been stamped and signed by the Responsible Design Professional listed on form *DSA 1: Application for Approval of Plans and Specifications* for this project. (For *Deferred Submittals*, refer to *IR A-18: Use of Construction Documents Prepared by Other Professionals,* and *IR A-19: Design Professional's Signature and Seal (Stamp) on Construction Documents*, when applicable, for signature and seal requirements.)

Provide a brief description of construction scope for this post-approval document (attach additional sheets if needed):

This addendum incorporates additional Wi-Fi and conduits to address the infrastructure for the RGB lighting system.

List of DSA-approved drawings affected by this post-approval document:

The affected drawings and specifications are listed on the following addendum narrative sheet.

DSA USE ONLY

SSS_____ Date_____ ☐Approved ☐Disapproved ☐Not Required

Comments:_____

FLS_____ Date_____ ☐Approved ☐Disapproved ☐Not Required

Comments:_____

ACS_____ Date_____ ☐Approved ☐Disapproved ☐Not Required

Comments:_____

Returned	DSA STAMP
Date:	
By:	

February 17, 2026

Pre-Bid ADDENDUM 2
(DSA ADDUNDUM 1)

Vista Murrieta High School

Murrieta Valley Unified School District
41870 McAlby Ct.
Murrieta, CA 92562

App# 04-125020
File # 33-H18

DLR Group
770 1st Avenue, Suite 300
San Diego, CA 92101

Alfred Gessel,
License #C30244



PART 1 - GENERAL

1.1. The following revisions and/or clarifications shall be made to the Bidding Requirements and Contract Documents. Revise and amend the Documents for the above-named project in accordance with this Addendum. The bid shall reflect these addendum changes, and each bidder shall make reference in their bid to this addendum.

1.2. All Bidding Requirements and Contract Documents shall apply to this addendum as originally indicated in the applicable portions of the contract documents, unless otherwise modified by this addendum.

1.3. Bid Scope Clarification:

Customer Responsibilities:

1. Complete access to the site for construction using standard 2-wheel drive rubber tire equipment.
2. Locate existing underground utilities not covered by your local utilities (i.e. water lines, electrical lines, irrigation systems, and sprinkler heads). Musco or Subcontractor will not be responsible for repairs to unmarked utilities.
3. Locate and mark field reference points per Musco supplied layout (i.e. home plate, center of FB field).
4. Ensure usability of existing underground wiring.
5. Pay any necessary power company fees and requirements.
6. Pay all permitting fees.
7. Provide any existing as-built documents or drawings.
8. Provide sealed Electrical Plans (if required).

Musco Responsibilities:

1. Provide required fixtures, electrical enclosures, mounts, hardware, wire harnesses, and control cabinets.
2. Provide poletop luminaire assembly
3. Provide fixture layout and aiming diagram.
4. Assist with post installation light test

February 17, 2026

Pre-Bid ADDENDUM 2
(DSA ADDUNDUM 1)

Contractor Responsibilities

General:

1. Obtain any required permitting.
2. All existing underground conduit and conductors to be re-used unless otherwise noted on one-line diagram sheet E7.1.
3. Contact the facility owner/manager to confirm the existing private underground utilities and irrigation systems have been located and are clearly marked to avoid damage from construction equipment. Notify owner and repair damage to marked utilities. Notify owner and Musco regarding damage which occurred to unmarked utilities.
4. Provide labor, equipment, and materials to offload equipment at jobsite per scheduled delivery.
5. Provide storage containers for material (including electrical components enclosures), as needed.
6. Provide necessary waste disposal and daily cleanup.
7. Provide adequate security to protect Musco delivered products from theft, vandalism, or damage during the installation.
8. Keep all heavy equipment off playing fields when possible. Repair damage to grounds which exceeds that which would be expected. Indentations caused by heavy equipment traveling over dry ground would be an example of expected damage. Ruts and sod damage caused by equipment traveling over wet grounds would be an example of damage requiring repair.
9. Provide startup and aiming as required to provide complete and operating sports lighting system.
10. Installation to commence upon delivery and proceed without interruption until complete. Musco to be immediately notified of any breaks in schedule or delays.
11. Complete and submit Musco provided closeout checklist including required pictures.

Demolition:

1. Remove and dispose of the existing fixtures, and electrical enclosures. This will include the recycling of lamps, aluminum reflectors, ballast, and steel, as necessary.
2. Leave existing ground wires and power feed in place for connection to new lighting equipment.

Retrofit Musco Equipment to Existing Poles:

1. Provide labor, materials, and equipment to assemble and install Musco TLC for LED® equipment on existing poles and terminate grounding and power feed. Power feed may need to be reworked to adapt to the new Musco equipment.
2. Ensure grounding components meet minimum standards required by NEC and NFPA780.
3. For concrete poles, provide new lightning down conductor(aluminum) and $^{5}/_{8}$ in copper ground rod. For poles 75 ft (22 m) or less use 1/0 AWG, poles over 75 ft (22 m) use 4/0 AWG conductor. Bond internal pole ground to new down conductor.
4. For steel poles, provide new ground rod and pole bonding conductor per NFPA Annex A.1.6.

5. Down conductor shall be converted to copper wire for any underground runs and bonded to
   ground rod(s).
6. Ensure all Musco components are bonded to both equipment and lightning grounds. No upward
   sweeps allowed for lightning down conductor or bonding jumper(s). See installation instructions
   for further information.
7. Test ground resistance with 3-point ground resistance test, using instructions provided. Confirm 25 ohms or less for each pole. Install additional ground rods or create grounding grid until resistance of 25 ohms or less is achieved. Record all results on form provided and submit readings to Musco.

Electrical:

1. Provide materials, and equipment to reuse existing electrical service panels as required.
2. Provide materials, and equipment per electrical design.
3. Complete electrical installation per Musco Control System Summary and Musco Best Practices: Supply Wiring Installation document. If there are any discrepancies between Musco documents and electrical plans (if present), notify your Musco contact.
4. Complete required insulation resistance tests on all current-carrying conductors per ANSI/NETA ATS-2021. Use the instructions and forms provided by Musco to provide test results to your Musco contact. Ensure conduits are full of water prior to testing. Any new conductors with resistance values less than (<) 100 MOhms - phase to ground - must be repaired or replaced to meet the standard. Any existing conductors with resistance values less than (<) 100 MOhms - phase to ground - must be reported to your Project Manager or Sales Coordinator.
5. Underground splices are strongly discouraged. Disconnects in light poles are rated for multiple conductors to allow for daisy-chains - if required by electrical plans. If underground splicing cannot be avoided, use only listed connector systems, rated for wet locations.
6. Provide as built drawings upon completion of installation.

Control-Link® Control and Monitoring:

1. Provide labor, equipment, and materials to install Musco control and monitoring cabinet(s) and terminate all necessary wiring as per one line diagram sheet E7.1.
2. Provide a dedicated 120 V 20 A controls circuit or a step-down transformer for 120 V control circuit if
   not available.
3. Check all zones to make sure they work in both auto and manual mode.
4. Commission Control-Link by contacting Control-Link Central™ at 877-347-3319.

Show-Light® Controls

1. Provide labor, equipment, and materials to install Musco control and monitoring cabinet(s), communication cabinet(s) and terminate all necessary wiring as per one line diagram sheet E7.1.
2. Provide a dedicated 120 V 20 A controls circuit or a step-down transformer for 120 V control circuit if not available.
3. Provide 24 AWG twisted wire pair cable. Recommended Belden 7937A or equal. Cable should be underground rated (working distance 1500 ft (457 m)).
4. Cable is terminated on surge protection device in both communication cabinet and control and monitoring cabinet. Drain wire is landed at surge device on control and monitoring cabinet. Communication cabinet requires earth ground.
5. Plug ethernet cable into port on the side of communication cabinet and bottom of touch screen (working distance 300 ft (91 m)).
6. Connect provided touch screen power supply. Requires 120 V outlet.
7. Provide audio cable ⅛ in (3.5 mm) plug from customer audio system to communication cabinet (land on Cueserver, must be within 50 ft (15 m)).
8. Land customer provided DMX cable in control and monitoring cabinet on DMX512 input terminals.
9. Check all zones to make sure they work in both auto and manual mode.
10. Commission Control-Link® by contacting Control-Link Central™ at 877-347-3319.

CODE OF CONDUCT

In order to maintain a high-quality jobsite and installation, Subcontractor represents to Musco that it has the supervision necessary to, and shall train, manage, supervise, monitor, and inspect the activities of its employees for the purpose of enforcing compliance with these safety requirements. Subcontractor acknowledges that Musco does not undertake any duty toward Subcontractor's employees to train, manage, supervise, monitor, and inspect their work activities for the purpose of enforcing compliance with these safety requirements, but Subcontractor agrees to abide by any reasonable recommendations made by Musco or Musco representatives with respect to safety.

Contractor agrees that it is or will be familiar with and shall abide by the safety rules and regulations of Musco and the Owner, including, but not limited to the Occupational Safety and Health Act of 1970 (OSHA), all rules and regulations established pursuant thereto, and all amendments and supplements thereto.

Contractor further agrees to require all its employees, subcontractors, and suppliers to comply with these requirements. Subcontractor shall also observe and comply with all laws with respect to environmental protection applicable to the Project.

Contractor shall require all its subcontractors, employees, visitors, suppliers, and agents under its direction to comply with the following:

1. GENERAL JOBSITE SAFETY AND CLEANLINESS.

a. Contractor's employees and agents shall be required to wear appropriate personal protective equipment including, but not limited to, safety glasses with side shields, work shoes, fall protection devices, and hard hats.
b. Where a walking or working surface has an unprotected side or edge which is six feet or more above a lower level, Subcontractor shall use guardrail systems, safety net systems, or personal fall arrest systems.
c. Jobsite shall be kept free of debris including, but not limited to, cardboard and packing materials which can become windborne.
d. Construction equipment shall be parked during non-use in an orderly fashion so as not to create inconvenience to others using the jobsite.
e. Contractor shall provide for and ensure the use of safety equipment for the Project in accordance with Musco's and Owner's safety requirements, to the extent these may be stricter than federal, state, or local standards, or generally recognized industry applicable standards.
f. Subcontractor shall provide the Musco project manager with an "Emergency List" showing Subcontractor's designated medical doctor, hospital, insurance company, and any other health service providers, such list to be updated within 24 hours of any change in the information provided.
g. Within eight (8) hours from the time of an accident (or such shorter period as laws may require), Contractor shall advise Musco of any accident resulting in injury to any person or damage to any equipment or facility. Upon request, Subcontractor shall promptly furnish Musco with a written report of any such accident as well as a copy of all insurance and worker's compensation claims involving the Project.
h. Contractor shall maintain and inspect all construction equipment, including cranes and other lifting equipment, prior to each use. Subcontractor warrants that all equipment operators shall be qualified for each piece of construction equipment they intend to operate. Documentation of specific training is the responsibility of the Subcontractor.
i. Jobsite shall be policed daily for compliance to the above conditions.
j. Contractor's employees and agents are prohibited from using drugs and alcohol on the Project property or being under the influence of alcohol or drugs while performing work on the Project. Anyone observed participating in or observed under the influence will be removed from the Project immediately and prohibited from returning, with no exceptions.

2. CONFORMANCE TO STANDARD MUSCO INSTALLATION GUIDELINES.
   a. Review and understand installation instructions are provided with every product installation.
   b. Education of installation personnel to allow for highest efficiency and lowest possibility of failure.
   c. Verify that components have been assembled per Musco installation instructions.
   d. Verify plumb of concrete foundations prior to standing of poles.

3. PROVIDING A QUALITY INSTALLATION TEAM.
   a. Contractor's work directly reflects the quality of relate to the quality of the product upon which Musco's reputation is built.
   b. Provide and maintain quality installation equipment. Records of maintenance and/or calibration shall be provided upon request.
   c. Personnel shall be knowledgeable in operation of equipment as well as installation of Musco product

PART 2 – PROJECT MANUAL

2.1 CHANGES TO SPECIFICATION

2.2.1. SECTION 26 33 23 – Emergency Lighting Equipment:

Added Specification section.

PART 3 –DRAWINGS

3.1 ELECTRICAL DRAWINGS ISSSUED

3.1.1. The following Addendum ("AD") drawings are issued:

- **A.** Drawing E1.2 – ENLARGED SITE PLAN: Revised currently issued drawing per AD-E1.2
- **B.** Drawing E1.3 – FOOTBALL FIELD PHOTOMETRICS: Revised currently issued drawing per AD-E1.3
- **C.** Drawing E1.4 – FOOTBAL & SWIMMING POOL - PHOTOMETRIC: Revised currently issued drawing per AD-E1.2
- **D.** Drawing E7.1 – SPORT LIGHTING ONE LINE DIAGRAM: Revised currently issued drawing per AD-E7.1

END OF ADDENDUM #1

SECTION 00 01 10

TABLE OF CONTENTS

SECTIONS

DIVISION 01 — GENERAL REQUIREMENTS
01 10 00 - FL - Summary
01 25 00 - SUBSTITUTION PROCEDURES
01 26 00 - CONTRACT MODIFICATION PROCEDURES
01 29 00 - PAYMENT PROCEDURES
01 31 00 - PROJECT MANAGEMENT AND COORDINATION
01 32 00 - CONSTRUCTION PROGRESS DUCUMENTATION
01 32 33 - PHOTOGRAPHIC DOCUMENTATION
01 33 00 - SUBMITTAL PROCEDURES
01 40 00 - QUALITY REQUIREMENTS
01 42 00 - REFERENCES
01 45 29 - TESTING LAB SERVICES
01 60 00 - PRODUCT REQUIREMENTS
01 73 00 - EXECUTION
01 77 00 - CLOSEOUT PROCEDURES
01 78 23 - OPERATION AND MAINTENANCE DATA
01 78 39 - PROJECT RECORD DOCUMENTS
01 79 00 - DEMONSTRATION AND TRAINING

DIVISION 02 — EXISTING CONDITIONS
02 41 19 - SELECTIVE DEMOLITION

DIVISION 26 — ELECTRICAL
26 01 00 - Electrical General Provisions
26 05 19 - Power Conductors
26 05 26 - Grounding
26 05 33 - Conduit and Fittings
26 05 34 - Outlet and Junction Boxes
26 33 23 - Emergency Lighting Equipment 1
26 56 68 - Exterior Athletic Lighting
26 90 90 - Electrical Closeout

SECTION 26 05 19 - EMERGENCY LIGHTING EQUIPMENT 1

PART 1 – GENERAL

1.1 Furnish and install an uninterruptible emergency lighting Inverter System and Emergency Power Control Relays to provide a reliable source of emergency power, designed to operate during periods of utility line deficiencies without any interruption in power supplied to the connected load. The system shall provide and be capable of powering any combination of electronic, power factor corrected, fluorescent, LED, incandescent or HID lighting. Other connected loads shall include but not be limited to building management systems, motors, security systems and other critical voltage or frequency-sensitive electronic loads. The system shall operate from 0-100% loading and be rated to deliver full KVA rated output at unity power factor for a minimum of 90 minutes. Upon return to normal AC utility line power, the system shall recharge the batteries without any interruption of power supplied to the load.

1.2 The Inverter System shall be listed to or comply with these standards:

1.2.1 UL 924 Standard for Emergency Lighting and Power Equipment

1.3 The Emergency Power Control Relay shall comply with UL 924

1.4 Submit Manufacturers' data sheets for all components including:

1.4.1 Warranty

1.4.2 Wiring diagrams

1.4.3 Bill of materials.

1.4.4 Product catalog sheets or equipment brochures.

1.4.5 Product guide specifications.

1.4.6 Installation information, including weights and dimensions.

1.4.7 Drawings for requested optional accessories.

1.5 **Common submittal mistakes which will result in the submittals being rejected:**

1.5.1 Not including all items listed in the above itemized description.

1.5.2 Including catalog cut sheets which have several items on a page, and not clearly identifying by highlighting, underlining, or clouding the items to be reviewed, or crossing out the items which are not applicable.

1.5.3 Not including actual manufacturer's catalog information of proposed products.

©JCE #25045

1.5.4 Do not include multiple manufacturers for similar products and do not indicate "or approved equal" statements, or "to be determined later" statements. The products being submitted must be the products installed.

PART 2 - PRODUCTS

Single Phase systems 2000VA or less

2.1 The Central Inverter System specified herein shall be:

2.1.1 Dual Lite "Synchron" DLS Series Inverter System.

2.1.2 Myers Power Products Illuminator CM series

2.1.3 Alternate manufacturers shall comply with these specifications and shall not exceed the physical dimensions and weights indicated on the drawing schedule.

2.1.4 All substitutions or alternates to those indicated shall be submitted for approval (7) days prior to the project bid date. Approvals when accepted will be issued in the form of an addendum. No consideration for substitutions will be provided afer the award of the contract.

2.1.5 The substitution request must include a statement indicating the difference in price of both the specified and alternate product, both contractor and list price. The substitution request must include a comparison of the features and capabilities between the specified and proposed systems, software and all components and warranty comparison.

2.1.6 Equipment as manufactured by Digital Signal Power Manufacturer (DSPM) has been reviewed and is not an approved alternate for this project.

Single Phase systems over 2000VA

2.2 The Central Inverter System specified herein shall be:

2.2.1 Dual Lite "Spectron LSN" Series Inverter System.

2.2.2 Myers Power Products Illuminator IE series

2.2.3 Alternate manufacturers shall comply with these specifications and shall not exceed the physical dimensions and weights indicated on the drawing schedule.

2.2.4 All substitutions or alternates to those indicated shall be submitted for approval (7) days prior to the project bid date. Approvals when accepted will be issued in the form of an addendum. No consideration for substitutions will be provided after the award of the contract.

2.2.5 The substitution request must include a statement indicating the difference in price of both the specified and alternate product, both contractor and list price. The substitution request must include a comparison of the features and capabilities between the specified and proposed systems, software and all components and warranty comparison

2.2.6 Equipment as manufactured by Digital Signal Power Manufacturer (DSPM) has been reviewed and is not an approved alternate for this project.

Three Phase systems

2.3 The Central Inverter System specified herein shall be:

2.3.1 Myers Power Products Illuminator "CIII" series (interior) "DK" series (exterior)

2.3.2 Alternate manufacturers shall comply with these specifications and shall not exceed the physical dimensions and weights indicated on the drawing schedule.

2.3.3 All substitutions or alternates to those indicated shall be submitted for approval (7) days prior to the project bid date. Approvals when accepted will be issued in the form of an addendum. No consideration for substitutions will be provided afer the award of the contract

2.3.4 The substitution request must include a statement indicating the difference in price of both the specified and alternate product, both contractor and list price. The substitution request must include a comparison of the features and capabilities between the specified and proposed systems, software and all components and warranty comparison

2.3.5 Equipment as manufactured by Digital Signal Power Manufacturer (DSPM) has been reviewed and is not an approved alternate for this project.

2.4 System operation shall be fully automatic. The charging system will maintain the batteries at full capacity at all times. On-board microprocessors will continuously monitor charger settings and the system's overall readiness. Diagnostic circuitry shall include a software-controlled charger, continuous monitoring of operating parameters, and programmable system testing capabilities. Individual alarms and system logs shall be provided. All alarms and logs shall be automatically recorded and readily displayed via the User Interface Display (UID). The system shall also include one RS232 serial port for remote communications.

2.5 Automatic overload and short circuit protection in normal and emergency mode shall consist of 150% momentary surge capability, 120% overload for 5 minutes, and 110% overload for 10 minutes. Protection shall also include a low battery voltage disconnect, AC input circuit breaker, a DC input breaker or Fuse, and an AC output fuse. A digitally

generated sinusoidal output waveform (PWM) with less than 5% total harmonic distortion at rated linear load shall be provided to the connected load.

2.6 Available input voltage shall be as indicated on the drawings, with a frequency of 60Hz. The AIC rating shall be a minimum of 42,000 RMS symmetrical amperes.

2.7 Available output voltage shall be as indicated on the drawings, with a frequency of 60Hz + 0.05Hz.

2.8 The user interface display (UID) shall include an array of LED's, a 2-line, 40-character LCD display, and a keypad for system input. The UID shall be menu-driven and display individual system parameters using a numbered code (Hot Key). The LED array shall indicate, by color code, the following status modes:

2.8.1 AC output presence (green)

2.8.2 System ready (green)

2.8.3 Battery charging (red)

2.8.4 Inverter "ON" (amber)

2.8.5 Alarm functions (red)

2.9 To ensure only authorized personnel have system access, a multi-level password shall be required to change all functions and operating parameters. A continuous scrolling display of the following metered functions shall be provided:

2.9.1 AC input voltage, AC output voltage, AC output amps

2.9.2 Battery voltage, Battery charging amps, Battery discharge amps

2.9.3 Output volt-amps (VA), Output power (watts)

2.9.4 Ambient temperature

2.9.5 Last inverter run time, Total inverter run time, System run time, Date Time

2.10 Audible and visual alarms shall be provided, with automatic logging of the twenty-five most recent events. An alarm acknowledgment feature shall be provided, which will allow the user to silence only the current audible alarm without silencing other alarms or clearing the alarm condition until the fault has been addressed. An alarm shall be sounded if any of the following operating conditions occur:

2.10.1 Low battery voltage, Near low battery voltage, High battery voltage

2.10.2 High AC input voltage, High AC output voltage, Low AC output voltage Output, overload (VA), Low remaining run time

©JCE #25045

2.10.3 High ambient temperature

2.10.4 Tripped circuit breaker

2.11 Manual and automatic test modes shall be provided.

2.11.1 Manual user-initiated system test at any time.

2.11.2 Automatic monthly and annual self-diagnostic tests.

2.11.3 Automatic recording of the last twenty events in a Test Results log.

2.12 A three-step float charger shall be software controlled and temperatures compensated, and charge the batteries continuously while in normal "standby" condition (non emergency mode). Following a power failure, the constant current charger mode shall be initiated until battery voltage reaches the equalize stage. Equalize stage shall be maintained until the charging current drops to .5 amps, or 0.3% of the battery amp/hour rating. Battery voltage shall then enter the float stage.

2.13 Batteries shall be designed to provide a minimum 1.5 hours rated output voltage to the connected load in emergency mode without dropping below 87.5% of nominal battery voltage.

2.13.1 The batteries shall be encased in an enclosure that permits easy maintenance without requiring removal.

2.13.2 Sealed Lead Calcium: Maintenance Free Construction requires no addition of water over its useful. Life expectancy is 10-years at 77°F (25°C) ambient temperature.

2.14 The following optional factory-installed equipment shall be provided:

2.14.1 Normally-On Output Circuit Breaker Options:

2.14.1.1 A maximum of fourteen monitored positions are available. Single pole 120V and 277V breakers occupy one position each, while double pole 240V breakers occupy two positions. Reference drawings for required number of output breakers required.

2.14.2 Provide Universal cabinet locks for all electronic and battery cabinets.

2.14.3 Provide, using the system's RS232 port, a fax operating status reports is transmitted over a customer-supplied dedicated analog phone line to up to six locations. Phone numbers can be programmed locally using the unit keypad or computer terminal, or remotely via a modem. Each designated fax location automatically receives a unit status report following monthly and annual tests, or when an alarm condition is detected. Status reports include readings on key operating parameters, as well as complete alarm and inverter log printouts, in uncoded, user-friendly descriptions. This option also provides for two-way

communications thru terminal emulation software, such as HyperTerminal (not supplied with the inverter system).

2.14.4 Provide a factory-installed, internally-mounted two-position “make before break” switch. Compatible with all input/output combinations and any combination or quantity of output circuit breakers. Allows connecting the utility power supply to the load without placing the inverter in emergency mode.

2.15 Maintenance, Service and Enhanced Warranty Plans. The following shall be provided to assure initial and long-term viability of the system through additional maintenance and service plans and/or through enhancements to the standard two-year electronics limited warranty.

2.15.1 Factory Start-Up shall be supplied as a service to the installing contractor. The Factory Start-Up process shall verify correct installation and operation of the inverter system. Trained, factory authorized technicians shall administer an on-site, point-by-point check of the system to include:

2.15.1.1 Internal electrical connections

2.15.1.2 AC input and Battery connections

2.15.1.3 System operating voltages

2.15.1.4 System operating parameters

2.15.1.5 Initial system “power-up

2.15.1.6 Battery discharge test

2.15.1.7 Correction of existing deficiencies

2.15.1.8 Final testing, calibration and recording

2.15.1.9 Training of available operating personnel

2.15.2 A Monitoring Program shall provide for the continuous monitoring of the inverter system by the Factory Technical Support Group. All monthly and annual system tests shall be reviewed and analyzed for early warning signs of system malfunction. Any failures shall be automatically relayed to the service department where corrective action can be recommended to the owner/operator. For activation, a user supplied dedicated analog phone line must be available.

2.15.3 Preventive Maintenance Plan (PMP) - The Preventive Maintenance Plan shall provide system coverage beyond the standard two-year factory warranty. PMP warranty service excludes the batteries, which are covered under a separate warranty plan. Installation of a Fax Modem option shall be provided for Preventive Maintenance Plan.

2.15.3.1 Additional 2-year warranty and 2-year service coverage, weekdays, Monday-Friday, 8AM to 5PM EST. If the standard factory warranty has expired before selection and purchase of a PMP plan, an on-site evaluation shall be scheduled to determine if the system requires parts and/or labor to return to factory specifications. Parts and labor required shall be charged at additional costs.

2.16 The system shall be contained in a code gauge, steel NEMA 1 enclosure, finished in a scratch resistant, powder coat finish, with a key lock, conduit knockouts at the top and sides, and front opening doors. Enclosures shall be designed to allow stacking to minimize the overall system's footprint. All components shall be front accessible and incorporate a modular design and a quick disconnect means to facilitate servicing.

Emergency Power Control Relays - (Noted on the drawings as LVS EPC Control relay)

2.17 Insert Series power control modules are designed to allow locally switched lighting fixtures to be wired for emergency operation from either generator, inverter system, or secondary sources.

2.18 As Manufactured by:

2.18.1 "Highlights" HEPC Series Emergency Power Control modules (203) 575-2044 www.highliteslighting.com or approved equal.

2.18.2 LVS Controls (800) 982-4587 www.lvscontrols.com.

2.19 During normal operation, LEDs on the module's faceplate indicate the presence of both utility (Green) and emergency (red) power and the local switch will be capable of turning all circuit lighting fixtures on or off as required. During utility power failures, emergency lighting fixtures controlled by the module will illuminate regardless of local switch position. If, during normal operation, emergency backup power is lost, the module will automatically produce an audible alarm as an alert to this potentially hazardous condition.

2.20 Recent energy mandates require improved vigilance in the conservation of resources. By eliminating the need for night light circuits, power controls conserve energy by allowing all area ambient lighting to be turned off while still assuring the availability of emergency illumination in the event of a utility power failure.

2.21 The power control automatically initiates a test of the emergency lighting fixtures whenever the local switch is turned off. Upon turning off of the local switch, the designated emergency lighting fixtures will remain illuminated for an additional 5 seconds to assure system readiness. The power controls may also be checked manually at any time through the integral test switch provided on the module's faceplate. With the local lighting turned off and both utility and emergency power present, pressing the test switch will cause the controlled emergency fixtures to illuminate for 5 seconds.

2.22 Adapts locally switched lighting fixtures for emergency operation, bypasses local switch during power failures. Compatible with motion detector and photocells.

2.23 Full 20 amp load capability available for 120 or 277VAC operation. Approved for in-wall or in-ceiling applications.

2.24 Provided with Surge and short circuit protection.

2.25 Audible emergency power circuit failure alarm, Built-in manual emergency circuit test feature, Momentary test switch.

2.26 Provide a single module at each emergency lighting fixture where the lighting fixture is locally controlled by a room switch and or motion sensor. These modules are to be furnished and installed by the contractor installing the lighting fixtures.

2.27 Provide a single module located at the panelboard or low voltage control panel to control emergency lights controlled from a low voltage control system. These modules are to be furnished and installed by the contractor installing the lighting fixtures.

2.28 Where dimmable light fixtures are on emergency circuit, provide emergency relay control, which is dimming compatible, and will bring lights to full brightness in emergency mode.

2.29 The Module has a full 5-year replacement warranty.

PART 3 - EXECUTION

3.1 Input and output conductors shall be enclosed in separate conduits. All load side wiring shall be sized as required for voltage drop conditions to assure proper operation of connected loads.

3.2 All free-standing electrical equipment or enclosures shall be anchored to the floor and braced at the top of the equipment to the structure. Where details have not been provided on the drawings, anchorage shall comply with CBC Section 1632A and Table 16-A0. The Contractor shall submit drawings signed by the Contractors registered structural Engineer indicating method of compliance prior installation.

3.3 The system shall allow connection of both “normally on” and "normally off” (optional) loads. Connected loads shall receive utility power during normal operation, and ‘no break” system inverter power during utility interruptions.

3.4 In emergency mode, the inverter system shall supply true digitally-generated AC sinusoidal output. Refer to plans for type and location of loads served by the system.

3.5 A factory trained service representative shall be dispatched to perform the initial system start-up.

3.6 Documents supplied with each system shall include:

3.7 Shop drawings showing physical dimensions, mounting information and wiring diagrams.

3.7.1 Installation/Users manual(s) for locating, mounting, interconnecting, and wiring the system, with operating and preventive maintenance procedures.

3.7.2 The system shall be installed in accordance with all appropriate manufacturers' instructions and in compliance with all appropriate codes.

3.8 The system shall be guaranteed, under normal and proper use, against defects in workmanship and materials for a period of two years from the date of shipment. Batteries supplied as part of the systems shall be covered under a separate pro-rata warranty as described below:

3.8.1 Sealed Lead Calcium, 10-year life expectancy – One-year full replacement warranty plus an additional nine years pro-rata.

3.8.1.1 Note: Within 90days from date of shipment, batteries shall be connected to an energized charging system to maintain the Warranty. Battery life and capacity is rated at an optimum operating temperature range of 68°F to 85°F. Operating temperatures outside this range will affect battery life and capacity. Batteries are rated at 100% capacity at 77°F.

3.9 Maintenance and service programs shall be made available by the supplier to assure long-term reliability of the system.

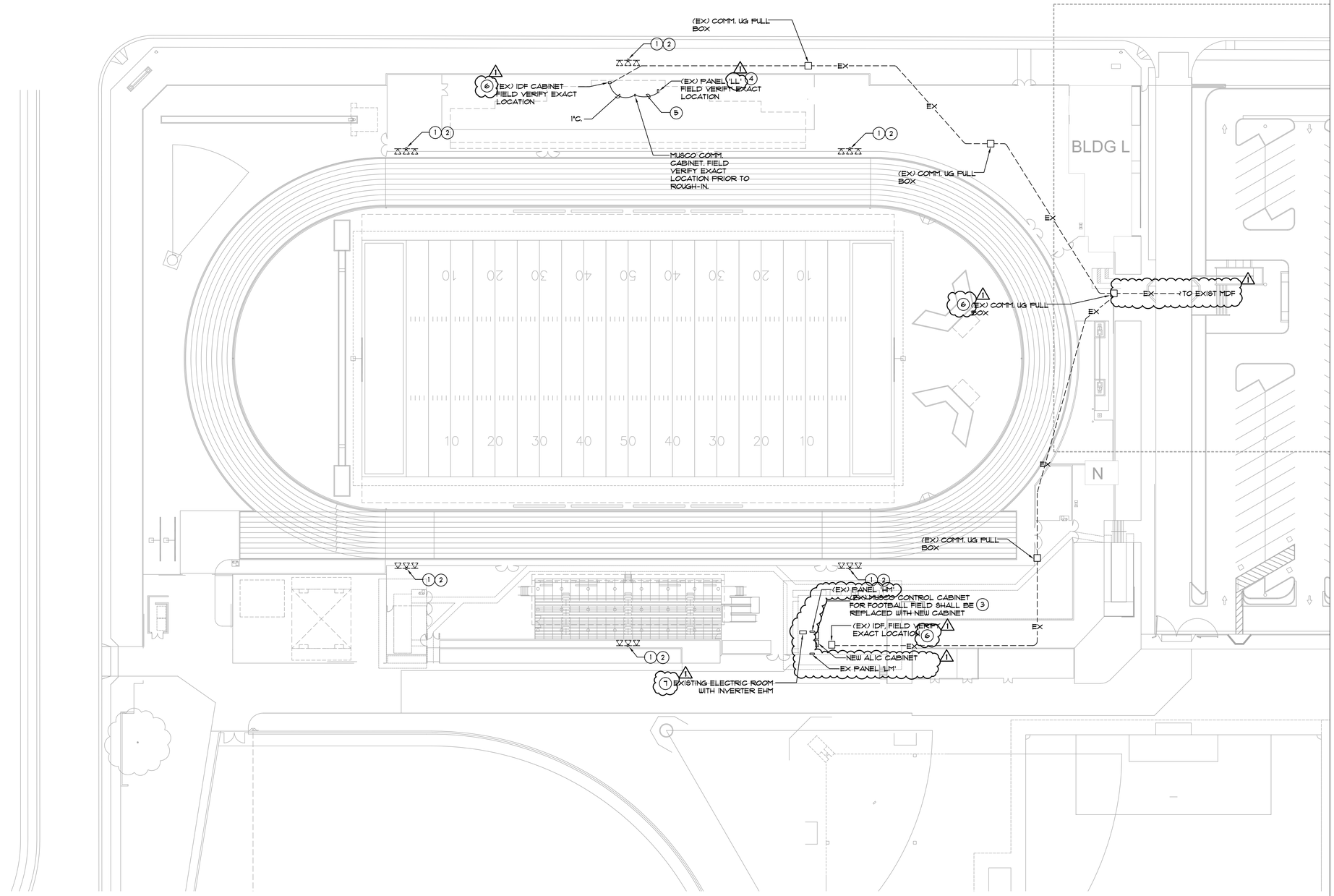
END OF SECTION

KEY NOTES:

1. EXISTING SPORTS LIGHTING POLE TO REMAIN. REMOVE EXISTING MUSCO LIGHTS, CROSSARMS, CAPS, BRACKETS AND ALL OTHER EXISTING LIGHT FIXTURES SUPPORTS. REPLACE WITH NEW MUSCO LED LIGHTS, MUSCO FACTORY PROVIDED CROSSARMS, CAPS, BRACKETS AND ALL OTHER NEW LED LIGHT FIXTURE SUPPORTS . PROVIDE ALL REQUIRED MUSCO FACTORY WIRING EXTENSIONS, WIRING HARNESS, BRACKETS AND ALL NECESSARY PARTS TO MAKE A COMPLETE MUSCO SPORTS LIGHTING SYSTEM. EXTEND EXISTING NORMAL AND EMERGENCY LIGHTING CIRCUITS TO NEW LED LIGHT FIXTURES AS REQUIRED. COORDINATE ADDITIONAL REQUIREMENTS AND FIXTURE AIMING WITH MUSCO. PROVIDE BIRD SPIKES ON TOP OF MUSCO POLES, CROSS ARMS AND ALL NEW MUSCO LED LIGHT FIXTURES.
2. DISCONNECT AND REMOVE EXISTING BALLAST ENCLOSURE AND REPLACE WITH NEW COMPLETE AND FULLY FUNCTIONAL LED DRIVER ENCLOSURES AS REQUIRED.
3. ALL EXISTING CONDUCTORS ARE TO REMAIN.
4. PROVIDE (1) 20A/1P BREAKER IN EXISTING SPACE TO FEED MUSCO COMM. CABINET IN ANNOUNCER'S AREA.
5. 3/4"C. 2 #2, 1 #2 GND.
6. PULL BACK EXISTING FIBER CABLING FROM IDF CABINETS TO THIS PULL BOX. PULL NEW CONTROL CABLING ALONG WITH THE EXISTING FIBERS TO THE IDF ROOMS AND RECONNECT EXISTING FIBERS AT IDF LOCATIONS.
7. DEMOLISH EXISTING LIGHTING INVERTER AND REPLACE AS PER E1.1.

GENERAL NOTES:

1. ALL JUNCTION BOXES SHOWN ON FLOOR PLAN SHALL BE NEMA 3R UNLESS OTHERWISE NOTED.
2. REFERENCE E1.1 FOR ADDITIONAL WIRING REQUIREMENTS.
3. CONTRACTOR SHALL FIELD VERIFY LOCATION OF ALL EXISTING UG PULL BOXES AND CONDUIT ROUTING. ROUTINGS SHOWN ON PLAN ARE BASED ON AS-BUILT DRAWINGS. CONTRACTOR SHALL PROVIDE ADDITIONAL LOCATING AND SURVEYING IN BID AND PROVIDE REQUIRED LENGTH OF CABLING PER SURVEY RESULTS FROM MUSCO COMM. CABINET TO MUSCO CONTROL CABINET.



PARTIAL SITE PLAN
SCALE: 1" = 30' - 0"

1 / E1.2

DSA APPROVAL STAMP

DESIGN PROFESSIONAL STAMP

DLR GROUP

© DLR Group

DLR GROUP PROJECT #: 75-25240-00

JOHNSON CONSULTING ENGINEERS, INC.
Power | Lighting | Multimedia
Communications | Data Networking
12875 Brookprinter Place, Suite 300
Poway, CA 92064
P. 858.679.4030 | F. 858.513.0559
www.joe-inc.com

REGISTERED PROFESSIONAL ENGINEER
No. E 14781
Exp. 6-30-2027
ELECTRICAL
STATE OF CALIFORNIA

#15045 2/13/2026

MVUSD ATHLETIC LIGHTING UPGRADE

Vista Murrieta High School, 28251 Clinton Keith, Murrieta, CA 92563

100%CD

12/01/2025
Revisions
1 2/16/2026 ADDENDUM 1

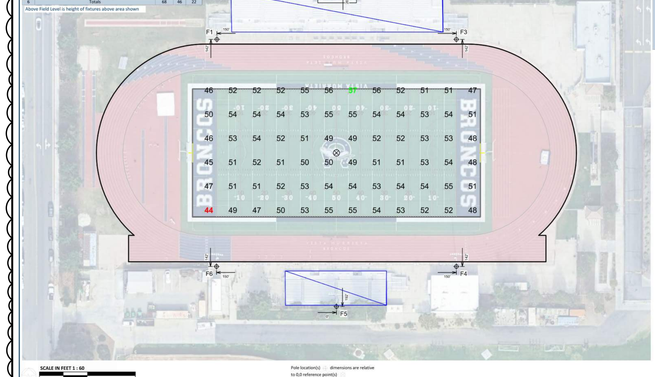
ENLARGED SITE PLAN

E1.2

Equipment List For Areas Shown

QTY	STRUCTURE ID	SIZE	GRADE ELEVATION	ABOVE FIELD LEVEL	FIXTURE TYPE	QTY/POLE	TWG GRID	OTHER GRIDS
	Structure				Fixtures			
2	F1 F3	80'	-	80'	TLC-LED-1500	7	5	2
				70'	TLC-RGBW	2	0	2
				15.5'	TLC-BT-575	2	2	0
1	F2	90'	-	90'	TLC-LED-1500	5	5	0
				90'	TLC-RGBW	6	0	6
				30'	TLC-BT-575	2	2	0
2	F4 F6	80'	-	80'	TLC-LED-1500	7	5	2
				70'	TLC-RGBW	2	2	0
				15.5'	TLC-BT-575	2	2	0
1	F5	90'	-	90'	TLC-LED-1500	5	5	0
				90'	TLC-RGBW	4	0	4
				22'	TLC-BT-575	2	0	2
6	Totals					68	46	22

Above Field Level is height of fixtures above area shown



SCALE IN FEET 1 : 60
0' 60' 120'

Pole location(s) dimensions are relative to (L0) reference point(s)

ENGINEERED DESIGN By: D.Palmer • File #214852G • 11-Feb-26

Vista Murrieta High School FB

Riverside, CA

Grid Summary

Name: Football
Size: 360' x 160'
Spacing: 30.0' x 30.0'
Height: 5.0' above grade

Illumination Summary

MAINTAINED HORIZONTAL FOOTCANDLES

	Entire Grid
Guaranteed Average:	**50**
Scan Average:	55.78
Max/Min:	57
Minimum:	44
Avg/Min:	1.27
Guaranteed Max/Min:	**2.5**
Max/Min:	1.29
UG (adjacent pts):	1.14
CU:	0.54
No. of Points:	72
FIXTURE INFORMATION:	
Applied Circuits:	A
No. of Fixtures:	**46**
Total Load:	53.78 kW

Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document.

Field Measurements: Individual field measurements may vary from computer-calculated predictions.

Electrical System Requirements: Refer to Amperage Draw Chart and/or the **"Musco Control System Summary"** for electrical sizing.

Installation Requirements: Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.

musco. We Make It Happen.

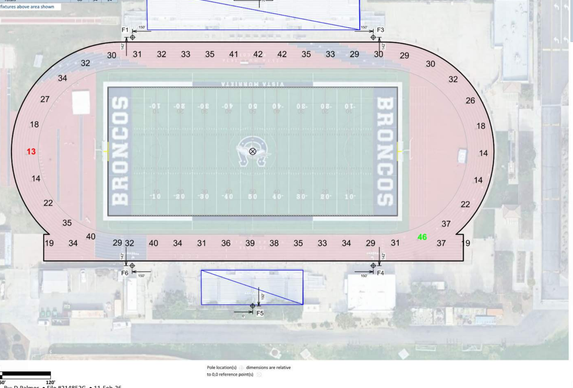
Not to be reproduced in whole or part without the written consent of Musco Sports Lighting, LLC. ©1981, 2026 Musco Sports Lighting, LLC.

ILLUMINATION SUMMARY

Equipment List For Areas Shown

QTY	STRUCTURE ID	SIZE	GRADE ELEVATION	ABOVE FIELD LEVEL	FIXTURE TYPE	QTY/POLE	TWG GRID	OTHER GRIDS
	Structure				Fixtures			
2	F1 F3	80'	-	80'	TLC-LED-1500	7	7	0
				70'	TLC-RGBW	2	0	2
				15.5'	TLC-BT-575	2	2	0
1	F2	90'	-	90'	TLC-LED-1500	5	5	0
				90'	TLC-RGBW	6	0	6
				30'	TLC-BT-575	2	2	0
2	F4 F6	80'	-	80'	TLC-LED-1500	7	7	0
				70'	TLC-RGBW	2	2	0
				15.5'	TLC-BT-575	2	2	0
1	F5	90'	-	90'	TLC-LED-1500	5	5	0
				90'	TLC-RGBW	4	0	4
				22'	TLC-BT-575	2	0	2
6	Totals					68	54	14

Above Field Level is height of fixtures above area shown



SCALE IN FEET 1 : 60
0' 60' 120'

Pole location(s) dimensions are relative to (L0) reference point(s)

ENGINEERED DESIGN By: D.Palmer • File #214852G • 11-Feb-26

Vista Murrieta High School FB

Riverside, CA

Grid Summary

Name: Track
Size: irregular
Spacing: 30.0' x 30.0'
Height: 5.0' above grade

Illumination Summary

MAINTAINED HORIZONTAL FOOTCANDLES

	Entire Grid
Guaranteed Average:	**50**
Scan Average:	50.47
Max/Min:	53
Minimum:	43
Avg/Min:	1.17
Max/Min:	**3.45**
UG (adjacent pts):	0.00
CU:	0.57
No. of Points:	72
FIXTURE INFORMATION:	
Applied Circuits:	A,A
No. of Fixtures:	**54**
Total Load:	47.04 kW

Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document.

Field Measurements: Individual field measurements may vary from computer-calculated predictions.

Electrical System Requirements: Refer to Amperage Draw Chart and/or the **"Musco Control System Summary"** for electrical sizing.

Installation Requirements: Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.

musco. We Make It Happen.

Not to be reproduced in whole or part without the written consent of Musco Sports Lighting, LLC. ©1981, 2026 Musco Sports Lighting, LLC.

ILLUMINATION SUMMARY

Equipment List For Areas Shown

QTY	STRUCTURE ID	SIZE	GRADE ELEVATION	ABOVE FIELD LEVEL	FIXTURE TYPE	QTY/POLE	TWG GRID	OTHER GRIDS
	Structure				Fixtures			
4	F1 F3 F4 F6	80'	-	80'	TLC-LED-1500	7	7	0
				70'	TLC-RGBW	2	2	0
				15.5'	TLC-BT-575	2	2	0
1	F2	90'	-	90'	TLC-LED-1500	5	5	0
				90'	TLC-RGBW	6	6	0
				30'	TLC-BT-575	2	2	0
1	F5	90'	-	90'	TLC-LED-1500	5	5	0
				90'	TLC-RGBW	4	4	0
				22'	TLC-BT-575	2	2	0
6	Totals					68	60	8

Above Field Level is height of fixtures above area shown

SCALE IN FEET 1 : 100
0' 100' 200'

Pole location(s) dimensions are relative to (L0) reference point(s)

ENGINEERED DESIGN By: D.Palmer • File #214852G • 11-Feb-26

Vista Murrieta High School FB

Riverside, CA

Grid Summary

Name: Spill @ 3ft.
Spacing: 5.0'
Height: 5.0' above grade

Illumination Summary

INITIAL HORIZONTAL FOOTCANDLES

	Entire Grid
Scan Average:	**0.0333**
Maximum:	0.60
Minimum:	0.00
CU:	0.00
No. of Points:	68
FIXTURE INFORMATION:	
Applied Circuits:	A,B,C
No. of Fixtures:	**46**
Total Load:	72.00 kW

Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document.

Field Measurements: Individual field measurements may vary from computer-calculated predictions.

Electrical System Requirements: Refer to Amperage Draw Chart and/or the **"Musco Control System Summary"** for electrical sizing.

Installation Requirements: Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.

musco. We Make It Happen.

Not to be reproduced in whole or part without the written consent of Musco Sports Lighting, LLC. ©1981, 2026 Musco Sports Lighting, LLC.

ILLUMINATION SUMMARY

Equipment List For Areas Shown

QTY	STRUCTURE ID	SIZE	GRADE ELEVATION	ABOVE FIELD LEVEL	FIXTURE TYPE	QTY/POLE	TWG GRID	OTHER GRIDS
	Structure				Fixtures			
4	F1 F3 F4 F6	80'	-	80'	TLC-LED-1500	7	5	2
				70'	TLC-RGBW	2	2	0
				15.5'	TLC-BT-575	2	2	0
1	F2	90'	-	90'	TLC-LED-1500	5	5	0
				90'	TLC-RGBW	6	6	0
				30'	TLC-BT-575	2	2	0
1	F5	90'	-	90'	TLC-LED-1500	5	5	0
				90'	TLC-RGBW	4	4	0
				22'	TLC-BT-575	2	2	0
6	Totals					68	60	8

Above Field Level is height of fixtures above area shown

SCALE IN FEET 1 : 50
0' 50' 100'

Pole location(s) dimensions are relative to (L0) reference point(s)

ENGINEERED DESIGN By: D.Palmer • File #214852G • 11-Feb-26

Vista Murrieta High School FB

Riverside, CA

Grid Summary

Name: Bleacher Home RGBW
Spacing: 5.2' x 4.9'
Height: 5.2' above grade

Illumination Summary

MAINTAINED HORIZONTAL FOOTCANDLES

	Entire Grid
Scan Average:	**37.67**
Maximum:	49
Minimum:	9
Avg/Min:	2.74
Max/Min:	**4.56**
UG (adjacent pts):	0.00
CU:	0.96
No. of Points:	170
FIXTURE INFORMATION:	
Applied Circuits:	C
No. of Fixtures:	**60**
Total Load:	80.72 kW

Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document.

Field Measurements: Individual field measurements may vary from computer-calculated predictions.

Electrical System Requirements: Refer to Amperage Draw Chart and/or the **"Musco Control System Summary"** for electrical sizing.

Installation Requirements: Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.

musco. We Make It Happen.

Not to be reproduced in whole or part without the written consent of Musco Sports Lighting, LLC. ©1981, 2026 Musco Sports Lighting, LLC.

ILLUMINATION SUMMARY

Equipment List For Areas Shown

QTY	STRUCTURE ID	SIZE	GRADE ELEVATION	ABOVE FIELD LEVEL	FIXTURE TYPE	QTY/POLE	TWG GRID	OTHER GRIDS
	Structure				Fixtures			
4	F1 F3 F4 F6	80'	-	80'	TLC-LED-1500	7	5	2
				70'	TLC-RGBW	2	2	0
				15.5'	TLC-BT-575	2	2	0
1	F2	90'	-	90'	TLC-LED-1500	5	5	0
				90'	TLC-RGBW	6	6	0
				30'	TLC-BT-575	2	2	0
1	F5	90'	-	90'	TLC-LED-1500	5	5	0
				90'	TLC-RGBW	4	4	0
				22'	TLC-BT-575	2	2	0
6	Totals					68	60	8

Above Field Level is height of fixtures above area shown

SCALE IN FEET 1 : 50
0' 50' 100'

Pole location(s) dimensions are relative to (L0) reference point(s)

ENGINEERED DESIGN By: D.Palmer • File #214852G • 11-Feb-26

Vista Murrieta High School FB

Riverside, CA

Grid Summary

Name: Bleacher Visitor RGBW
Spacing: 10.0' x 10.0'
Height: 10.0' above grade

Illumination Summary

MAINTAINED HORIZONTAL FOOTCANDLES

	Entire Grid
Scan Average:	**29.94**
Maximum:	45
Minimum:	14
Avg/Min:	1.70
Max/Min:	**3.25**
UG (adjacent pts):	0.00
CU:	0.92
No. of Points:	65
FIXTURE INFORMATION:	
Applied Circuits:	C,A
No. of Fixtures:	**60**
Total Load:	80.72 kW

Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document.

Field Measurements: Individual field measurements may vary from computer-calculated predictions.

Electrical System Requirements: Refer to Amperage Draw Chart and/or the **"Musco Control System Summary"** for electrical sizing.

Installation Requirements: Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.

musco. We Make It Happen.

Not to be reproduced in whole or part without the written consent of Musco Sports Lighting, LLC. ©1981, 2026 Musco Sports Lighting, LLC.

ILLUMINATION SUMMARY

DSA APPROVAL STAMP

DESIGN PROFESSIONAL STAMP

DLR GROUP

© DLR Group

DLR GROUP PROJECT #: 75-25240-00

JOHNSON CONSULTING ENGINEERS, INC.
Power | Lighting | Multimedia
Communications | Data | Networking
12875 Brookprinter Place, Suite 300
Poway, CA 92064
P. 858.679.4030 | F. 858.513.0559
www.jce-inc.com

REGISTERED PROFESSIONAL ENGINEER
No. E 14781
Exp. 6-30-2027
ELECTRICAL
STATE OF CALIFORNIA

25045 2/13/2026

MVUSD ATHLETIC LIGHTING UPGRADE

Vista Murrieta High School, 28251 Clinton Keith, Murrieta, CA 92563

100%CD

12/01/2025
Revisions
1 2/16/2026 ADDENDUM 1

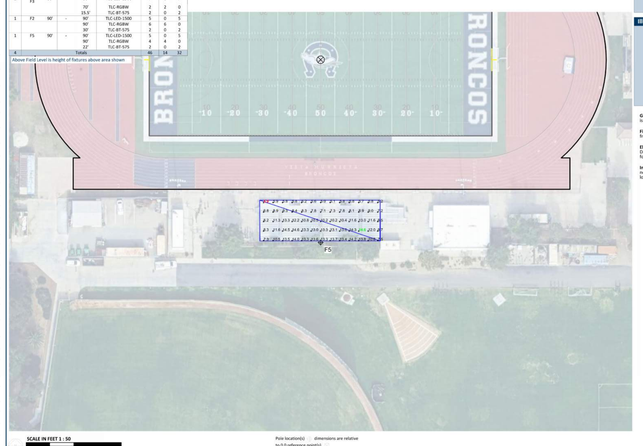
FOOTBALL FIELD - PHOTOMETRICS

E1.3

Equipment List For Areas Shown

Structure				Fixtures			
QTY	STRUCTURE ID	SIZE	GRADE ELEVATION	ABOVE FIELD LEVEL	FIXTURE TYPE	QTY/POLE	TAG ONE	OTHER ONES
2	F1 F3	80'	-	80' 70'	TLC-LED-1500 TLC-RGBW	7 2	0 2	7 0
1	F2	50'	-	19.5' 90'	TLC-BT-575 TLC-LED-1500	2 5	0 0	2 5
1	F5	90'	-	90' 80' 90' 80'	TLC-RGBW TLC-BT-575 TLC-LED-1500 TLC-RGBW	6 2 5 6	6 0 0 6	0 2 5 0
4				22'	TLC-BT-575	2	0	2
4	Totals					46	14	32

Above Field Level is height of fixtures above area shown



SCALE IN FEET 1 : 50
0' 50' 100'

Pole location(s): ○ dimensions are relative to (L0) reference point(s): □

ENGINEERED DESIGN By: D.Palmer • File #214852G • 11-Feb-26

Vista Murrieta High School FB

Riverside, CA

Grid Summary

Name:	Bleacher Visitor Egress
Spacing:	10.0' x 10.0'
Height:	20.0' above grade

Illumination Summary

MAINTAINED HORIZONTAL FOOTCANDLES

	Entire Grid
Scan Average:	9.66
Maximum:	15
Minimum:	5
Avg/Min:	2.00
Max/Min:	3.00
UG (adjacent pts):	2.00
CV:	0.14
No. of Points:	65
FIXTURE INFORMATION	
Applied Circuits:	A
No. of Fixtures:	14
Total Load:	8.96 kW

Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document.

Field Measurements: Individual field measurements may vary from computer-calculated predictions.

Electrical System Requirements: Refer to Amperage Draw Chart and/or the **"Musco Control System Summary"** for electrical sizing.

Installation Requirements: Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.

musco
We Make It Happen.

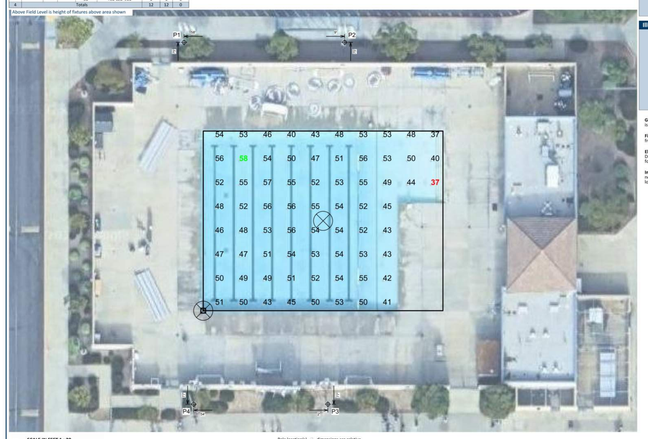
Not to be reproduced in whole or part without the written consent of Musco Sports Lighting, LLC.
©1981, 2025 Musco Sports Lighting, LLC.

ILLUMINATION SUMMARY

Equipment List For Areas Shown

Structure				Fixtures			
QTY	STRUCTURE ID	SIZE	GRADE ELEVATION	ABOVE FIELD LEVEL	FIXTURE TYPE	QTY/POLE	TAG ONE	OTHER ONES
4	P1-P4	50'	-	50'	TLC-LED-550	2	2	0
				50'	TLC-LED-900	1	1	0
4	Totals					12	12	0

Above Field Level is height of fixtures above area shown



SCALE IN FEET 1 : 20
0' 20' 40'

Pole location(s): ○ dimensions are relative to (L0) reference point(s): □

ENGINEERED DESIGN By: D.Palmer • File #244717C • 19-Dec-25

Murrieta Vista HS Pool

Murrieta, CA

Grid Summary

Name:	Pool
Spacing:	10.0' x 7.5'
Spacing:	10.0' x 10.0'
Height:	3.0' above grade

Illumination Summary

MAINTAINED HORIZONTAL FOOTCANDLES

	Entire Grid
Scan Average:	50.1
Maximum:	58
Minimum:	37
Avg/Min:	1.37
Max/Min:	1.58
UG (adjacent pts):	1.15
CV:	0.07
No. of Points:	70
FIXTURE INFORMATION	
Applied Circuits:	A
No. of Fixtures:	12
Total Load:	7.74 kW

Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document.

Field Measurements: Individual field measurements may vary from computer-calculated predictions.

Electrical System Requirements: Refer to Amperage Draw Chart and/or the **"Musco Control System Summary"** for electrical sizing.

Installation Requirements: Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.

musco
We Make It Happen.

Not to be reproduced in whole or part without the written consent of Musco Sports Lighting, LLC.
©1981, 2025 Musco Sports Lighting, LLC.

ILLUMINATION SUMMARY

Equipment List For Areas Shown

Structure				Fixtures			
QTY	STRUCTURE ID	SIZE	GRADE ELEVATION	ABOVE FIELD LEVEL	FIXTURE TYPE	QTY/POLE	TAG ONE	OTHER ONES
4	P1-P4	50'	-	50'	TLC-LED-550	2	2	0
				50'	TLC-LED-900	1	1	0
4	Totals					12	12	0

Above Field Level is height of fixtures above area shown



SCALE IN FEET 1 : 30
0' 30' 60'

Pole location(s): ○ dimensions are relative to (L0) reference point(s): □

ENGINEERED DESIGN By: D.Palmer • File #244717C • 19-Dec-25

Murrieta Vista HS Pool

Murrieta, CA

Grid Summary

Name:	Deck
Spacing:	10.0' x 7.5'
Spacing:	10.0' x 10.0'
Height:	3.0' above grade

Illumination Summary

MAINTAINED HORIZONTAL FOOTCANDLES

	Entire Grid
Scan Average:	54.4
Maximum:	64
Minimum:	12
Avg/Min:	2.63
Max/Min:	4.59
UG (adjacent pts):	1.67
CV:	0.45
No. of Points:	70
FIXTURE INFORMATION	
Applied Circuits:	A
No. of Fixtures:	12
Total Load:	7.74 kW

Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document.

Field Measurements: Individual field measurements may vary from computer-calculated predictions.

Electrical System Requirements: Refer to Amperage Draw Chart and/or the **"Musco Control System Summary"** for electrical sizing.

Installation Requirements: Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.

musco
We Make It Happen.

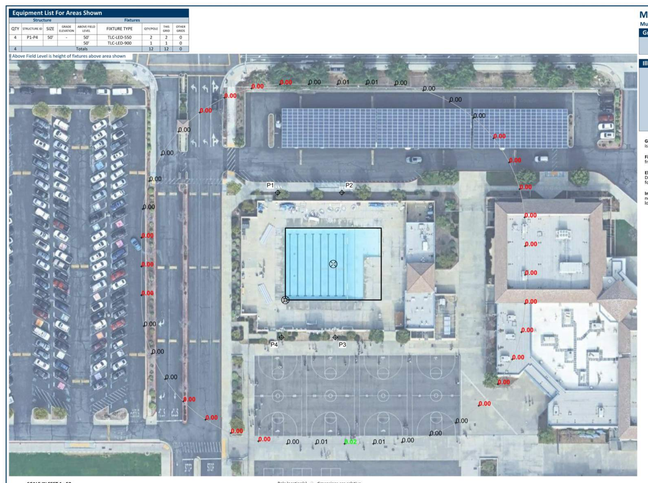
Not to be reproduced in whole or part without the written consent of Musco Sports Lighting, LLC.
©1981, 2025 Musco Sports Lighting, LLC.

ILLUMINATION SUMMARY

Equipment List For Areas Shown

Structure				Fixtures			
QTY	STRUCTURE ID	SIZE	GRADE ELEVATION	ABOVE FIELD LEVEL	FIXTURE TYPE	QTY/POLE	TAG ONE	OTHER ONES
4	P1-P4	50'	-	50'	TLC-LED-550	2	2	0
				50'	TLC-LED-900	1	1	0
4	Totals					12	12	0

Above Field Level is height of fixtures above area shown



SCALE IN FEET 1 : 50
0' 50' 100'

Pole location(s): ○ dimensions are relative to (L0) reference point(s): □

ENGINEERED DESIGN By: D.Palmer • File #244717C • 19-Dec-25

Murrieta Vista HS Pool

Murrieta, CA

Grid Summary

Name:	Project Spill @ 3ft.
Spacing:	30.0'
Height:	3.0' above grade

Illumination Summary

INITIAL HORIZONTAL FOOTCANDLES

	Entire Grid
Scan Average:	0.0015
Maximum:	0.02
Minimum:	0.00
Avg/Min:	0.00
No. of Points:	43
FIXTURE INFORMATION	
Applied Circuits:	A
No. of Fixtures:	12
Total Load:	7.74 kW

Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document.

Field Measurements: Individual field measurements may vary from computer-calculated predictions.

Electrical System Requirements: Refer to Amperage Draw Chart and/or the **"Musco Control System Summary"** for electrical sizing.

Installation Requirements: Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.

musco
We Make It Happen.

Not to be reproduced in whole or part without the written consent of Musco Sports Lighting, LLC.
©1981, 2025 Musco Sports Lighting, LLC.

ILLUMINATION SUMMARY

EXISTING EMERGENCY LIGHTING FIXTURES MOUNTED ON LIGHTING POLE ARE TO REMAIN.

DSA APPROVAL STAMP

DESIGN PROFESSIONAL STAMP

DLRGROUP

© DLR Group

DLR GROUP PROJECT #: 75-25240-00

JOHNSON CONSULTING ENGINEERS, INC.
Power | Lighting | Multimedia
Communications | Data | Networking
12875 Brookprinter Place, Suite 300
Poway, CA 92064
P. 858.679.4030 | F. 858.513.0559
www.jce-inc.com

REGISTERED PROFESSIONAL ENGINEER
No. E 14781
Exp. 6-30-2027
ELECTRICAL
STATE OF CALIFORNIA

25045 2/13/2026

MVUSD ATHLETIC LIGHTING UPGRADE

Vista Murrieta High School, 28251 Clinton Keith, Murrieta, CA 92563

100%CD

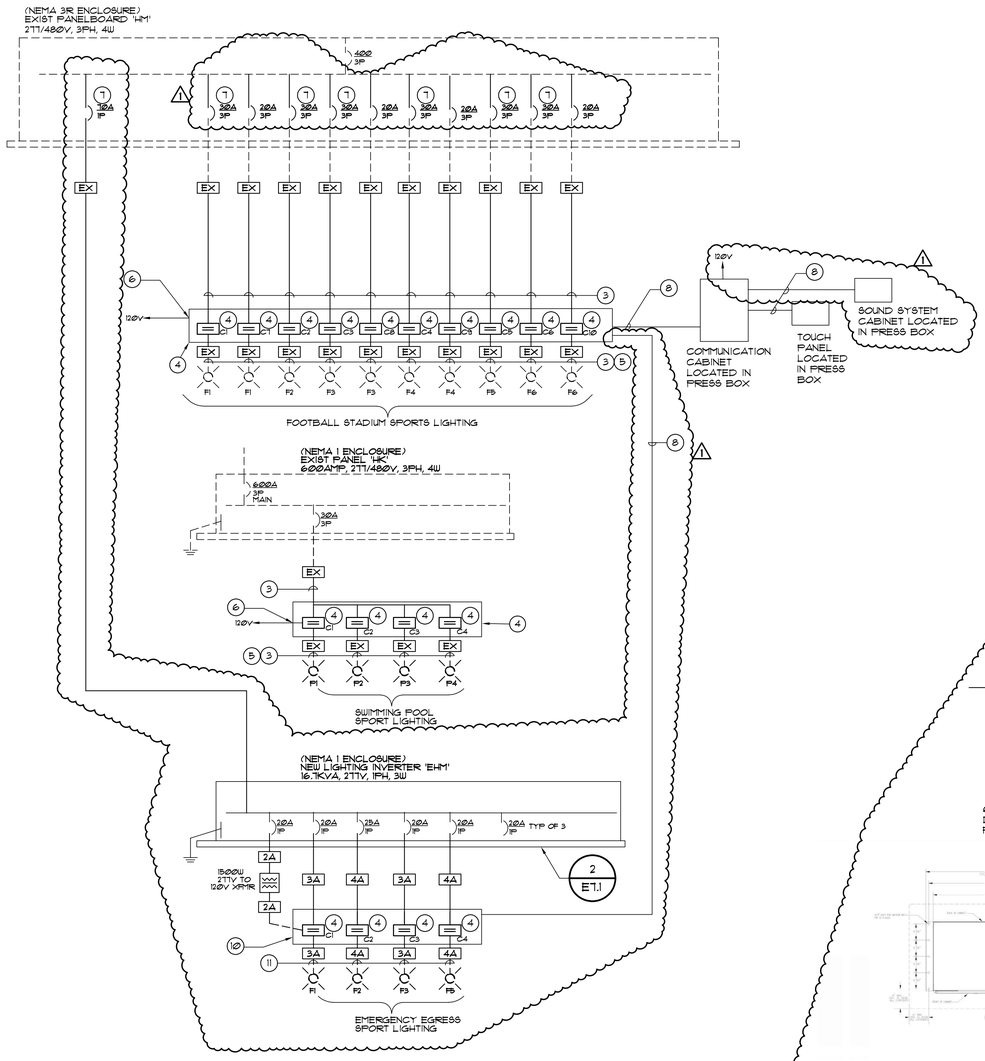
12/01/2025

Revisions

1 2/16/2026 ADDENDUM 1

1 FOOTBALL & SWIMMING POOL - PHOTOMETRICS

E1.4



SPORTS LIGHTING ONE LINE DIAGRAM

NO SCALE

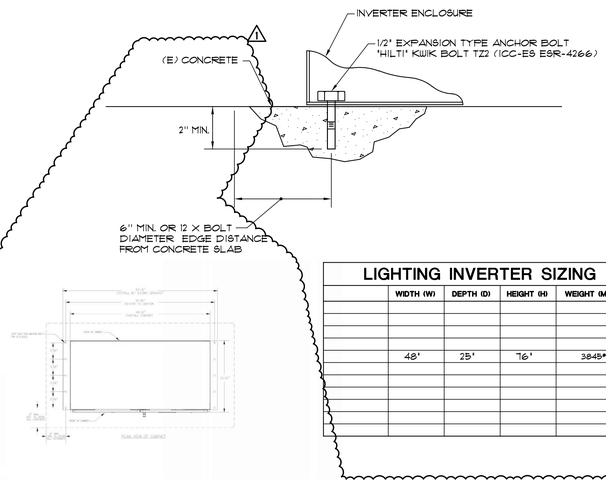
1 E7.1

GENERAL NOTES:

1. UNLESS WHERE OTHERWISE NOTED, ALL WORK INDICATED ON THESE DRAWINGS SHALL BE CONSIDERED NEW WORK.

KEY NOTES:

1. PROVIDE FIELD INSTALLED NEUTRAL KIT IN THE CABINET AND CONNECT IN AND OUT NEUTRAL CONDUCTORS.
2. DISCONNECT AND REMOVE EXISTING 40A/3P BREAKER AND REPLACE WITH A NEW 30A/3P BREAKER. RECONNECT EXISTING CIRCUIT TO NEW BREAKER AS REQUIRED.
3. EXISTING INCOMING LIGHTING CIRCUIT CONDUIT AND CONDUCTORS TO REMAIN. EXTEND TO DESIGNATED LIGHTING CONTACTOR DOWNSTREAM SHOWN ON ONE LINE DIAGRAM AS REQUIRED.
4. RECONNECT INCOMING AND OUTGOING LIGHTING CIRCUITS AND EMERGENCY LIGHTING CIRCUITS TO ALL NEW CONTACTORS IN NEW SPORTS LIGHTING ENCLOSURE AS REQUIRED.
5. EXTEND AND RECONNECT EXISTING OUTGOING LIGHTING CIRCUITS TO DESIGNATED CONTACTORS UPSTREAM IN SPORTS LIGHTING CONTROL CABINETS AND POLE NEW DRIVER ENCLOSURES AND LED LIGHTING FIXTURE HEADS DOWNSTREAM SHOWN ON ONE LINE DIAGRAM AS REQUIRED.
6. EXISTING CONTROL CABINET TO BE REPLACED WITH NEW CONTROL CABINET. RECONNECT TO EXISTING 120V CONTROL CIRCUIT.
7. REPLACE EXISTING BREAKER WITH 30A/3P.
8. PROVIDE WIRING PER MANUFACTURER'S REQUIREMENTS.
9. REPLACE EXISTING BREAKER WITH 30A/1P.
10. PROVIDE NEW ALIC CABINET WITH (2) 1-1/4"C. BETWEEN LIGHTING INVERTER AND CABINET. PROVIDE 120V POWER CIRCUIT FROM PANEL 'LM' AND EMERGENCY POWER FROM LIGHTING INVERTER THROUGH 277V TO 120V TRANSFORMER.
11. DEMOLISH EXISTING CONDUCTORS IN EXISTING CONDUIT THE POLES. ROUTE NEW CONDUCTORS FROM ALIC THROUGH THE LIGHTING INVERTER AND IN EXISTING 1-1/4"C.
12. REPLACE EXISTING CIRCUIT BREAKER IN PANEL 'HM' FEEDING LIGHTING INVERTER WITH 10A/1P CIRCUIT BREAKER.



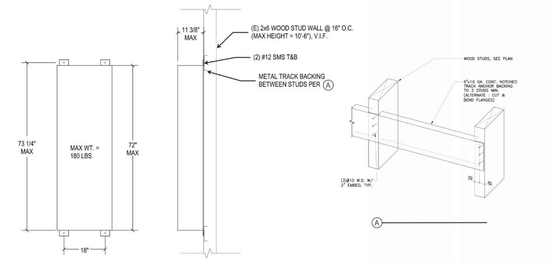
LIGHTING INVERTER ANCHORAGE

NO SCALE

2 E7.1

LIGHTING INVERTER SIZING

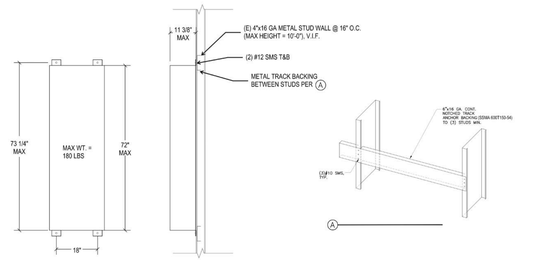
WIDTH (W)	DEPTH (D)	HEIGHT (H)	WEIGHT (MAX)
48"	25"	76"	3845#



TYP. CABINET WALL @ WOOD WALL

NO SCALE

3 E7.1



TYP. CABINET WALL @ METAL STUD WALL

NO SCALE

4 E7.1

600Volt Feeder Schedule

I.D.	Type	Ampacity	Copper Conduit	Copper Conductors	Aluminum Conduit	Aluminum Conductors
2A		20	(1) 3/4"	3 # 12, 1# 12 Gnd	NA	NA
2B		20	(1) 3/4"	4 # 12, 1# 12 Gnd	NA	NA
3A		30	(1) 3/4"	3 # 10, 1# 10 Gnd	NA	NA
3B		30	(1) 3/4"	4 # 10, 1# 10 Gnd	NA	NA
4A		40	(1) 1"	3 # 8, 1# 8 Gnd	NA	NA
4B		40	(1) 1"	4 # 8, 1# 8 Gnd	NA	NA
5A		50	(1) 1"	3 # 6, 1# 10 Gnd	NA	NA
5B		50	(1) 1"	4 # 6, 1# 10 Gnd	NA	NA
6A		60	(1) 1 1/4"	3 # 4, 1# 8 Gnd	NA	NA
6B		60	(1) 1 1/4"	4 # 4, 1# 8 Gnd	NA	NA
7A		70	(1) 1 1/4"	3 # 4, 1# 8 Gnd	NA	NA
7B		70	(1) 1 1/4"	4 # 4, 1# 8 Gnd	NA	NA
8A		80	(1) 1 1/4"	3 # 3, 1# 8 Gnd	NA	NA
8B		80	(1) 1 1/4"	4 # 3, 1# 8 Gnd	NA	NA
9A		90	(1) 1 1/2"	3 # 2, 1# 8 Gnd	NA	NA
9B		90	(1) 1 1/2"	4 # 2, 1# 8 Gnd	NA	NA
10A		100	(1) 1 1/2"	3 # 1, 1# 6 Gnd	NA	NA
10B		100	(1) 1 1/2"	4 # 1, 1# 6 Gnd	NA	NA
12A		125	(1) 2"	3 # 1, 1# 6 Gnd	(1) 2"	3 # 2/0, 1# 3 Gnd
12B		125	(1) 2"	4 # 1, 1# 6 Gnd	(1) 2"	4 # 2/0, 1# 3 Gnd
15A		150	(1) 2"	3 # 1/0, 1# 6 Gnd	(1) 2"	3 # 3/0, 1# 3 Gnd
15B		150	(1) 2"	4 # 1/0, 1# 6 Gnd	(1) 2"	4 # 3/0, 1# 3 Gnd
17A		175	(1) 2"	3 # 2/0, 1# 6 Gnd	(1) 2"	3 # 4/0, 1# 3 Gnd
17B		175	(1) 2"	4 # 2/0, 1# 6 Gnd	(1) 2"	4 # 4/0, 1# 3 Gnd
20A		200	(1) 3"	3 # 3/0, 1# 4 Gnd	(1) 3"	3 # 250, 1# 2 Gnd
20B		200	(1) 3"	4 # 3/0, 1# 4 Gnd	(1) 3"	4 # 250, 1# 2 Gnd
22A		225	(1) 3"	3 # 4/0, 1# 4 Gnd	(1) 3"	3 # 300, 1# 2 Gnd
22B		225	(1) 3"	4 # 4/0, 1# 4 Gnd	(1) 3"	4 # 300, 1# 2 Gnd
25A		250	(1) 3"	3 # 250, 1# 4 Gnd	(1) 3"	3 # 350, 1# 2 Gnd
25B		250	(1) 3"	4 # 250, 1# 4 Gnd	(1) 3"	4 # 350, 1# 2 Gnd
30A		300	(1) 3"	3 # 350, 1# 4 Gnd	(1) 3"	3 # 500, 1# 2 Gnd
30B		300	(1) 3"	4 # 350, 1# 4 Gnd	(1) 3"	4 # 500, 1# 2 Gnd
2C		20	(1) 1/2"	2 # 12, 1# 12 Gnd	NA	NA
3C		30	(1) 3/4"	2 # 10, 1# 10 Gnd	NA	NA
4C		40	(1) 3/4"	2 # 8, 1# 10 Gnd	NA	NA
5C		50	(1) 1"	2 # 6, 1# 10 Gnd	NA	NA
6C		60	(1) 1 1/4"	2 # 4, 1# 8 Gnd	NA	NA
7C		70	(1) 1 1/4"	2 # 4, 1# 8 Gnd	NA	NA
8C		80	(1) 1 1/4"	2 # 3, 1# 8 Gnd	NA	NA
9C		90	(1) 1 1/4"	2 # 2, 1# 8 Gnd	NA	NA
10C		100	(1) 1 1/4"	2 # 1, 1# 6 Gnd	NA	NA
15C		150	(1) 2"	2 # 1/0, 1# 6 Gnd	NA	NA
17C		175	(1) 2"	2 # 2/0, 1# 6 Gnd	NA	NA

600V FEEDER SCHEDULE GENERAL NOTES:

1. ALL CONDUCTOR SHALL BE PROVIDED WITH TYPE THWN-2 INSULATION. REFERENCE SPECIFICATION SECTION 26 05 19 (16120) FOR ADDITIONAL REQUIREMENTS.
2. PROVIDE 60 DEGREE COPPER/ALUMINUM RATED TERMINATION FOR ALL FEEDERS SIZED WITH #2 OR SMALLER CONDUCTORS. PROVIDE 75 DEGREE COPPER/ALUMINUM RATED TERMINATIONS FOR ALL FEEDERS SIZED WITH #1 OR LARGER CONDUCTORS.
3. CONTRACTOR SHALL BE RESPONSIBLE FOR ORDERING LUG CONFIGURATION AN ALL EQUIPMENT, BREAKER OF DISCONNECTS TO MATCH FEEDER CONFIGURATIONS INDICATED.
4. WHERE MULTIPLE CONDUIT QUANTITIES ARE INDICATED, CONDUCTOR QUANTITIES AND SIZES SHOWN IN SCHEDULE SHALL BE PROVIDED IN EACH CONDUIT.

NOT APPLICABLE

DSA APPROVAL STAMP

DESIGN PROFESSIONAL STAMP

DLRGROUP

© DLR Group

DLR GROUP PROJECT #: 75-25240-00

JOHNSON CONSULTING ENGINEERS, INC.
Power | Lighting | Multimedia
Communications | Data | Networking
12875 Brookprinter Place, Suite 300
Poway, CA 92064
P. 858.679.4030 | F. 858.513.0559
www.joe-inc.com

REGISTERED PROFESSIONAL ENGINEER
No. E 14781
Exp. 6-30-2027
ELECTRICAL
STATE OF CALIFORNIA

#25045 3/18/2026

MVUSD ATHLETIC LIGHTING UPGRADE

Vista Murrieta High School, 28251 Clinton Keith, Murrieta, CA 92563

100%CD

12/01/2025

Revisions

1 2/16/2026 ADDENDUM 1

SPORTS LIGHTING ONE LINE DIAGRAM

E7.1