

ADDENDUM NO. 3

TO: All Registered Bidders
DATE: June 17, 2022
PROJECT: Ocean View School District
Star View Elementary School Modernization
CONTACT: Milo Oostinga, Ledesma & Meyer Construction Co., Inc.

This Addendum forms a part of the Contract Documents for the Project described above and shall supersede referenced sections of the original Bidding Documents. This Addendum is an integral part of said Bidding Documents and shall be acknowledged in the Contractor's Bid Proposal form. Failure to acknowledge receipt of this Addendum in the Bid may cause the Bid to be rejected.

I. INSTRUCTIONS AND PROCEDURES

1. The following changes, omissions and/or additions to the Bid Specification shall apply to proposals made for and to the execution of the various parts of the work affected thereby, and all other conditions shall remain the same.
2. Careful note of the Addendum shall be taken by all parties of interest so that the proper allowance may be made in all computations and estimates, and all trades affected shall be fully advised in the performance of the work which will be required of them.
3. In case of conflict between the Drawings, Specifications, and this Addendum, this Addendum shall govern.

II. PROJECT MANUAL

1. **DOCUMENT 00020 – NOTICE INVITING BIDS**
 - a. Add Specification Section 11 61 03 Theatrical Networked Lighting Control System to Category 22 in its entirety.
 - b. Add Specification Section 11 61 09 Stage Lighting Fixtures to Category 22 in its entirety.
 - c. Add Specification Section 11 61 73 Theatrical Wiring Devices to Category 22 in its entirety.
 - d. Add Specification Section 32 92 01 Turf Seeding to Category 03 in its entirety.
2. **DOCUMENT 00300 - BID FORM**
 - a. Replace Document 00300 – Bid Form in its entirety with the attached Bid Form.
3. **DOCUMENT 01011 – WORK SCOPE SPECIAL CONDITIONS**
 - a. Replace Document 01011 – Work Scope Special Conditions (20 pages) in its entirety with the attached Work Scope Special Conditions (43 pages) including attachments.

4. **DOCUMENT 01019 – CONTRACT CONSIDERATIONS**

- a. Replace Document 01019 – Contract Considerations in its entirety with the attached Contract Considerations.

5. **DOCUMENT 01210 – ALLOWANCE**

Paragraph 3.1.1.1, revise Category 18 to read as follows 3.1.1.1

Category 18 \$200,000

Category 18 \$11,000 – QSP Services (MVM Environmental)

6. **DOCUMENT 01310 – PROJECT CONSTRUCTION SCHEDULE**

- a. Replace Document 01310 – Project Construction Schedule (9 pages) in its entirety with the attached 01310 Project Construction Schedule (9 pages).

III. **CHANGES TO PRIOR ADDENDA**

1. N/A

IV. **OTHER DOCUMENTS**

1. **DLR ADDENDUM NO. 3 – STAR VIEW ELEMENTARY SCHOOL MODERNIZATION**

See attached Addendum #3 (85 pages) for Star View Elementary School Modernization from DLR Group, dated June 15, 2022. All items listed on this summary are also indicated throughout this addendum.

2. **RELOCATABLES DRAWING SET – STAR VIEW ELEMENTARY SCHOOL MODERNIZATION**

- a. See attached Relocatables Drawing Set dated June 15, 2022 (34 pages) for Star View Elementary School Modernization. This work is to be included in your base bid. This drawing set is to be built in conjunction with the Project Drawings, Project Manual & Specifications.
- b. For clarification of ALL Relocatable at Star View Elementary School see attached CMSK-2 drawing indicating where to locate the scope of work within this Addendum.

3. **SOUTHERN CALIFORNIA EDISON APPROVED FINAL DESIGN APPROVED FOR CONSTRUCTION DRAWINGS DRAWING NO. 1515634_0.01.**

V. **PRE-BID QUESTIONS**

Please see attached RFBI Log, which is an integral part of the bidding documents. Included immediately following the RFBI log are copies of the correlating RFBI's with details as referenced in applicable responses. Any Substitution Requests issued will be listed within RFBI log.

Attachments:

00300 Bid Form

01011 Work Scope Special Conditions including attachments

01019 Contract Considerations

01310 Project Construction Schedule

DLR Addendum 3

Relocatable Drawing Set

CMSK-2

Southern California Edison Approved Drawings 1515634_0.01

RFBI Log

END OF ADDENDUM

BID FORM

TO: **OCEAN VIEW SCHOOL DISTRICT**, acting by and through its Governing Board, herein called "District".

FROM: _____
(Proper Name of Bidder)

Dept. of Industrial Relations Public Works Contractor Registration # _____

1. Pursuant to and in compliance with your Notice Inviting Bids and other documents relating thereto, the undersigned bidder, having familiarized himself with the terms of the contract, the local conditions affecting the performance of the contract and the cost of the work at the place where the work is to be done, hereby proposes and agrees to perform within the time stipulated, the contract, including all of its component parts, and everything required to be performed, including its acceptance by the District, and to provide and furnish any and all of the labor, materials, tools, expendable equipment, and all utility and transportation services necessary to perform the contract and complete in a workmanlike manner all of the work required in connection with the following:

Bid Package(s) _____ for the construction of the project known as **Star View Elementary School Modernization** in District described above, all in strict conformance with the drawings and other contract documents on file at the Business Office of said District for amounts set forth herein.

2. **ADDENDA**

The undersigned has thoroughly examined any and all Addenda (if any) issued during the bid period and is thoroughly familiar with all contents thereof and acknowledges receipt of the following Addenda: (Bidder to list all addenda).

Number	Number	Number	Number	Number	Number	Number	Number
--------	--------	--------	--------	--------	--------	--------	--------

_____	_____	_____	_____	_____	_____	_____	_____
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3. **BASE BID** (Numerical)
(Not to include cost for Allowance) \$ _____

ALLOWANCE (Numerical)
(See Spec Section 01210) \$ _____

TOTAL BASE BID & ALLOWANCE (Numerical) \$ _____

TOTAL BASE BID & ALLOWANCE (in Words) _____

_____ DOLLARS

4. **ALTERNATE BIDS**

The following amounts shall be added to or deducted from the Base Bid at the District's option. Alternates are fully described in Section 01019 – Contract Considerations.

Alternate No. 1 = (add) (deduct) \$ _____

Alternate No. 2 = (add) (deduct) \$ _____

Alternate No. 3 = (add) (deduct) \$ _____

Alternate No. 4 = (add) (deduct) \$ _____

Alternate No. 5 = (add) (deduct) \$ _____

Alternate No. 6 = (add) (deduct) \$ _____

5. **TIME FOR COMPLETION:** The aggregate sum total work of all individual prime contractors to the District comprises the entire “Project” and shall be commenced and completed in conformance with the Project Construction Schedule. The entire Project shall be completed within **415 consecutive calendar days with Substantial Completion being completed within 352 consecutive calendar days.** Bidder acknowledges liability for liquidated damages in the amount stipulated in the Agreement, and not as a penalty, for each calendar day of the delay for which Contractor has contributed to or caused until the complete project is completed and accepted.
6. It is understood that the District reserves the right to reject this bid and that the Bid shall remain open to acceptance and is irrevocable for a period of **NINETY (90)** days.
7. The following documents are attached hereto:
- i. Document 00301 Bidder Questionnaire
IMPORTANT NOTICE: This project is subject to DIR Public Works Funding Legislation - SB 854. To bid on this Project, the Prime Bidder and all of Prime Bidder’s Subcontractors are required to be registered online as a “public works contractor” with the California Department of Industrial Relations at www.dir.ca.gov and each shall pay an annual non-refundable fee via credit card.
 - ii. Document 00301-1 DIR Registration Verification
 - iii. Document 00301-2 Acknowledgement of Bidding Practices Regarding Indemnity
 - iv. Document 00410 Bid Bond
 - v. Document 00430 Designation of Subcontractors. Bidder understands and acknowledges that all subcontractors providing goods and services in excess of \$100,000.00 must be bonded.
 - vi. Document 00480 Non-collusion Declaration
 - vii. Document 00490 Certification – Participation of Disabled Veteran Business Enterprises
8. **Site Visit Certification:**
By submission of this bid, the Bidder hereby certifies that it’s estimating and management staff has visited the site of the proposed work and is fully acquainted with the conditions relating to construction and labor. Bidder fully understands the facilities, difficulties, and restrictions attending the execution of the work under contract and has also relayed this information to all listed subcontractors and suppliers. Bidder fully indemnifies **OCEAN VIEW SCHOOL DISTRICT**, the Architect, the Construction Manager and all of their respective officers, agents, employees, and consultants from any damage, or omissions, related to conditions that could have been identified during a visit to the site.

9. The Bidder specifically acknowledges and understands that if it is awarded the Contract, that it shall perform the Work of the Project while fully cooperating and complying with all of the applicable provisions of the District's labor compliance program. The undersigned Bidder hereby certifies that Bidder is able to furnish labor that can work in harmony with all other elements of labor employed or to be employed on the Work.
10. Bidder expressly acknowledges that it is aware that if a false claim is knowingly submitted (as the terms "claims" and "knowingly" are defined in the California False Claims Act, CA Gov. Code, §2650 et. Seq.), the District will be entitled to civil remedies set forth in the California False Claims Act. It may also be considered fraud and the Contractor may be subject to criminal prosecution.
11. It is understood and agreed that if written notice of the acceptance of this bid is mailed, telegraphed, or delivered to the undersigned after the opening of the bid, and within the time this bid is required to remain open, or at any time thereafter before this bid is withdrawn, the undersigned will execute and deliver to the District a contract in the form attached hereto in accordance with the bid as accepted, and that he will also furnish and deliver to the District **FIVE (5) executed copies of the Performance Bond and Payment Bond as specified, all within FIVE (5) days** after receipt of Notice Of Award letter, and that the work under the contract shall be commenced by the undersigned bidder, if awarded the contract, on the date to be stated in the District's "Notice To Proceed", and shall be completed by the Contractor in the time specified in the contract documents.
12. Notice of Award letter or other correspondence should be addressed to the undersigned at the address stated below.
13. The names of all persons interested in the foregoing proposal as principals are as follows:

(IMPORTANT NOTICE: If bidder or other interested person is a corporation, state legal name of corporation, also names of the president, secretary treasurer, and manager thereof; if a co-partnership, state true name of firm, also names of all individual co-partners composing firm; if bidder or other interested person is an individual, state first and last names in full.)

14. The undersigned bidder declares that he or she is licensed in accordance with the act providing for registration of contractors and the documentation of licensure is as follows:

	License #	Classification	Expiration Date
1.	_____	_____	_____
2.	_____	_____	_____
3.	_____	_____	_____

If the bidder is a joint venture, each member of the joint venture must include the above information.

The undersigned certifies (or declares) under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

15. In the event the bidder to whom Notice of Award is given fails or refuses to post the required bonds and return executed copies of the agreement form within **FIVE (5)** calendar days from the date of receiving the Notice of Award, the District may declare the Bidder's bid deposit or bond forfeited as damages.

16. Pursuant to Section 4552 of the Government code, in submitting a bid to the District, the bidder offers and agrees that if the bid is accepted, it will assign to District all rights, title, and interest in and to all causes of action it may have under Section 4 of the Clayton Act (15 U.S.C. Section 15) or under the Cartwright Act (Chapter 2 (commencing with Section 16700) of Part 2 of Division 7 of the Business and Professions Code), arising from purchases of goods, materials, or services by the bidder for sale to the purchasing body pursuant to the bid. Such assignment shall be made and become effective at the time the purchasing body tenders final payment to the bidder.
17. Bidder hereby automatically certifies, by submission of this bid form, that Bidder is fully knowledgeable of and in full compliance with California Public Contract Code Sections 2201-2208 (AKA: Iran Contracting Act) by either Option #1 "Certification" or Option #2 "Exemption".

NAME _____

ADDRESS _____

NAME _____

ADDRESS _____

DATE: _____

PROPER NAME OF BIDDER

BY: _____
SIGNATURE OF BIDDER

BY: _____
SIGNATURE OF BIDDER

NOTE: If bidder is a corporation, the legal name of the corporation shall be set forth above together with the signature of authorized officers or agents and the document shall bear the corporate seal; if bidder is partnership, the true name of the firm shall be set forth above together with the signature of the partner or partners authorized to sign contracts on behalf of the partnership; and if bidder is an individual, his signature shall be placed above.

Street Address: _____

City, State, Zip Code: _____

Mailing Address: _____

City, State, Zip Code: _____

Telephone: FAX: _____

END OF DOCUMENT

ITEM	DESCRIPTION:	Category Contractor															
		Demolition & Abatement	Landscape & Irrigation	Concrete, Asphalt & Grading	Casework	Sheet Metal & Roofing	Doors, Frames & Hardware	Glazing & Storefront	Rough Carpentry, Plaster, Drywall & Insulation	Ceramic Tile	Acoustical (Ceiling & Visual Display Boards)	Flooring	Painting & Wallcovering	Specialties	Plumbing	HVAC	Electrical, Low Voltage & Fire Alarm Systems
		2	3	4	8	9	11	12	13	14	15	16	17	18	19	21	22
1	This Category Contractor shall fingerprint all employees to meet DOJ and Education Code requirements and comply with all requirements of the contract documents for all employees who are physically working on the school sites. Provide employees with company shirts clearly identifying their company on the front and back, and shall require sub contractors to do likewise.	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
2	Please be sure all areas are safe and secure, with all materials and equipment within the construction area at all times. All gates separating construction areas from the campus must remain closed at all times.	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
3	Due to local City Ordinance, Construction start times will be strictly enforced. No work shall start before 7:00 am. Any fines or violations incurred will be paid for by This Category Contractor(s) in violation. The District nor the Construction Manager will be held responsible for these violations.	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
4	Properly & completely coordinate all work through the Construction Manager to ensure that all work is properly and efficiently installed per the contract documents.	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
5	All deliveries of material and/or equipment shall be coordinated and approved by the Construction Manager prior to commencement of work.	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
6	Provide all job verification and field measuring as may be needed and/or required to ensure that the work is coordinated and fits properly prior to any ordering or fabricating of materials.	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
7	This Category Contractor shall include the cost of preparation and printing of all shop drawings and submittals for base contract work items, including all revisions to shop drawings during the approval process. Reasonable additional copies required for coordination with other trades, copies for the project record, etc. as required through completion of the Project.	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
8	At no time will any Category Contractor or Sub-Contractor park their vehicles around or between buildings. All vehicles will be parked at designated parking areas per the Construction Manager. Only vehicles with the consent of the Construction Manager will be allowed to park outside designated parking areas.	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
9	The Construction Manager will review and approve the placement of all temporary storage containers, trailers, and stored materials. All locations shall be coordinated with the Construction Manager.	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
10	Provide accurate & neatly drawn dimensioned As-Built Record Drawings for work installed. The Construction Manager will have the As-Built set that will need to be updated weekly.	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
11	Comply with all City, State, Local Jurisdictional Agencies, AQMD, Health Department, SCE, OVSD, California Regional Water Quality Control Board (SWPPP), and CAL/OSHA requirements and obtain permits as required. The Contractor shall prepare and submit all necessary paperwork to the City and other governing agencies, as required to obtain an encroachment permit, approved haul route, hauling permits, AQMD permits, and any other requirement that must be complied with so that the work in this Contract can be accomplished.	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
12	<i>If additional temporary fencing is required for work outside the construction temporary fencing shown on CMSK - 01 drawing, it shall be the responsibility of that particular Category Contractor to provide and maintain. No areas shall be left open or unsafe at any time. This is not an option of the Contractor. It is a requirement to ensure a safe and secure site. If required, Contractor shall remove and reinstall temporary fencing, temporary toilets, and hand wash stations while performing work within this category and/or obtaining access to the work area.</i>	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
13	Properly protect existing finishes and improvements scheduled to remain when performing work within this Category Contractor.	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
14	All trades are to have a physical copy of their firm's IIPP and project specific MSDS/SDS sheets on site as required by CAL-OSHA. Submit all MSDS submittals to the Construction Manager for record and coordination with other trades.	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
15	This Category Contractor shall provide all required submittals within ten (10) days after the Notice to Award is issued. This Category Contractor will be assessed one thousand dollars (\$1000.00) per calendar day for each late submittal.	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes

ITEM	DESCRIPTION:	Category Contractor															
		Demolition & Abatement	Landscape & Irrigation	Concrete, Asphalt & Grading	Casework	Sheet Metal & Roofing	Doors, Frames & Hardware	Glazing & Storefront	Rough Carpentry, Plaster, Drywall & Insulation	Ceramic Tile	Acoustical (Ceiling & Visual Display Boards)	Flooring	Painting & Wallcovering	Specialties	Plumbing	HVAC	Electrical, Low Voltage & Fire Alarm Systems
		2	3	4	8	9	11	12	13	14	15	16	17	18	19	21	22
16	This Category Contractor shall include all supervision, materials, taxes, delivery costs, equipment, and installation labor required to perform the scope of work as defined herein in full accordance with the Contract Schedule, all of the Contract Documents, and all applicable codes, laws, and industry standards.	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
17	This Category Contractor is responsible for coordinating all inspections required for this scope of work. Inspection requests must be made to the Construction Manager at least forty-eight (48) hours prior to inspection. Category Contractor shall notify Construction Manager of all scheduled inspections and subsequent deficiency or approval status. Inspection time frames are part of the durations given in the project <u>Construction Schedule</u> .	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
18	This Category Contractor includes all items consistent with this scope of work that are indicated in the complete set of Contract Documents, Specifications and Addenda. This Category Contractor's scope of work is not limited to a particular set or part of the Contract Documents but rather the entire set of documents.	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
19	This Category Contractor will verify conditions related to this scope of work prior to the start of work. The Construction Manager shall be immediately notified in writing of any discrepancies between the Contract Documents and existing conditions. Failure to notify the Construction Manager of any discrepancies prior to start of work will indicate that the Category Contractor concurs that site conditions match the <u>Contract Documents</u> .	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
20	This Category Contractor shall designate an on site "safety officer" who shall be responsible for the safety of this Category Contractor's personnel and his associated Sub-Contractors – safety officer is to hold at a minimum an OSHA 10 Certification. The designated safety person shall be onsite at all times during the Category Contractors work operations. All Safety procedures and precautions shall fully comply with all OSHA and governing agency requirements. Copies of all accident reports and incident reports shall be immediately issued to the Owner.	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
21	This Category Contractor is to completely store and secure all materials, tools, and miscellaneous items and render them safe at the end of each day's work. At no time is material or equipment to be stockpiled outside of construction fencing. This Category Contractor shall provide and pay for security measures for all their onsite <u>stored materials, tools, and equipment</u> .	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
22	All components, equipment, and work including installation shall fully comply with current accessibility codes. This Category Contractor shall request specific written direction from Architect and/or Owner before proceeding with any work or ordering <u>any materials that are non-compliant</u> .	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
23	This Category Contractor must take all necessary precautions to prevent disturbing known or unknown existing (above ground and underground/under slab) utilities, and/or structures not noted to be removed in this scope of work. This Category Contractor shall notify the Construction Manager immediately upon disturbing said <u>utilities</u> .	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
24	Protect existing asphalt and/or concrete, striping and landscape/irrigation. Any and all damage will be this Category Contractor's responsibility to remove and/or replace to the Construction Manager's discretion. Re-stripe all areas affected by construction and/or damage. Power wash and clean all areas as required to restore <u>to the original condition before start of construction</u> .	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
25	Each Category Contractor shall have a foreman on site to over see the project. The job needs to be manned accordingly to complete each task per the construction <u>schedule within the allotted duration days</u> .	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
26	Provide and pay for all layout, staking and engineering as required to complete work in this <u>Category Contractor</u> .	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
27	All Category Contractors shall provide a minimum of a (3) three-yard trash container(s) for waste, trash, lunch trash and construction debris. This includes procurement of all hauling permits and/or dump fees which may be required. Containers shall meet the requirements of the SWPPP's regulations. This applies equally to any/all Sub-Contractors employed by the this Category Contractor. If this Category Contractor that fail to comply with this Work Scope Special Condition item, then a dumpster shall be provided for them and their contract charged accordingly. This items will be listed and billed on each month within the schedule of values.	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
28	Furnish and install all braces, brackets, and specialty support or mounting systems <u>which may be required to install work in this Category Contractor</u> .	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes

Addendum 3

01011 Work Scope Special Conditions

ITEM	DESCRIPTION:	Category Contractor															
		Demolition & Abatement	Landscape & Irrigation	Concrete, Asphalt & Grading	Casework	Sheet Metal & Roofing	Doors, Frames & Hardware	Glazing & Storefront	Rough Carpentry, Plaster, Drywall & Insulation	Ceramic Tile	Acoustical (Ceiling & Visual Display Boards)	Flooring	Painting & Wallcovering	Specialties	Plumbing	HVAC	Electrical, Low Voltage & Fire Alarm Systems
		2	3	4	8	9	11	12	13	14	15	16	17	18	19	21	22
29	Whenever the term "Contractor" or "General Contractor" is used anywhere within the Project Manual, Drawings, or any Addenda (including future addenda), said term shall be interpreted as the applicable Category Contractor.	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
30	All finishes should match adjacent finishes when patching in new work. Where items are cut, demolished, or removed, patch surfaces affected to match adjacent surface. Match material texture and pattern. Remove fasteners and anchors and patch holes.	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
31	If additional demolition is required, other than what is specifically noted on the contract documents for the Category 2 Contractor to perform, the Category Contractor needing to perform their associated work will be responsible for demolition, repairs, and patching to match existing as necessary. This applies also to items that are not otherwise stipulated within this Work Scope Special Conditions.	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
32	The Construction Manager & District shall be notified in writing no less than 48 hours prior to any site services, utilities or systems being shut down and/or interrupted. This needs to be coordinated and scheduled through the Construction Manager.	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
33	Furnish & install all sleeves required for work within the scope of this Category Contractor.	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
34	Any area found requiring de-watering in order to perform work shall be performed by this Category Contractor within the timeline given in a written notice from the Construction Manager.	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
35	This Contractor is to insure all door and window openings are protected at the end of each work day.	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
36	All Contractors are to provide a 30 minute clean up of their respective work areas at the end of each work day. Contractors are to remove and place all their trash, debris and excess materials in their own dumpsters. Their will be no community stockpiles of any trash, debris, spoils or excess materials allowed on this project.	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
37	Please reference the Limited Asbestos and Lead Survey provided by Heath Science Associates that is part of the Category 2 Contractor's scope. Please be aware of all areas needing abatement work prior to starting your scope of work and be sure clearances have been received prior to start of any associated work.	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
38	Contractors are to provide adequate protection of their interior and exterior finishes and equipment prior to any rain event throughout the duration of the project.	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
39	LMCCI has implemented Trimble Project Sight as the mandatory project documentation and processing program for this project. All Category Contractors will be required to sign up for the free account in order to use the program to view documents through links which will be forwarded by LMCCI, input Daily Reports, RFIs etc. The program is free of charge and required for use on this project. An email will be issued to each Category Contractor with a link to follow to join and create an account at the commencement of the project.	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
40	All contractors shall be responsible for providing their own lifts, scaffolding, cranes, and all other equipment needed to execute the work in their scope.	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
41	All submittals are to be submitted as a complete package with samples, product data and shop drawings included.	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
42	All Category Contractors are to reference the Geotechnical Report attached at the end of the Work Scope Special Conditions.	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
43	If this category contractor requests the removal of "batter boards" to perform their scope of work, they shall be responsible for the cost to re-establish the "batter boards".	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
44	Provide all layout in writing, for the demolition and removal of finishes scheduled to be removed by the Category 2 Contractor.	no	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
45	This Category Contractor shall include in its base bid all costs associated with BIM coordination including, but not limited to, costs to attend all Virtual Construction Coordination meetings. Contractor shall have a representative present at each weekly/biweekly meeting, as determined by the Construction Manager. Each representative shall be capable of manipulating the BIM model as it pertains to the scope of work within this category. BIM modeling shall be billed on a monthly basis until the "project model" is completed. Failure to attend all mandatory coordination meetings will result in monthly billing being withheld.		yes	yes	yes		yes	yes	yes		yes			yes	yes	yes	yes

ITEM	DESCRIPTION:	Category Contractor															
		Demolition & Abatement	Landscape & Irrigation	Concrete, Asphalt & Grading	Casework	Sheet Metal & Roofing	Doors, Frames & Hardware	Glazing & Storefront	Rough Carpentry, Plaster, Drywall & Insulation	Ceramic Tile	Acoustical (Ceiling & Visual Display Boards)	Flooring	Painting & Wallcovering	Specialties	Plumbing	HVAC	Electrical, Low Voltage & Fire Alarm Systems
		2	3	4	8	9	11	12	13	14	15	16	17	18	19	21	22
46	This Category Contractor shall comply with all the requirements for a complete virtual model as stipulated in the BIM Coordination Specifications. Any clashes in this category's scope of work caused by failure to properly coordinate with BIM modeling shall be this category contractor's full responsibility.		yes	yes	yes		yes	yes	yes		yes			yes	yes	yes	yes
47	Provide Ground Penetrating Radar Systems scanning on masonry and concrete walls as required for work in this Category Contractors scope.	yes		yes										yes	yes	yes	yes
48	This Category Contractor shall be responsible to make all repairs to irrigation and landscaping that is damaged as a result of executing work within this Category Contractor.	yes	yes	yes										yes	yes	yes	yes
49	This Contractor is to assume that all existing asphalt has petromat and shall remove and dispose of the asphalt accordingly as it pertains to work in the Category Contractors scope.	yes	yes	yes										yes	yes		yes
50	This Contractor is to assume that all existing concrete and asphalt is a minimum of 6" thick.	yes	yes	yes										yes	yes		yes
51	Provide all required and dimensioned backing, blocking, and opening information (including configuration information) in writing showing specific locations for work in this Category Contractor to the Construction Manager. (Information MUST be provided 5 days prior to start of Category 13 Contractor framing).		yes	yes	yes	yes	yes	yes	yes	yes				yes	yes	yes	yes
52	Provide all underground utility excavation (including dewatering of excavations if necessary), bedding, backfill, and re-compaction work as required to perform work within this Category.		yes	yes										yes	yes		yes
53	This Category Contractor shall saw-cut existing flatwork/asphalt as needed to install underground improvements. Once improvements are installed, trenches shall be backfilled flush with existing flatwork/asphalt.		yes												yes		yes
54	This Category Contractor shall backfill and grade around all footings and/or foundations upon completion of their respective work.			yes										yes			
55	Provide all welding as required on reinforcing bar in order to install your respective work.			yes										yes			
56	All gypsum board and plaster needed to be removed and patched back which is not specifically shown on demolition drawings, shall be that Category Contractor's responsibility needing to perform their said respective work. Please note, work for installation of backing is described in another item. This item pertains to all other installations.								yes					yes	yes	yes	yes
57	Supply all bolts, anchors, reglets, and anchor bolts (with nuts and washers) to the Category 4 Contractor which are required to be cast in concrete, including templates, properly identified, and detail layout sheets as needed and/or required. Embeds must be provided in sufficient time to cause no delay to the Category 4 Contractor. This Category Contractor shall walk and confirm that all anchor bolts are installed in the correct locations prior to the concrete being poured. If any are missed and or in wrong location after the concrete has been poured, this Category Contractor shall provide and install anchor bolts as required.								yes					yes	yes		yes
58	This Category Contractor is to provide Ram Board at all new flooring locations as applicable for their installations.									yes		yes					
59	This Category Contractor is to provide all safe off, disconnecting and capping of existing utilities for all relocatable classrooms indicated to be removed or demolished in the Contract Documents.														yes	yes	yes
60	Provide all final connections to kitchen equipment to provide a complete operable system.														yes	yes	yes
61	Provide sleeves from all wall penetrations into the suspended ceilings to conceal all wires.														yes	yes	yes
62	This Category Contractor shall demolish any concrete and finishes as needed to properly install all work within this category not specifically called out in the drawings for Category 2 Contractor to demolish. This includes all patch back to match existing conditions.												no		yes	yes	yes
63	This Category Contractor shall provide points of connection at new buildings for their applicable utilities.														yes	yes	yes
64	Completely furnish & properly install all Unistrut NOT shown on the Structural Drawings of the Construction Documents, but required by this Category Contractor in order to properly complete and/or support their respective work.													yes	yes	yes	yes
65	This Category Contractor shall coordinate cut outs for case work, mill work, or other equipment as required.													yes	yes	yes	yes
66	Furnish and install access doors (rated and non-rated) required by code for work within this category whether or not shown in the Contract Documents.													yes	yes	yes	yes

Addendum 3

01011 Work Scope Special Conditions

ITEM	DESCRIPTION:	Category Contractor															
		Demolition & Abatement	Landscape & Irrigation	Concrete, Asphalt & Grading	Casework	Sheet Metal & Roofing	Doors, Frames & Hardware	Glazing & Storefront	Rough Carpentry, Plaster, Drywall & Insulation	Ceramic Tile	Acoustical (Ceiling & Visual Display Boards)	Flooring	Painting & Wallcovering	Specialties	Plumbing	HVAC	Electrical, Low Voltage & Fire Alarm Systems
		2	3	4	8	9	11	12	13	14	15	16	17	18	19	21	22
67	Furnish and properly install all escutcheons for pipe penetrations as required for work within this Category.													yes	yes	yes	yes
68	Immediately after the acoustical ceiling grid has been installed in a room or area, jointly walk with the Category 15 Contractor and locate light fixture and diffusers so the Category 15 Contractor can immediately install support wires prior to installation of fixtures and diffusers.															yes	yes
69	<i>This Category Contractor is to reference the DSA 103-19 (23 pages) Testing and Inspection Reports attached to the end of this section for any special inspections required on this project. Please coordinate any special inspections as it relates to work within this category.</i>	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
70	<i>This Category Contractor shall include in its base bid all work pertaining to this Category in the "Relocatables Drawing Set". This drawing set is to be built in conjunction with the Project Drawings, Project Manual & Specifications.</i>	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
71	spare																
72	spare																
73	spare																
74	spare																
75	spare																
76	spare																
77	spare																
78	spare																
79	Unless specifically noted otherwise within these Work Scope Special Conditions this Category Contractor shall be responsible for all demolition.	yes															
80	This Category Contractor to provided temporary plywood panels including all fasteners and blocking, approved by the Construction Manager, to secure building after demolition of windows, doors and openings.	yes															
81	This Category Contractor shall demo floor slabs in all new interior restroom's so that others can complete their work.	yes															
82	This Category Contractor shall provide all Abatement as specified in the Limited Asbestos and Lead Survey.	yes															
83	Cutting of trees and delivery of wood to district.	yes															
84	This Category Contractor is to remove all thermal insulation from walls and ceilings where new insulation is scheduled to be installed.	yes															
85	This Category Contractor is responsible to remove all adhesive and mastic left from demolition of the flooring and wall materials.	yes															
86	This Category Contractor shall remove all site fencing and walls including associated footings regardless of depth.	yes															
87	This Category Contractor is to include to their base bid the removal and disposal of 500 lineal feet of transite pipe and (5) move ins.	yes															
88	This Contractor is to figure that the entire foot print of each building has furring strips on roofs 16" on center. This Contractor shall also figure to remove all furring strips and all nails, screws and staples as part of their base bid.	yes															
89	This Category Contractor is to include in their base bid 4 men @ 40 hours each and (5) 40 yard bins including dump fees for district furniture removal.	yes															
90	This Category Contractor is to figure to remove any and all finishes from all walls, ceilings and or roofs down to bare studs, joists and / or masonry block and brick.	yes															
91	This Category Contractor shall figure to include all sub ceiling to have drywall above finish ceiling and it is to be abated. This is to include the entire footprint of every building.	yes															
92	This Category Contractor shall include in their base bid to remove and dispose of all existing shrubs whether shown to be removed on the drawings or not.	yes															
93	This Contractor is to figure removal and disposal of existing finishes intended to receive new site finishes per the contract documents. Whether shown on the demolition drawings or not.	yes															
94	This Contractor is to include in their base bid all demolition of existing walls for others to install new openings. This is in addition to what is shown on the building demolition drawings and shall include making all existing openings bigger as needed.	yes															
95	This Category Contractor shall be responsible for the removal and disposal of all concrete equipment pads and underground concrete duct chases.	yes															
96	This category contractor is to remove and dispose of existing shade structure including footings complete up to 10 feet deep.	yes															

Addendum 3

01011 Work Scope Special Conditions

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		Demolition & Abatement	Landscape & Irrigation	Concrete, Asphalt & Grading	Casework	Sheet Metal & Roofing	Doors, Frames & Hardware	Glazing & Storefront	Rough Carpentry, Plaster, Drywall & Insulation	Ceramic Tile	Acoustical (Ceiling & Visual Display Boards)	Flooring	Painting & Wallcovering	Specialties	Plumbing	HVAC	Electrical, Low Voltage & Fire Alarm Systems
		2	3	4	8	9	11	12	13	14	15	16	17	18	19	21	22
97	This Category Contractor is to provide the demolition and disposal of all existing portable/modular classrooms as shown in the Contract Documents including all concrete and wood foundations including back filling of any voids left from demolition.	yes															
98	This Category Contractor shall demolish portable/modular classrooms C4 and C5 in their entirety and relocate the storage container adjacent to it. Please note this contractor is to provide a line item on their schedule of values for this work.	yes															
99	spare																
100	spare																
101	spare																
102	spare																
103	spare																
104	spare																
105	spare																
106	spare																
107	spare																
108	spare																
109	This Category Contractor shall be responsible for all soil harvesting and soil preparation as called for in the contract documents.		yes														
110	This Category Contractor shall provide all base as called for on the Landscaping Drawings.		yes														
111	Provide and install all irrigation sleeves as shown on the Contract Documents and provide the same under ALL hardscaped areas whether shown or not.		yes														
112	This Category Contractor shall cut, cap, and re-route existing irrigation lines around areas that are located within the entire scope of work area, as needed. This shall take place prior to any contractor starting work.		yes														
113	This Category Contractor shall maintain existing landscape on the entire campus throughout the duration of the project, this includes keeping irrigation systems up and running, mowing grass, trimming trees and plants as needed and installing protection barriers at existing trees.		yes														
114	<i>This Category Contractor is to provide in their base bid 60,000 s.f. of grading and hydro seeding as directed by the Construction Manager.</i>		yes														
115	Provide (3) lodgepole tree stakes for each tree,		yes														
116	Re-route existing irrigation and provide new sprinkler heads along new fencing.		yes														
117	This Category Contractor is to include in their bid the replacement of existing hydraulic irrigation valves with (16) new specified electric valves in addition to what is shown on the contract documents. This is to include all trenching and irrigation control wires so that existing hydraulic system can be removed completely.		yes														
118	Contractor to provide (4) Quick Coupler Valves to be located in the field by Owner.		yes														
119	<i>At the direction of the Construction Manager, this Category Contractor shall restore all damaged landscaping at the laydown area to match existing landscape with hydroseed. Laydown area is approximately 90,000 sq ft. Please reference CMSK-1.</i>		yes														
120	<i>This Category Contractor shall restore the landscaping under portable/modular classrooms C4 and C5 and the storage container adjacent to it once they are demolished/relocated. Area shall be restored with sod to match existing landscape. Please note this contractor is to provide a line item on their schedule of values for this work. Reference SK-01.</i>		yes														
121	<i>This Category Contractor shall include in its base bid an additional 30,000 sq ft of sod at areas disturbed by utility trenching scheduled to remain. Sod blend shall match existing and shall be submitted for review and approval prior to construction. Please note this contractor is to provide a line item on their schedule of values for this work.</i>		yes														
122	<i>This Category Contractor shall include in its base 1,000 sq ft of landscape/irrigation and (4) trees as indicated in SK-03</i>		yes														
123	spare																
124	spare																
125	spare																
126	spare																
127	spare																

ITEM	DESCRIPTION:	Category Contractor															
		Demolition & Abatement	Landscape & Irrigation	Concrete, Asphalt & Grading	Casework	Sheet Metal & Roofing	Doors, Frames & Hardware	Glazing & Storefront	Rough Carpentry, Plaster, Drywall & Insulation	Ceramic Tile	Acoustical (Ceiling & Visual Display Boards)	Flooring	Painting & Wallcovering	Specialties	Plumbing	HVAC	Electrical, Low Voltage & Fire Alarm Systems
		2	3	4	8	9	11	12	13	14	15	16	17	18	19	21	22
128	spare																
129	spare																
130	spare																
131	Provide all dewatering of the site grading operations until new finishes have been completed unless noted otherwise in these work scope special conditions.			yes													
132	Provide all sub excavation, re-compaction, earthwork, and rough grading of site as required by the contract documents to a maximum tolerance of +/- 1/10th ft. This Category Contractor shall provide all grading and backfill required, along with any import and/or export required for the site work improvements. Assume DTSC soil sample analysis takes 10 days to perform, Contractor is to plan in advance for testing time in order to not delay the Construction Schedule. This includes the stockpiling of approved imported fill or export of excess soils which have been stock piled. Costs associated with import and/or export material shall be included within the bid. Grades shall be certified prior to turning over to any other Contractor including yourself.			yes													
133	Provide and pay for construction water for the duration of the project, including the cost for obtaining a temporary hydrant meter.			yes													
134	Provide, pay for, and maintain "Extreme Plates" Tubular Track Out Grate, Bottomless and "Extreme Plates" Professional Heavy-Duty Curb Ramps and graveled area at the entrance of the construction staging area for the duration of the project. Reference SCAQMD Rule 403 standards and SWPPP requirements (BMP's) for site track-out for the duration of the project. Maintenance will be required per the Best Management Practice and as directed by Construction Manager. Provide and install gravel within the entire construction staging area. Upon completion of construction, gravel shall be removed from the site.			yes													
135	Install all embedded rough framing hardware supplied "free on board destination" to the job site by others which embeds into work performed by this trade.			yes													
136	Provide and install all concrete housekeeping pads as required by the contract documents.			yes													
137	This Category Contractor to provide all hardscape shown in the hardscape drawings with the exception to the playground equipment.			yes													
138	This Category Contractor shall install all Lithocrete Aggregate flatwork as shown in the contract documents.			yes													
139	This Category Contractor is to remove and turn over to the Ocean View School District, any fencing and gates scheduled to be removed per the contract documents			yes													
140	This Category Contractor shall furnish and install complete all concrete and reinforcement as shown for electrical fixtures/light standards, parking lot lights, light columns, light bollards, and equipment pads at locations as indicated in the contract documents.			yes													
141	This Category Contractor shall grout all parking lot light standards, light column, and light bollard base plates as required.			yes													
142	This Category Contractor shall furnish and install all dry packing of structural and miscellaneous steel where said items attach to work installed by this category.			yes													
143	<i>This Category Contractor shall install 3" of asphalt over 6" of base at the laydown yard and temp road with redwood header along the perimeter. As directed by the Construction Manager, this Category Contractor shall remove and dispose of all temp asphalt. Please reference CMSK-1</i>			yes													
144	Provide all asphalt slurry coat on all existing asphalt hardscape.			yes													
145	This Category Contractor shall provide and install all Knox boxes shown on Contract Documents.			yes													
146	This Category Contractor shall provide and install all wheel stops as shown on the contract documents.			yes													
147	This Category Contractor shall provide and install all bollards as shown on the contract documents.			yes													
148	This Category Contractor shall provide and install all concrete mow curb as shown on the Contract Documents.			yes													
149	This Category shall provide and install all base and rebar as called for on the Architectural, Civil and Structural Drawings under any concrete and asphalt areas.			yes													

ITEM	DESCRIPTION:	Category Contractor															
		Demolition & Abatement	Landscape & Irrigation	Concrete, Asphalt & Grading	Casework	Sheet Metal & Roofing	Doors, Frames & Hardware	Glazing & Storefront	Rough Carpentry, Plaster, Drywall & Insulation	Ceramic Tile	Acoustical (Ceiling & Visual Display Boards)	Flooring	Painting & Wallcovering	Specialties	Plumbing	HVAC	Electrical, Low Voltage & Fire Alarm Systems
		2	3	4	8	9	11	12	13	14	15	16	17	18	19	21	22
150	This Category Contractor is to provide brick veneer cleaning and sealing at all exterior locations.			yes													
151	This Category Contractor to provide all masonry at wall infills to match existing finishes as shown on the Contract Documents.			yes													
152	This Category Contractor to provide concrete footing and rebar for the Marquee sign.			yes													
153	This Category Contractor shall provide and install all hardware, including panic hardware, associated with all gates for the fencing called out in the Contract Documents.			yes													
154	Furnish and install redwood headers wherever asphalt paving does not terminate against concrete, masonry, or existing asphalt paving for work on site. No raw or wild edges will be permitted.			yes													
155	This Category Contractor shall properly install and maintain all "Batter Boards" as directed by the Construction Manager and shall maintain them for use by all trades throughout the course of the project.			yes													
156	Thoroughly clean the bonding surfaces of all footings including the protruding reinforcing steel from same by sandblasting to the satisfaction of the District's Inspector.			yes													
157	This Category Contractor shall coordinate elevations of flatwork in all areas to allow other trades to set finishes in these areas when requested.			yes													
158	This Category Contractor shall include in their base bid to sack and patch 1,500 lineal feet of interior and/or exterior existing concrete curbs as directed by the Construction Manager. Please note this contractor is to provide a line item on their schedule of values for this work.			yes													
159	This Category Contractor shall properly re-grade adjacent finishes to new concrete and/or asphalt elevations to provide a smooth transition from existing to new. This shall include re-establishing landscape and irrigation to match existing.			yes													
160	This Category Contractor shall be responsible to adjust all existing electrical and plumbing items in order to provide new site concrete and asphalt work.			yes													
161	This Category Contractor shall provide and install all anchor bolts that are required to be drilled and epoxied.			yes													
162	Provide all temporary fencing with wind screen & toilets for areas of work. The fencing shall be the same layout of the erosion control drawing limit of work lines. This will include a minimum of 6 temporary toilets and 3 wash stations for the entire duration of the project per the schedule provided in the Bid Documents. Toilets shall be cleaned twice a week and per OSHA standards. Cleaning times shall be scheduled through the Construction Manager and coordinated with school site activities. Reference logistics plan CMSK - 01			yes													
163	This Category Contractor shall layout, furnish, & install all game line, parking lot and driveway striping, or any pavement markings shown on both asphalt and concrete surfaces as required per the Contract Documents.			yes													
164	Provide and maintain up to ten (10) 55-gallon trash cans with liners to be located by the Construction Manager for the duration of the project. This includes the disposing of accumulated trash in said trash cans on a daily basis and providing new liners when needed.			yes													
165	This Category Contractor shall grout all cavities between the stem walls and hollow metal and aluminum frames. This includes sack and patching the exposed portion of the concrete curb prior to exterior building paint.			yes													
166	This Category Contractor shall include in their bid, time and material to bush all existing curbs after demolition of finishes in order to provide a flush surface from existing studs to existing stem walls. Please note this contractor is to provide a line item on their schedule of values for this work.			yes													
167	This Category Contractor shall include (4) mobilizations for asphalt paving and base in their bid.			yes													
168	This Category Contractor is to provide in their base bid to remove and replace 5,000 sq ft of asphalt as directed by the Construction Manager. Please note this contractor is to provide a line item on their schedule of values for this work.			yes													
169	This Category Contractor is to provide all grinding and overlay of existing asphalt.			yes													
170	This Category Contractor shall install all contrasting striping at each stair tread as shown in the contract documents. Reference detail 21/A4.50			yes													

ITEM	DESCRIPTION:	Category Contractor															
		Demolition & Abatement	Landscape & Irrigation	Concrete, Asphalt & Grading	Casework	Sheet Metal & Roofing	Doors, Frames & Hardware	Glazing & Storefront	Rough Carpentry, Plaster, Drywall & Insulation	Ceramic Tile	Acoustical (Ceiling & Visual Display Boards)	Flooring	Painting & Wallcovering	Specialties	Plumbing	HVAC	Electrical, Low Voltage & Fire Alarm Systems
		2	3	4	8	9	11	12	13	14	15	16	17	18	19	21	22
171	This Category Contractor shall furnish, install and continually maintain all temporary erosion control and site drainage measures for the duration of the project. Measures to be per the Storm Water Pollution Prevention Plan (SWPPP) as called out in the Contract Documents, including all details. This is not an option of the contractor. This work must be in place at the start of the project. Costs for the installation and maintenance shall be included in this Category Contractor's bid. This Category Contractor shall also provide and maintain double wide shaker plates and rock at entry gates until the completion of project with a minimum of two (2) relocations, as directed by the Construction Manager (rock & plates must be minimum of 30' X50'). All other erosion control measures shall remain in place. This Category Contractor shall modify SWPPP measures as necessary per the project progress and remove and dispose of them as directed by the Construction Manager.			yes													
172	This Category Contractor shall provide a competent and certified person to service, repair, and monitor the erosion control plan and BMP's for the life of the project.			yes													
173	<i>This Category Contractor shall include in its base bid an additional 1,000 LF of decorative fencing to be installed at the discretion of the Construction Manager. This includes footings, rebar, mow curb, etc. for a complete installation.</i>			yes													
174	<i>This Category Contractor shall include in its base bid an additional 1,400 sq ft of concrete paving, 2,500 sq ft of asphalt paving, and 8 painted wheel stops as indicated in SK-01.</i>			yes													
175	<i>This Category Contractor shall remove 250 sq ft of brick relic/pavers from the "Walk of Stars", as indicated in SK-04, and reinstall them as directed by the Construction Manager.</i>			yes													
176	<i>This Category Contractor shall replace the chain-link fencing/gates shown on SK-02 with decorative fencing/gates.</i>			yes													
177	<i>This Category Contractor shall include in its base bid an additional 4,000 sq ft of concrete paving to replace the rubberized surface/concrete drainage slab as indicated in SK-03</i>			yes													
178	spare																
179	spare																
180	spare																
181	spare																
182	spare																
183	This Category Contractor shall furnish and install all countertop tube steel supports and steel angles as shown in detail 11/A10.40. This includes all required base plate and anchors/footings to install tube steel supports.				yes												
184	This Category Contractor shall make provisions (modesty panel and/or chase) for electrical and plumbing concealed access located within casework				yes												
185	This Category Contractor shall furnish and install all casework locks on all doors and drawers with keying to the appropriate room as shown on the Contract Documents.				yes												
186	This Category Contractor shall furnish and properly install all wood floor blocking as shown on detail 45/A10.40 for use in installing casework as shown in the Contract Documents.				yes												
187	This Category Contractor shall furnish and install the millwork door at the reception desk as shown on detail 5/A10.40. This includes all surface mounted spring pivots and associated hardware to ensure a complete and operable swinging door.				yes												
188	This Category Contractor shall furnish and install an additional 30 grommets at the discretion of the Construction Manager. Grommets shall match those specified in the contract documents.				yes												
189	<i>This Category Contractor shall include in its base bid new 7ft tall cabinets 12ft in length in all of the portable classrooms scheduled to remain; C1, C2, C3, and Multipurpose Building.</i>				yes												
190	spare																
191	spare																
192	spare																
193	spare																
194	spare																
195	spare																

ITEM	DESCRIPTION:	Category Contractor															
		Demolition & Abatement	Landscape & Irrigation	Concrete, Asphalt & Grading	Casework	Sheet Metal & Roofing	Doors, Frames & Hardware	Glazing & Storefront	Rough Carpentry, Plaster, Drywall & Insulation	Ceramic Tile	Acoustical (Ceiling & Visual Display Boards)	Flooring	Painting & Wallcovering	Specialties	Plumbing	HVAC	Electrical, Low Voltage & Fire Alarm Systems
		2	3	4	8	9	11	12	13	14	15	16	17	18	19	21	22
196	spare																
197	spare																
198	spare																
199	This Category Contractor is to remove all existing roofing as shown on the contract documents. This shall include the demolition and removal of all Mansard roofs (including wood framing) complete where shown on the documents.	no				yes											
200	Provide and install all roof gutters and downspouts at all buildings including portable classrooms, regardless if shown on the documents or not.					yes											
201	This Category Contractor shall remove and replace all parapet wall caps on all roofs whether shown on the drawings or not.					yes											
202	This Category Contractor is to provide all HVAC system sheet metal covers and enclosures.					yes											
203	This Category Contractor is to provide all roofing insulation as required for all roofing systems.					yes											
204	This Contractor is to provide all nailers, crickets, plywood skirting at all roof curbs and at roof access hatches as required by roofing manufacturer.					yes											
205	This Category Contractor shall install complete the personal protection tie-off as shown on detail 51/A2.30.					yes											
206	<i>This Category Contractor shall furnish and install a new roofing system RF-1 at Buildings A, B, K, existing Relo Toilet, and Multipurpose Building whether or not shown in the Contract Documents.</i>					yes											
207	This Contractor is to provide and install flashings around window and door openings as detailed in the drawings.					yes											
208	This Category Contractor is to include in their bid (48) hours of man power and materials to provide roof protection prior to rain events. This shall include up to (5) rain events for the project. Please note this contractor is to provide a line item on their schedule of values for this work.					yes											
209	spare																
210	spare																
211	spare																
212	spare																
213	spare																
214	spare																
215	spare																
216	spare																
217	spare																
218	spare																
219	This Contractor is to remove and dispose of any exterior doors and associated hardware shown to be replaced.	no					yes										
220	Completely furnish and properly install all door louvers, including any door louvers shown on the Mechanical Drawings.						yes										
221	This Category Contractor shall be responsible to remove, spread and/or stack doors so that the Category 17 Contractor can prep and paint prior to installation.						yes										
222	Completely caulk and seal the BACKSIDE of all exterior hollow metal frames and mullion joints prior to installing same within the work of this Category Contractor with a silicone waterproof caulk to ensure that said joints do not leak.						yes										
223	If existing hollow metal door frame is to be modified to accept new hardware it shall be this Category Contractors responsibility.						yes										
224	This Category Contractor to remove existing door hardware and dispose of in order to install new hardware.						yes										
225	Provide and install all material and/or hardware not specially called out in the hardware schedule, in order to provide a complete and operable Hollow Metal assembly.						yes	no									
226	After installation of NEW exterior hollow metal doors, and/or windows, provide temporary plywood in each opening until the new glass (glazing) is installed. This is to provide a secure opening against unwanted entrance into the buildings. This shall be continuously maintained until a new door, window, and/or wall is provided.						yes										
227	This Category Contractor to provide and install new door hardware at all new and existing relocatable to match system provided at the rest of the campus.						yes										

ITEM	DESCRIPTION:	Category Contractor															
		Demolition & Abatement	Landscape & Irrigation	Concrete, Asphalt & Grading	Casework	Sheet Metal & Roofing	Doors, Frames & Hardware	Glazing & Storefront	Rough Carpentry, Plaster, Drywall & Insulation	Ceramic Tile	Acoustical (Ceiling & Visual Display Boards)	Flooring	Painting & Wallcovering	Specialties	Plumbing	HVAC	Electrical, Low Voltage & Fire Alarm Systems
		2	3	4	8	9	11	12	13	14	15	16	17	18	19	21	22
228	This Category Contractor is to install all AD400 wireless access locks provided by Category 22 for all Hollow Metal or Wood Doors.						yes										
229	This Category Contractor is to Field undercut new and existing doors to 1/8" of finish floor.						yes										
230	This Category contractor shall field verify fit and function of existing /new doors frames and hardware. Failure to correctly identify existing conditions that impede the scope of work within this category will result in a zero cost change order.						yes										
231	<i>This Category Contractor shall purchase, order and install the permanent cylinders for all doors and gates, including portable classrooms C1, C2, C3, existing Relo Toilet and Multipurpose Building.</i>						yes										
232	spare																
233	spare																
234	spare																
235	spare																
236	spare																
237	spare																
238	spare																
239	spare																
240	spare																
241	spare																
242	This Category Contractor to provide and install all aluminum door frames per Contract Documents - all doors shall be prepared for new hardware.							yes									
243	This Category Contractor to provide and install all aluminum doors and associated door hardware, this shall include installation of AD400 wireless locks provided by Category 22 Contractor.							yes									
244	If existing aluminum door frame is to be modified to accept new hardware it shall be this Category Contractors responsibility.							yes									
245	Furnish and install glazing in metal and wood doors provided by others. Frames and stops provided by others.							yes									
246	Completely furnish and properly install all glass and glazing (including rated glass) as required in the Contract Documents.							yes									
247	This Category Contractor shall install all backer rod and caulking required at all aluminum frames, storefront frames, and operable glass walls.							yes									
248	This Category Contractor is to provide brake metal where aluminum frames abut existing and new columns whether or not shown in the Contract Documents.							yes									
249	This Category Contractor shall notify Category 2 Contractor in writing of the required demolition to accommodate new door and window frames within this category. Any additional demolition needed due to failure to provide written direction to Category 2 shall be this Category Contractor's full responsibility. This includes all associated costs and coordination with other trades.							yes									
250	spare																
251	spare																
252	spare																
253	spare																
254	spare																
255	spare																
256	spare																
257	spare																
258	spare																
259	spare																
260	In addition to what is shown on the plans, fire extinguisher cabinets shall be provided at all corridor exit doors and throughout the corridor at 150 feet intervals.								yes								
261	This Category Contractor is to provide TV backing. 2 locations per room including existing Relocatables.								yes								
262	This Category Contractor shall plane and/or fur all existing walls, new walls and ceilings. Contractor to provide a flush transition from existing or new studs to existing stem walls.								yes								
263	This Category Contractor shall provide and install all backing, blocking, block outs, etc. unless specifically noted otherwise within these Work Scope Special Conditions. This shall include all drywall wrapping, insulation and caulking as required per the Contract Documents.								yes								

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		2	3	4	8	9	11	12	13	14	15	16	17	18	19	21	22
264	This Category Contractor shall furnish and install all Simpson framing hardware.								yes								
265	Provide and install all backing as required and shown in the Food Service Drawings.								yes								
266	This Category Contractor shall prepare new openings scheduled to receive new doors and windows.								yes								
267	This Category Contractor, as part of their base bid, shall figure to provide a framed leveling roof curb for all mechanical equipment shown on the mechanical roof drawings.								yes								
268	This Category Contractor shall carefully coordinate the demolition with Category 2 Contractor and properly shore all building elements until structural steel and new framing is in place.								yes								
269	Completely furnish and properly install, all dimensional lumber (including shaped pieces) and all plywood sheathing and decking, unless specifically noted to be provided by another Category Contractor within these Work Scope Special Conditions.								yes								
270	Completely furnish and properly install all bolts which pass through structural or misc. steel items and enter into or pass through wood unless specifically noted within these Work Scope Special Conditions to be completed by another Category Contractor.								yes								
271	Furnish all embedded rough framing hardware (i.e. Simpson, hold down anchor bolts, catalog hardware) to the job site to the applicable Category Contractor installing same. Furnish layout drawings, diagrams and on-site layout/inspection as required to ensure proper layout by the installing Category Contractor.								yes								
272	This Category Contractor shall provide all shoring and temporary supports for walls, ceilings and roof structure as necessary.								yes								
273	Furnish and install all access doors (rated and non-rated) shown in the Construction Documents.								yes								
274	This Category Contractor shall furnish and install an additional twenty (10) fire-rated lockable access panels, 30" x 30", at the discretion of the Construction Manager. This is in addition to what is shown on the Contract Documents.								yes								
275	Completely furnish and properly install all building paper from finish floor to ceiling as required on all exterior walls including openings in same.								yes								
276	This Category Contractor is to provide demolition of drywall and plaster (if not specifically called out on the demolition drawings) for backing, blocking and/or associated hardware. This includes any and all patch back of drywall as necessary.	no							yes								
277	This Category Contractor is to provide all fire caulking, fire proofing, sound caulking, joint sealants as required in the Contract Documents.								yes								
278	This Category Contractor shall hold cement board flush with the top of the concrete curb in the restrooms.								yes								
279	This Category Contractor shall include in their bid, 5,000 sq ft of removal and replacement of existing or new drywall as directed by the Construction Manager. This is in addition to the work specifically called out in the contract documents and shall also include all mud and taping activities to match finishes. Please note this contractor is to provide a line item on their schedule of values for this work.								yes								
280	This Category Contractor shall include in their bid, 10,000 sq ft of removal and replacement of existing or new plaster as directed by the Construction Manager. This shall include removal to the nearest stud/backing at all locations and is in addition to the work specifically called out in the Contract Documents. Please note this contractor is to provide a line item on their schedule of values for this work.								yes								
281	Scribe gypsum board of walls and partitions to irregularities of structure and roof deck above.								yes								
282	Provide 4'X4'X5/8" plywood backing behind all large TV mounts.								yes								
283	spare																
284	spare																
285	spare																
286	spare																
287	spare																
288	spare																
289	spare																

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		2	3	4	8	9	11	12	13	14	15	16	17	18	19	21	22
290	spare																
291	spare																
292	spare																
293	This Category Contractor to provide all marble thresholds as indicated in the Contract Documents.									yes							
294	This Category Contractor shall infill below the bottom of cement board to the finish floor with mortar to provide a flush and plumb surface for the new tile surface finish.									yes							
295	Provide waterproof membrane behind ceramic tile.									yes							
296	This Category Contractor shall furnish and install mortar setting bed at all ceramic tile floors									yes							
297	spare																
298	spare																
299	spare																
300	spare																
301	spare																
302	This Category Contractor is to include in their base bid (15) boxes of ceiling tile and 40 man hours for the replacement of damaged ceiling tiles prior to turning over the project.										yes						
303	Provide and install wall and ceiling blocking, backing, supports etc. as required for T-Bar ceiling installation.										yes						
304	Furnish and install all hanger and support wires for light fixtures, electrical devices and HVAC registers in suspended acoustical ceilings for the Category 21 and 22 Contractors to attach their respective fixtures and devices.										yes					no	no
305	This Category Contractor will turn over the necessary quantity of ceiling tiles to Category Contractor 22 to install devices within the tile to be set in the T-Bar grid. Tile shall be turned over upon request by the Category Contractor 22.										yes						
306	This Category Contractor shall provide and install all Phase Change Material per the Contract Documents.										yes						
307	This Category Contractor shall provide new ceiling tiles within existing relocatable classrooms. Tiles to be the same as specified for all other classrooms.										yes						
308	This Category Contractor is to provide and install 2'X4' access panels at the location of every FC unit shown on the Mechanical Drawings.										yes						
309	spare																
310	spare																
311	spare																
312	spare																
313	spare																
314	spare																
315	spare																
316	spare																
317	spare																
318	<i>This Category Contractor shall include in its base bid an additional coat of epoxy finish in the kitchen. This shall be installed at the direction of the Construction Manager before turning the kitchen over to the District. Please note this contractor is to provide a line item on their schedule of values for this work.</i>											yes					
319	This Category Contractor shall furnish and install a transition strip at all changes of flooring material whether shown on the drawings or not.											yes					
320	This Category Contractor shall provide all prep work and/or skim coat to provide an acceptable surface for all floor covering. This shall include grinding of floors, bead blasting, and moisture mitigation as required. This is in addition to the removal of the floor adhesive activities performed by Category 2.											yes					
321	This Category Contractor is to include in their base bid self leveling materials up to 1/2 inch, to correct existing floor conditions where new flooring is to be installed.											yes					
322	spare																
323	spare																
324	spare																
325	spare																
326	spare																

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		2	3	4	8	9	11	12	13	14	15	16	17	18	19	21	22
327	This Category Contractor is responsible to provide a primer coat of paint at all gypsum board walls scheduled to receive vinyl covered wall panels, FRP, casework, stainless steel wall flashings, etc.												yes				
328	This Category Contractor shall provide and install all caulking and sealants as specified anywhere that receives paint except for areas or locations specifically noted otherwise in these Work Scope Special Conditions.												yes				
329	This Category Contractor shall apply a final coat of paint (interior and exterior) after completion of all finish work as directed by the Construction Manager.												yes				
330	This Category Contractor shall paint all exposed plumbing and electrical piping. Color shall be selected by the Architect.												yes				
331	Provide all painting at all construction areas including all existing interior and exterior walls and ceilings. In addition to the areas specifically called out in the Contract Documents, this Category Contractor shall include painting to match existing when other Category Contractors disturb finishes to perform their respective work. This Category Contractor shall paint all new work installed by others that is exposed and adjacent to existing painted work.												yes				
332	All new and existing hollow metal frames and wood doors shall be properly prepped and painted by this Category Contractor. This Category Contractor shall also repair all dings, dents, scratches, holes etc. This shall include all interior and exterior openings, inside and out, in areas of work noted in the Drawings.												yes				
333	Provide all paint touch up and final coats as necessary per the Architect and Owner's Punch List.												yes				
334	At all interior and exterior locations where painting is required due to all work associated with this project, provide coats of paint from corner to corner and floor to ceiling. Where items are cut, removed or demolished and painting is required to match adjacent surfaces, paint the entire plane of the repair.												yes				
335	This Category Contractor shall paint all existing surfaces within the construction area and adjacent to the new construction.												yes				
336	All existing exterior stucco walls shall be prepared for new paint finish. Color to match existing. All existing roof eaves, cable end, gutters, downspouts and roof posts shall be prepared for new paint finish - color to match existing.												yes				
337	This Category Contractor shall provide black paint at all exposed roof structure areas as indicated in the Contract Documents.												yes				
338	This Category Contractor shall back prime all exposed lumber.												yes				
339	This Category is to include in their base bid to paint all exterior walls and trim, handrails at each existing and new portable buildings.												yes				
340	This Category Contractor shall include in their bid labor and material to paint existing and new lunch shelters.												yes				
341	This Category Contractor shall provide sandblasting of all painted masonry walls in the interior and exterior walls and fences.												yes				
342	This Category Contractor shall paint the interior of the trash enclosure and can wash area with two coats of epoxy paint, including the floor, per the Health Department requirements, whether shown or not. Including any required prep work and block fill at masonry surfaces.												yes				
343	This Category Contractor shall paint all new and existing PIV, Fire Hydrants, and Backflow devices.												yes				
344	<i>This Category Contractor shall paint the entire interior and exterior of portable classrooms C1, C2, C3, existing Relo Toilet, and Multipurpose Building.</i>												yes				
345	spare																
346	spare																
347	spare																
348	spare																
349	spare																
350	spare																
351	spare																
352	spare																
353	spare																
354	Provide and install all handrails and guardrails per the Contract Documents													yes			
355	This Category Contractor shall furnish and install all appliances for the teacher's lounge as indicated in the Contract Documents.													yes			

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		2	3	4	8	9	11	12	13	14	15	16	17	18	19	21	22
356	This Category Contractor shall furnish and install all marker boards and whiteboards as indicated in the contract documents. All associated hardware, screws, brackets and/or mounts shall be provided and installed by this Category Contractor. Contractor shall figure for ghost grid finish and to be magnetic.													yes			
357	This Contractor is to provide an in depth in-service / training for all food service equipment. This is in addition to what each manufacture provides. Ocean View School District would like a demonstration with real food and full operation of each piece of equipment. THIS TRAINING WILL BE VIDEO RECORDED. IF THE MANUFACTURE DOES NOT WANT TO PROVIDE, THEN CONTRACTOR IS TO HIRE A 3RD PARTY THAT WILL ALLOW VIDEO RECORDING.													yes			
358	This Category Contractor to provide and install roller Mechoshade blinds at all portable classrooms, (2) 4' HX8'W windows per classroom.													yes			
359	<i>This Category Contractor shall provide twelve (20) general site and building cleanup operations including manpower, dumpsters, and all costs for debris disposal. This will take place when directed by the Construction Manager. Each clean up shall consist of (1) 40-yard roll off bin and (4) men at a minimum of 4 days each cleanup. Each cleanup will include vacuuming and cleaning the Construction jobsite Trailer</i>													yes			
360	Provide and install all metal decking per Contract Documents.													yes			
361	Provide and install all site furnishing, this includes any site footings needed for work within this Category Contractors scope of work.													yes			
362	This Category Contractor to provide and install all playground equipment including all concrete footings and play surfaces.													yes			
363	This Category Contractor is to install all owner furnished TV mounts, including all TV mounts in portable classroom. Figure (2) TV's per room including existing portable whether shown on the drawings or not.													yes			
364	A Total of 2 Final Cleanings shall be performed per Building per Attachment AA Final Construction / Building Clean Up included at the end of this Work Scope Special Conditions. THIS FINAL CLEANING SECTION STANDS ALONE AND DOES NOT RELIEVE THE PRIME CONTRACTOR OF HIS CLEANING RESPONSIBILITIES AS NOTED IN THE SPECIFICATIONS.													yes			
365	Provide final site clean up and power washing of all PCC concrete paving & asphaltic paving prior to the District taking occupancy. This shall take place at areas of construction, lay down areas and path of travel to and from work areas. This work to be performed after school hours or on Saturday. This is to be coordinated around school events and with the Construction Manager.													yes			
366	<i>This Category Contractor to include 160 hours of an operator and water truck as directed by the Construction Manager. This is in addition to all requirements by all contractors per the contract documents.</i>													yes			
367	<i>This Category Contractor to include 160 hours of an operator and street sweeper as directed by the Construction Manager. This is in addition to all requirements by all contractors per the contract documents.</i>													yes			
368	Contractor to include 2 weeks of project skilled labor to be used only as directed by the Construction Manager. A week shall consist of 40 hours of standard burden prevailing wage labor and 8 hours of overtime per week, total of 80 regular hours and 16 Over Time hours.													yes			
369	This Category Contractor shall furnish and install complete all lunch and shade structures with concrete footings.													yes			
370	<i>This Category Contractor shall provide a Security Guard Service for the entire duration of the project. At a minimum, (2) two armed uniformed patrol officers shall be provided from 2:30pm until 6:00am Monday thru Friday and 24 Hours a day for Saturdays, Sundays, and Holidays.</i>													yes			
371	Provide and install all ladders and supports as shown in the contract documents.													yes			
372	This Category Contractor shall include in their base bid all power and low voltage systems for all walk in coolers and freezers. This shall include but is not limited to all conduit, boxes, wires, lights, switches, modules, devices, to provide a complete and operable system.													yes			
373	Contractor to assure that all penetrations being made to the walk-in cooler and freezer are sealed tight.													yes			
374	This Category Contractor shall furnish and install all corner guards as shown in the Contract Documents.													yes			

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		2	3	4	8	9	11	12	13	14	15	16	17	18	19	21	22
375	<i>This Category Contractor shall include in its base bid (4) new 5ft x 8ft markerboards and (4) new 5ft x 8ft tackpanels in all portable classrooms scheduled to remain; C1, C2, C3, and Multipurpose Building.</i>													yes			
376	<i>This Category Contractor shall remove and replace the handrails at portable classrooms C1, C2, C3, existing Relo Toilet, and Multipurpose Building.</i>													yes			
377	<i>This Category Contractor shall provide a 44ft office trailer with a washroom for the duration of the project. Contractor shall connect plumbing and electrical services to the trailer. Upon project completion, this Category Contractor is to disconnect plumbing and electrical services connected to the Construction Management trailer and cut / cap said utilities 1' below grade.</i>													yes			
378	<i>This Category Contractor shall pay for the Qualified SWPPP Practitioner (QSP) for the project in accordance with the Storm Water Pollution Prevention Plan as called out in the Contract Documents. The Company used as the QSP will be selected by the Construction Manager. This item will be billed from the schedule of values on a monthly basis as in reflection to what is billed by the QSP Contractor and approved by the Construction Manager. The cost for this scope of work shall be reimbursed through this Category Contractor's allowance.</i>													yes			
379	spare																
380	spare																
381	spare																
382	spare																
383	spare																
384	spare																
385	Remove and replace existing domestic and irrigation backflows with Zurn Model 375.														yes		
386	This Category Contractor shall patch concrete and flooring where plumbing is to be removed and capped at areas not specifically shown to be demolished on the Demolition Drawings.														yes		
387	This Category Contractor shall remove and dispose of all plumbing utilities. This includes all water, gas, waste and vents lines back to their point of entry into the buildings.														yes		
388	Completely furnish and properly install all handicap protective insulation on waste and water lines as required by code.														yes		
389	This Category Contractor is to provide all demolition and new work as shown on the Plumbing Drawings.														yes		
390	This Category Contractor shall provide all plumbing for the mechanical equipment as shown on the Plumbing Drawings.														yes		
391	This Category Contractor shall furnish and install insulation on all new condensate lines located in all attic spaces whether shown or not.														yes		
392	This Category Contractor shall flush the entire storm and sewer systems and provide video recording of these systems prior to construction and after completion of construction. Contractor to provide digital copy of recordings as part of closeout documents.														yes		
393	This Category Contractor shall make all fire water, sewer, domestic water and storm drain points of connection out in the streets per the city requirements.														yes		
394	<i>This Category Contractor is to remove and replace 2,000 linear feet of existing site storm drain pipe including the replacement of (20) existing catch basins. Contractor to factor in trenching at a minimum depth of 4' feet and the use of 6" inch pipe. Trenching and piping to be provided as specified in the contract documents. This in addition to what is shown on the Contract Documents.</i>														yes		
395	This Category Contactor is to remove and replace 1000' linear feet of existing site sewer pipe including all cleanouts and cleanout covers as required by code. Contractor to factor in trancing at a minimum depth of 6 feet and the use of 4" inch pipe. Trenching and piping to be provided as specified in the contract documents. This is in addition to what is shown on the Contract Documents.														yes		
396	This Category Contractor shall furnish and install all condensate lines for all HVAC Units whether or not shown in the Contract Documents.														yes		
397	This Category Contractor shall perform all chlorination testing and reports for new water piping installed.														yes		

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		2	3	4	8	9	11	12	13	14	15	16	17	18	19	21	22
398	This Category Contractor is to include 40 manhours to cut and cap existing fire sprinkler system.														yes		
399	<i>This Category Contractor shall furnish and install a keyed Cam Lock on all Sloan sink doors. Cam Lock shall be McMaster Part #1770A924. Contractor to order sinks with orientation of fixtures in order of the following: Soap Dispenser, Water Faucet and Hand Dryer.</i>														yes		
400	spare																
401	spare																
402	spare																
403	spare																
404	spare																
405	spare																
406	spare																
407	spare																
408	spare																
409	All other plumbing needed in order to provide a complete and operable system NOT shown on the plumbing drawings shall be this Category Contractors responsibility.															yes	
410	This Category Contractor is to provide all demolition and new work as shown on the Mechanical Drawings, Mechanical Demolition Drawings, Mechanical Calculations, Mechanical Details, Mechanical Specifications, and anything with the Mechanical Engineer name on it to provide a complete and operable Mechanical System on this project.															yes	
411	This Category Contractor is to provide removal of all HVAC systems and equipment not scheduled to remain in there entirety .															yes	
412	This Category Contractor is to provide self leveling curbs for all mechanical equipment whether shown on the contract documents or not.															yes	
413	This Category Contractor shall provide all pipe roof supports as indicated in the Contract Documents. Reference detail 8/M5.02															yes	
414	spare																
415	spare																
416	spare																
417	spare																
418	spare																
419	spare																
420	spare																
421	spare																
422	<i>This Category Contractor is to include in its base bid all work associated with the approved Southern California Edison Approved Final Design Approved for Construction Drawing No. 1515634_0.01 set of drawings included in Addendum 3.</i>																yes
423	<i>This Category Contractor shall furnish AD400 wireless locks for portable classrooms C1, C2, C3, and Multipurpose Building.</i>																yes
424	This Category Contractor is to provide Cat 6A data cables for all low voltage systems.																yes
425	Where line voltage power for HVAC equipment, controls etc., is shown on the documents, it shall be assumed as typical throughout whether or not shown in the Contract Documents.																yes
426	This Category Contractor is to include in their base bid to cut all conduit scheduled to be removed in the Contractor Documents down to the floor slab. This includes removing all feeder wire and branch wire.																yes
427	This Category Contractor is to provide all backflow device tamper switches for the fire water systems whether or not shown in the Contract Documents.																yes
428	Provide adequate and proper electrical power for (and make final connections to) all Category Contractor's work requiring same whether or not noted in the Contract Documents.																yes
429	Carefully coordinate fire alarm system to provide all necessary means, engineering, and devices to ensure compatible signaling between work within Category 21 Contractor's scope of work with all other Category Contractors.																yes
430	Provide and maintain all temporary building lighting continuously during the life of the project. Provide per CAL/OSHA standards.																yes

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		2	3	4	8	9	11	12	13	14	15	16	17	18	19	21	22
431	This Category Contractor to provide a temp power service for the job site including temp power poles and meter, spectrum service (or equal) for a 12 month duration. Provide and maintain all temporary portable power (spider) boxes in all buildings, along with cords connecting same to power supply for use by all building trades during the life of the project. Provide per industry and OSHA standards. This also includes temporary power to the existing Gym for the use of the Construction Manager and Inspector. Include a network connection including a wireless router and (8) RJ45 jacks at locations determined by the Construction Manager. ALL TEMPORARY POWER AND DATA NEED TO BE RAN SO AS IT WILL NOT BE INTERRUPTED DURING THE DURATION OF THE PROJECT ACTIVITIES. If a new temporary service is needed for power or network, this category contractor shall provide as part of their bid. Including temp power poles with clearance above 20' at all drive approaches. Contractor to also include in their bid to provide, install and maintain exterior lights at all temp power poles. Please consider 200 amps for construction power and 100amps for CM office.																yes
432	This Category Contractor will take delivery of ceiling tiles from the Category 15 Contractor so as to install ceiling devices within the T-bar grid system prior to the installation of ceiling tile.																yes
433	Provide and install all conduit, J hooks, sleeves and pathways for the low voltage systems as indicated in the Contract Documents. Cabling and equipment to be provided and installed by this Category Contractor.																yes
434	Prior to any work commencing, review the entire existing electrical system's conditions and safe off all existing electrical power that is required to provide a safe working environment. Areas not affected by Construction shall remain up and running for the site staff.																yes
435	This Category Contractor shall install all underground exterior conduits including but not limited to layout, saw cutting, asphalt and concrete demo and disposal, excavation, conduit with pull strings, backfill, concrete/asphalt and/or irrigation/landscaping patch back & repair. Repair and/or restripe areas damaged or removed by this Category Contractor.																yes
436	Furnish and install all line voltage conduit and wire and all low voltage conduit only where required for work by other Category Contractors, unless specified otherwise in these Work Scope Special Conditions. All empty conduits to be installed with pull rope.																yes
437	<i>This Category Contractor is to provide all demolition and new work as shown on the Electrical Drawings, including the Theater Lighting and Design Sheets: QT1.01 and QT2.01</i>																yes
438	This Category Contractor shall provide and install HDMI, power and data connection to the back of all TV locations.																yes
439	This Category Contractor shall provide power and control to lighting switch for all exhaust fans.																yes
440	All telephone jacks shall be installed at 48" off finish floor and shall be located within 5' feet of each exiting door. A phone jack is to be installed in every room whether or not shown on the drawings.																yes
441	This Category Contractor is to provide and install the Marquee Sign. This contractor is to provide all necessary underground power and data to connect to the Marquee Sign. Footing to be provided by others.																yes
442	This Category Contractor shall remove existing fire alarm system within existing relocatable classrooms. This shall include installation of new to tie into new Fire Alarm System being provided throughout the project. This shall include all new underground and other devices to provide a complete and operable system.																yes
443	This Category Contractor shall furnish and install complete all cord reels.																yes
444	This Category Contractor shall remove and dispose of all interior and exterior electrical and low voltage, conduits, boxes, devices, panels, equipment etc. not intended to remain.																yes
445	This Category Contractor shall furnish and install HDMI path ways and cables from large TV's to small TV's.																yes
446	This Category Contractor is to provide weather hoods over AD400 wireless locks installed on exterior gates.																yes

Attachment AA
Final Construction/Building Cleanup Requirements

Below you will find a list of our requirements.

- Provide two rough cleaning for each building and of the site prior to final clean as directed by the Construction Manager. This includes, wipe down, sweep and removal of trash.
 - Execute final cleaning prior to final inspection.
 - Clean glass and all surfaces exposed to view, remove temporary labels, stains and foreign substances.
 - Vacuum carpet and all other soft surfaces.
 - Polish/wax and seal resilient floor surfaces with product directed by the district (3 coats).
 - Clean and wash all FRP walls.
 - Clean and polish all stainless steel.
 - Clean all food service equipment in and out.
 - Clean all plumbing fixtures to a sanitary condition.
 - Clean all toilet partitions and toilet accessories (remove all stickers as well).
 - Clean T-Bar ceilings.
 - Clean window ledges.
 - Clean and polish all casework inside and out – Polish (remove all pencil marks as well).
 - Clean all doors, frames and polish metal hardware surfaces.
 - Clean light fixtures lens that show dirt when lights are in the on position.
 - Clean walls, vinyl walls and ceilings of dust, dirt, stains, hand marks and like defects.
 - Wipe down operable walls and tracks.
 - Clean skylights inside and out.
 - Clean all ceramic tile floors & walls.
 - Police site for trash, sweep or hose clean exterior surfaces.
 - Clean & haul off site all construction trash, debris and materials at the end of the project.
 - High pressure wash all concrete & asphalt areas.
 - Wash down all exterior building/site surfaces including roofs, plaster walls, metal panels, metal roofing, masonry, and sheet metal surfaces.
 - Thoroughly sweep and wash down all building and site sidewalks, play surfaces, play equipment, athletic equipment, ramps, stairs, surrounding finishes.
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-

A-Final Walk Thru – A punch list will be established

B-Must carry liability and workers' compensation insurance

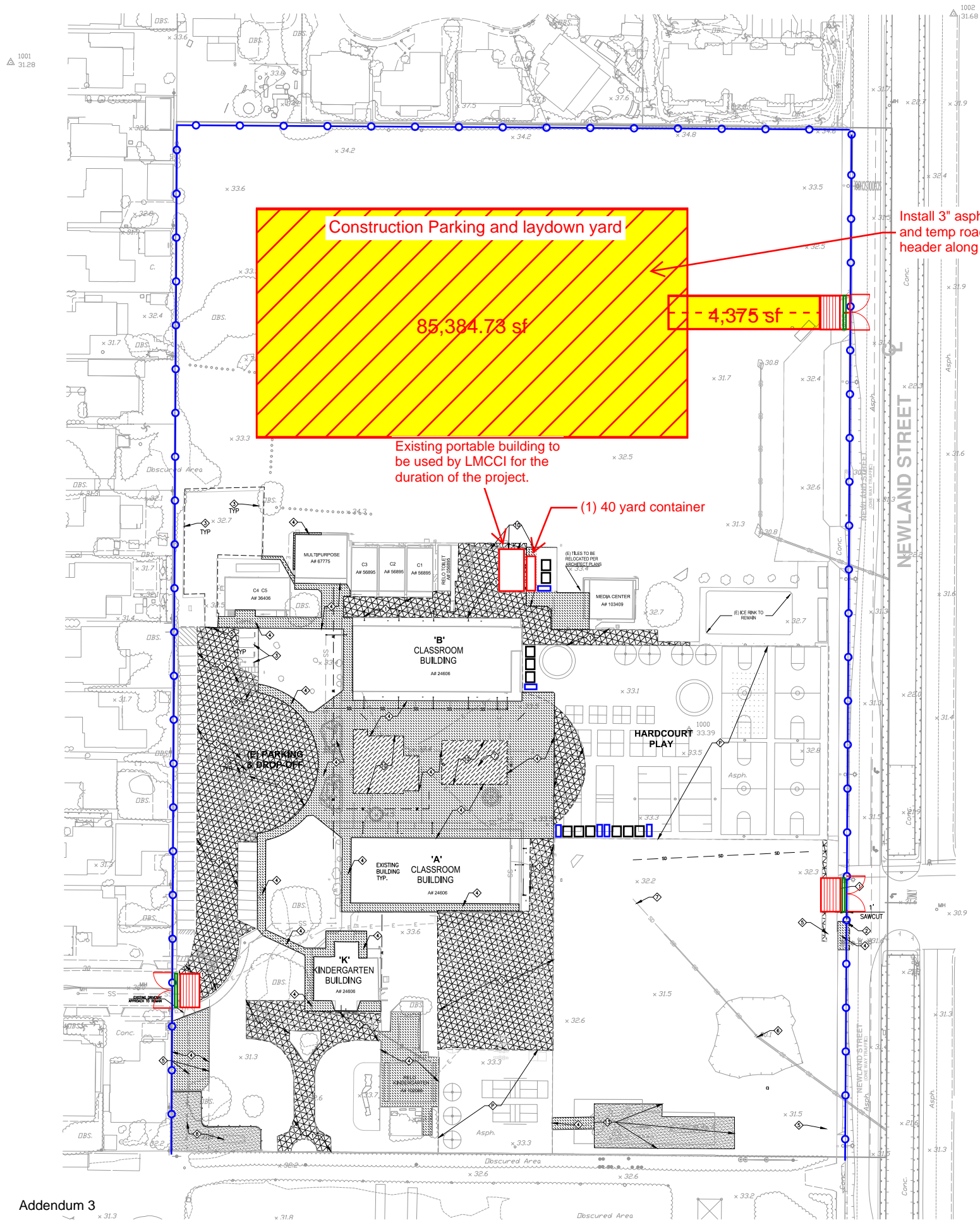
C-This is a Prevailing wage project

D-All man lifts and/or equipment needed to clean, shall be part of this bid price.

21-408 – Star View Elementary School Modernization

Attachment AA Final Construction/Building Cleanup Requirements

Addendum No. 1



Legend

- Temporary Toilet
- Hand Wash Station
- Temporary gates 24' width with hinges at each side
- SWPPP and SCAQM Compliant entrance including, but not limited to, new rock, fabric, wheel wash, and "Extreme Plates" Tubular Track Out Grate, Bottomless. See SWPPP plan for more detail
- "Extreme Plates" Professional Heavy-Duty Curb Ramps
- 6' Tall Fence with wind screen and driven posts



CLIENT: Ocean View School District

PROJECT: 20-408 Star View Elementary School

BID NO: ADDRESS:

DATE: 06-01-2022

ADDENDUM: 1

ADDENDUM: 1

SHEET: CMSK-1

DSA 103-19: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS, 2019 CBC

Application Number: 04-120623	School Name: Star View Elementary	School District: Ocean View
DSA File Number: 30-24	Increment Number: 1	Date Created: 2021-12-15 13:28:47

2019 CBC

IMPORTANT: This form is only a summary list of structural tests and some of the special inspections required for the project. Generally, the structural tests and special inspections noted on this form are those that will be performed by the Geotechnical Engineer of Record, Laboratory of Record, or Special Inspector. The actual complete test and inspection program must be performed as detailed on the DSA approved documents. The appendix at the bottom of this form identifies work NOT subject to DSA requirements for special inspection or structural testing. The project inspector is responsible for providing inspection of all facets of construction, including but not limited to, special inspections not listed on this form such as structural wood framing, high-load wood diaphragms, cold-formed steel framing, anchorage of non-structural components, etc., per Title 24, Part 2, Chapter 17A (2019 CBC).

****NOTE:** Undefined section and table references found in this document are from the CBC, or California Building Code.

KEY TO COLUMNS

1. TYPE	2. PERFORMED BY
Continuous – Indicates that a continuous special inspection is required	GE – Indicates that the special inspection shall be performed by a registered geotechnical engineer or his or her authorized representative.
Periodic – Indicates that a periodic special inspection is required	LOR – Indicates that the test or special inspection shall be performed by a testing laboratory accepted in the DSA Laboratory Evaluation and Acceptance (LEA) Program. See CAC Section 4-335.
Test – Indicates that a test is required	PI – Indicates that the special inspection may be performed by a project inspector when specifically approved by DSA.
	SI – Indicates that the special inspection shall be performed by an appropriately qualified/approved special inspector.

DSA 103-19: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS (SOILS), 2019 CBC

Application Number: 04-120623	School Name: Star View Elementary	School District: Ocean View
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Geotechnical Reports: Project has a geotechnical report, or CDs indicate soils special inspection is required by GE

	1. GENERAL:	Table 1705A.6		
	Test or Special Inspection	Type	Performed By	Code References and Notes
<input checked="" type="checkbox"/>	a. Verify that: <ul style="list-style-type: none">• Site has been prepared properly prior to placement of controlled fill and/or excavations for foundations.• Foundation excavations are extended to proper depth and have reached proper material.• Materials below footings are adequate to achieve the design bearing capacity.	Periodic	GE*	* By geotechnical engineer or his or her qualified representative. (See Appendix for exemptions.)

	2. SOIL COMPACTION AND FILL:	Table 1705A.6		
	Test or Special Inspection	Type	Performed By	Code References and Notes
<input type="checkbox"/>	a. Perform classification and testing of fill materials.	Test	LOR*	* Under the supervision of the geotechnical engineer.
<input checked="" type="checkbox"/>	b. Verify use of proper materials, densities and inspect lift thicknesses, placement and compaction during placement of fill.	Continuous	GE*	* By geotechnical engineer or his or her qualified representative. (Refer to specific items identified in the Appendix for exemptions where soils SI and testing may be conducted under the supervision of a geotechnical engineer or LOR's engineering manager. In such cases, the LOR's form DSA 291 shall satisfy the soil SI and test reporting requirements for the exempt items.)

DSA 103-19: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS (SOILS), 2019 CBC

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<input checked="" type="checkbox"/>	c. Compaction testing.	Test	LOR*	* Under the supervision of the geotechnical engineer. (Refer to specific items identified in the Appendix for exemptions where soils testing may be conducted under the supervision of a geotechnical engineer or LOR's engineering manager. In such cases, the LOR's form DSA 291 shall satisfy the soil test reporting requirements for the exempt items.)
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	3. DRIVEN DEEP FOUNDATIONS (PILES):	Table 1705A.7		
	Test or Special Inspection	Type	Performed By	Code References and Notes
<input type="checkbox"/>	a. Verify pile materials, sizes and lengths comply with the requirements.	Continuous	GE*	* By geotechnical engineer or his or her qualified representative.
<input type="checkbox"/>	b. Determine capacities of test piles and conduct additional load tests as required.	Test	LOR*	* Under the supervision of the geotechnical engineer.
<input type="checkbox"/>	c. Inspect driving operations and maintain complete and accurate records for each pile.	Continuous	GE*	* By geotechnical engineer or his or her qualified representative.
<input type="checkbox"/>	d. Verify locations of piles and their plumbness, confirm type and size of hammer, record number of blows per foot of penetration, determine required penetrations to achieve design capacity, record tip and butt elevations and record any pile damage.	Continuous	GE*	* By geotechnical engineer or his or her qualified representative.
<input type="checkbox"/>	e. Steel piles.	Provide tests and inspections per STEEL section below.		
<input type="checkbox"/>	f. Concrete piles and concrete filled piles.	Provide tests and inspections per CONCRETE section below.		

DSA 103-19: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS (SOILS), 2019 CBC

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<input type="checkbox"/>	g. For specialty piles, perform additional inspections as determined by the registered design professional in responsible charge.	*	*	* As defined on drawings or specifications.
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	4. CAST-IN-PLACE DEEP FOUNDATIONS (PIERS):	Table 1705A.8		
	Test or Special Inspection	Type	Performed By	Code References and Notes
<input type="checkbox"/>	a. Inspect drilling operations and maintain complete and accurate records for each pier.	Continuous	GE*	* By geotechnical engineer or his or her qualified representative. (See Appendix for exemptions.)
<input type="checkbox"/>	b. Verify pier locations, diameters, plumbness, bell diameters (if applicable), lengths and embedment into bedrock (if applicable); record concrete or grout volumes.	Continuous	GE*	* By geotechnical engineer or his or her qualified representative. (See Appendix for exemptions.)
<input type="checkbox"/>	c. Confirm adequate end strata bearing capacity.	Continuous	GE*	* By geotechnical engineer or his or her qualified representative. (See Appendix for exemptions.)
<input type="checkbox"/>	d. Concrete piers.	Provide tests and inspections per CONCRETE section below.		

	5. RETAINING WALLS:			
	Test or Special Inspection	Type	Performed By	Code References and Notes
<input type="checkbox"/>	a. Placement, compaction and inspection of backfill.	Continuous	GE*	1705A.6.1. * By geotechnical engineer or his or her qualified representative. (See Section 2 above).

DSA 103-19: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS (SOILS), 2019 CBC

Application Number: 04-120623	School Name: Star View Elementary	School District: Ocean View
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<input type="checkbox"/>	b. Placement of soil reinforcement and/or drainage devices.	Continuous	GE*	* By geotechnical engineer or his or her qualified representative.
<input type="checkbox"/>	c. Segmental retaining walls; inspect placement of units, dowels, connectors, etc.	Continuous	GE*	* By geotechnical engineer or his or her qualified representative. See DSA IR 16-3.
<input type="checkbox"/>	d. Concrete retaining walls.	Provide tests and inspections per CONCRETE section below.		
<input type="checkbox"/>	e. Masonry retaining walls.	Provide tests and inspections per MASONRY section below.		

	6. OTHER SOILS:			
	Test or Special Inspection	Type	Performed By	Code References and Notes
<input checked="" type="checkbox"/>	a. Soil Improvements	Test	GE*	Submit a comprehensive report documenting final soil improvements constructed, construction observation and the results of the confirmation testing and analysis to CGS for final acceptance. * By geotechnical engineer or his or her qualified representative.
<input checked="" type="checkbox"/>	b. Inspection of Soil Improvements	Continuous	GE*	* By geotechnical engineer or his or her qualified representative.
<input type="checkbox"/>	c.			

DSA 103-19: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS (Concrete), 2019 CBC

Table 1705A.3; ACI 318-14 Sections 26.12 & 26.13

Application Number: 04-120623	School Name: Star View Elementary	School District: Ocean View
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7. CAST-IN-PLACE CONCRETE				
	Test or Special Inspection	Type	Performed By	Code References and Notes
Material Verification and Testing:				
<input checked="" type="checkbox"/>	a. Verify use of required design mix.	Periodic	SI	Table 1705A.3 Item 5, 1910A.1.
<input checked="" type="checkbox"/>	b. Identify, sample, and test reinforcing steel.	Test	LOR	1910A.2; ACI 318-14 Section 26.6.1.2; DSA IR 17-10. (See Appendix for exemptions.)
<input checked="" type="checkbox"/>	c. During concrete placement, fabricate specimens for strength tests, perform slump and air content tests, and determine the temperature of the concrete.	Test	LOR	Table 1705A.3 Item 6; ACI 318-14 Sections 26.5 & 26.12.
<input checked="" type="checkbox"/>	d. Test concrete (f'_c).	Test	LOR	1905A.1.15; ACI 318-14 Section 26.12.
Inspection:				
<input checked="" type="checkbox"/>	e. Batch plant inspection: Periodic	See Notes	SI	Default of 'Continuous' per 1705A.3.3. If approved by DSA, batch plant inspection may be reduced to 'Periodic' subject to requirements in Section 1705A.3.3.1, or eliminated per 1705A.3.3.2. (See Appendix for exemptions.)
<input type="checkbox"/>	f. Welding of reinforcing steel.	Provide special inspection per STEEL, Category 19.1(d) & (e) and/or 19.2(g) & (h) below.		

8. PRESTRESSED / POST-TENSIONED CONCRETE (in addition to Cast-in-Place Concrete tests and inspections):
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DSA 103-19: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS (Concrete), 2019 CBC

Table 1705A.3; ACI 318-14 Sections 26.12 & 26.13

Application Number: 04-120623	School Name: Star View Elementary	School District: Ocean View
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	Test or Special Inspection	Type	Performed By	Code References and Notes
<input type="checkbox"/>	a. Sample and test prestressing tendons and anchorages.	Test	LOR	1705A.3.4, 1910A.3
<input type="checkbox"/>	b. Inspect placement of prestressing tendons.	Periodic	SI	1705A.3.4, Table 1705A.3 Items 1 & 9.
<input type="checkbox"/>	c. Verify in-situ concrete strength prior to stressing of post-tensioning tendons.	Periodic	SI	Table 1705A.3 Item 11. Special inspector to verify specified concrete strength test prior to stressing.
<input type="checkbox"/>	d. Inspect application of post-tensioning or prestressing forces and grouting of bonded prestressing tendons.	Continuous	SI	1705A.3.4, Table 1705A.3 Item 9; ACI 318-14 Section 26.13

	9. PRECAST CONCRETE (in addition to Cast-in-Place Concrete tests and inspections):			
	Test or Special Inspection	Type	Performed By	Code References and Notes
<input type="checkbox"/>	a. Inspect fabrication of precast concrete members.	Continuous	SI	ACI 318-14 Section 26.13.
<input type="checkbox"/>	b. Inspect erection of precast concrete members.	Periodic	SI*	Table 1705A.3 Item 10. * May be performed by PI when specifically approved by DSA.

	10. SHOTCRETE (in addition to Cast-in-Place Concrete tests and inspections):			
	Test or Special Inspection	Type	Performed By	Code References and Notes

DSA 103-19: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS (Concrete), 2019 CBC

Table 1705A.3; ACI 318-14 Sections 26.12 & 26.13

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<input type="checkbox"/>	a. Inspect shotcrete placement for proper application techniques.	Continuous	SI	1705A.19, Table 1705A.3 Item 7, 1908A.6, 1908A.7, 1908A.8, 1908A.9, 1908A.11, 1908A.12. See ACI 506.2-13 Section 3.4, ACI 506R-16.
<input type="checkbox"/>	b. Sample and test shotcrete (f'_c).	Test	LOR	1908A.5, 1908A.10.

	11. POST-INSTALLED ANCHORS:			
	Test or Special Inspection	Type	Performed By	Code References and Notes
<input checked="" type="checkbox"/>	a. Inspect installation of post-installed anchors	See Notes	SI*	1617A.1.19, Table 1705A.3 Item 4a (Continuous) & 4b (Periodic), 1705A.3.8 (See Appendix for exemptions). ACI 318-14 Sections 17.8 & 26.13. * May be performed by the project inspector when specifically approved by DSA.
<input checked="" type="checkbox"/>	b. Test post-installed anchors.	Test	LOR	1910A.5. (See Appendix for exemptions.)

	12. OTHER CONCRETE:			
	Test or Special Inspection	Type	Performed By	Code References and Notes
<input type="checkbox"/>	a.			

DSA 103-19: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS (Masonry), 2019 CBC

1705A.4; TMS 602-16, Tables 3 and 4.

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	13. STRUCTURAL MASONRY: 2000 psi			
	Test or Special Inspection	Type	Performed By	Code References and Notes
Material Verification and Testing: (See Appendix for exemptions.)				
<input checked="" type="checkbox"/>	a. Mill certificate indicates compliance with requirements for reinforcement, anchors, ties, fasteners and metal accessories. See item 7b for identification, sampling and testing of reinforcing steel.	Periodic	SI*	2103A.4; TMS 602-13 Article 1.5B.2 & 2.4. * To be performed by qualified LOR representative. Applicable testing by LOR. See IR 17-10.16 for unidentified reinforcing steel.
<input checked="" type="checkbox"/>	b. Producer's certificate of compliance for masonry units, mortar and grout materials.	Test	LOR	1705A.4, 2103A.2.1, 2103A.3, 2103A.5; TMS 602-16 Articles 2.1, 2.2, 2.6A and 2.6B, and Table 6 footnote 3.
<input checked="" type="checkbox"/>	c. Test masonry (f'_m).	Test	LOR	1705A.4. For Unit Strength: 2105A.3 (2114.6.1+); TMS 602-16 Articles 1.4B.2, 1.5B.1 & 1.5B.2. For Prism (required when $f'_m > 2000$ psi): 2105A.2; TMS 602-16 Articles 1.4B.3, 1.4B.4, 1.5B.1 & 1.5B.2.
<input checked="" type="checkbox"/>	d. Verify proportions of site prepared, premixed or preblended mortar and grout.	Periodic	SI	TMS 602-16 Table 3 Item 5, Table 4 Item 1a & 2d.
<input checked="" type="checkbox"/>	e. Test core-drilled samples.	Test	LOR	2105A.4. (See Appendix for exemptions.)
Inspection: (See Appendix for exemptions.)				
<input type="checkbox"/>	f. Inspect preparation of prisms.	Continuous	SI	TMS 602-16 Articles 1.4.B.3 & 1.4.B.4 & Table 4 Item 4.
<input checked="" type="checkbox"/>	g. Verify size, location and condition of all dowels, construction supporting masonry, etc.	Periodic	SI	

DSA 103-19: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS (Masonry), 2019 CBC

1705A.4; TMS 602-16, Tables 3 and 4.

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<input checked="" type="checkbox"/>	h. Verify size, grade and type of reinforcement and anchor bolts.	Periodic	SI	TMS 602-16 Table 4 Item 1c.
<input type="checkbox"/>	i. Welding of reinforcing steel.	TMS 602-16 Table 4 Item 3e. Provide special inspection per STEEL, Category 19.1(d) & (e) and/or 19.2(g) & (h) below.		
<input checked="" type="checkbox"/>	j. Inspect placement of reinforcement and connectors.	Continuous	SI	TMS 602-16 Table 4 Item 2c.
<input checked="" type="checkbox"/>	k. Inspect placement of masonry units and construction of mortar joints.	Periodic	SI	TMS 602-16 Table 4 Item 3b.
<input checked="" type="checkbox"/>	l. Verify preparation, construction and protection of masonry during cold weather (temperature below 40° F) or hot weather (temperature above 90° F).	Periodic	SI*	TMS 602-16 Table 4 Item 3f. * May be performed by the project inspector when specifically approved by DSA.
<input checked="" type="checkbox"/>	m. Inspect type, size and location of anchors and all other items to embedded in masonry including other details of anchorage of masonry to structural members, frames and other construction.	Continuous	SI	TMS 602-16 Table 4 Item 3d.
<input checked="" type="checkbox"/>	n. Inspect grout space prior to placement of grout.	Continuous	SI	TMS 602-16 Table 4 Item 2a.

14. VENEER OR GLASS BLOCK PARTITIONS: 1705A.4.1; TMS 602-16 Tables 3 and 4.				
	Test or Special Inspection	Type	Performed By	Code References and Notes
<input checked="" type="checkbox"/>	a. Verify proportions of siteprepared mortar and grout and/or verify certification of premixed mortar.	Periodic	SI	TMS 602-16 Table 3 Item 5 and Table 4 Items 1a & 2d.

DSA 103-19: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS (Masonry), 2019 CBC

1705A.4; TMS 602-16, Tables 3 and 4.

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<input checked="" type="checkbox"/>	b. Inspect placement of units and construction of mortar joints.	Periodic	SI	TMS 602-16 Table 4 Item 3b.
<input checked="" type="checkbox"/>	c. Inspect placement of reinforcement, connectors and anchors.	Periodic	SI	TMS 602-16 Table 4 Item 2c.
<input checked="" type="checkbox"/>	d. Inspect type, size and location of anchors and all other items to be embedded in masonry including details of anchorage of masonry to structural members, frames and other construction.	Periodic	SI	TMS 602-16 Table 4 Item 3d.
<input checked="" type="checkbox"/>	e. Verify preparation, construction and protection of masonry during cold weather (temperature below 40° F) or hot weather (above 90° F).	Periodic	SI*	TMS 602-16 Table 4 Item 3f. * May be performed by the project inspector when specifically approved by DSA.
<input checked="" type="checkbox"/>	f. Test veneer bond strength	Test	LOR	1410.2.1; TMS 402 Article 12.3.2.4. (Field constructed mock-up laboratory tested in accordance with ASTM C482).

15. POST-INSTALLED ANCHORS IN MASONRY:				
	Test or Special Inspection	Type	Performed By	Code References and Notes
<input checked="" type="checkbox"/>	a. Inspect installation of postinstalled anchors	See Notes	SI*	1617A.1.19, 1705A.4, Table 1705A.3 Item 4a (Continuous) & 4b (Periodic); ACI 318-14 Sections 17.8 & 26.13. * May be performed by the project inspector when specifically approved by DSA. (See Appendix for exemptions.)
<input checked="" type="checkbox"/>	b. Test post-installed anchors.	Test	LOR	1705A.4, 1910A.5. (See Appendix for exemptions.)

DSA 103-19: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS (Masonry), 2019 CBC

1705A.4; TMS 602-16, Tables 3 and 4.

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	16. OTHER MASONRY:			
	Test or Special Inspection	Type	Performed By	Code References and Notes
<input type="checkbox"/>	a.			

DSA 103-19: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS (Steel and Aluminum), 2019 CBC

1705A.2.1, Table 1705A.2.1; AISC 303-16, AISC 341-16, AISC 358-16, AISC 360-16; AISI S100-16

Application Number: 04-120623	School Name: Star View Elementary	School District: Ocean View
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17. STRUCTURAL STEEL, COLD-FORMED STEEL AND ALUMINUM USED FOR STRUCTURAL PURPOSES				
Material Verification and Testing:				
	Test or Special Inspection	Type	Performed By	Code References and Notes
<input checked="" type="checkbox"/>	a. Verify identification of all materials and: • Mill certificates indicate material properties that comply with requirements. • Material sizes, types and grades comply with requirements.	Periodic	*	Table 1705A.2.1 Item 3a 3c. 2202A.1; AISI S100-16 Section A3.1 & A3.2, AISI S240-15 Section A3 & A5, AISI S220-15 Sections A4 & A6. * By special inspector or qualified technician when performed off-site.
<input checked="" type="checkbox"/>	b. Test unidentified materials	Test	LOR	2202A.1.
<input checked="" type="checkbox"/>	c. Examine seam welds of HSS shapes	Periodic	SI	DSA IR 17-3.
Inspection:				
<input checked="" type="checkbox"/>	d. Verify and document steel fabrication per DSA-approved construction documents.	Periodic	SI	Not applicable to cold-formed steel light-frame construction, except for trusses (1705A.2.4).

18. HIGH-STRENGTH BOLTS: RCSC 2014				
Material Verification and Testing of High-Strength Bolts, Nuts and Washers:				
	Test or Special Inspection	Type	Performed By	Code References and Notes
<input checked="" type="checkbox"/>	a. Verify identification markings and manufacturer's certificates of compliance conform to ASTM standards specified in the DSA-approved documents.	Periodic	SI	Table 1705A.2.1 Items 1a & 1b, 2202A.1; AISC 360-16 Section A3.3, J3.1, and N3.2; RCSC 2014 Section 1.5 & 2.1; DSA IR 17-8 & DSA IR 17-9.

DSA 103-19: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS (Steel and Aluminum), 2019 CBC

1705A.2.1, Table 1705A.2.1; AISC 303-16, AISC 341-16, AISC 358-16, AISC 360-16; AISI S100-16

Application Number: 04-120623	School Name: Star View Elementary	School District: Ocean View
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<input checked="" type="checkbox"/>	b. Test high-strength bolts, nuts and washers.	Test	LOR	Table 1705A.2.1 Item 1c, 2213A.1; RCSC 2014 Section 7.2; DSA IR 17-8.
Inspection of High-Strength Bolt Installation:				
<input type="checkbox"/>	c. Bearing-type ("snug tight") connections.	Periodic	SI	Table 1705A.2.1 Item 2a, 1705A.2.6, 2204A.2; AISC 360-16 J3.1, J3.2, M2.5 & N5.6; RCSC 2014 Section 9.1; DSA IR 17-9.
<input checked="" type="checkbox"/>	d. Pretensioned and slip-critical connections.	*	SI	Table 1705A.2.1 Items 2b & 2c, 1705A.2.6, 2204A.2; AISC 360-16 J3.1, J3.2, M2.5 & N5.6; RCSC 2014 Sections 9.2 & 9.3; DSA IR 17-9. * "Continuous" or "Periodic" depends on the tightening method used.

	19. WELDING:	1705A.2.5, Table 1705A.2.1 Items 4 & 5; AWS D1.1 and AWS D1.8 for structural steel; AWS D1.2 for Aluminum; AWS D1.3 for cold-formed steel; AWS D1.4 for reinforcing steel; DSA IR 17-3 (See Appendix for exemptions.)		
Verification of Materials, Equipment, Welders, etc.:				
	Test or Special Inspection	Type	Performed By	Code References and Notes
☑	a. Verify weld filler material identification markings per AWS designation listed on the DSA-approved documents and the WPS.	Periodic	SI	DSA IR 17-3.
☑	b. Verify weld filler material manufacturer's certificate of compliance.	Periodic	SI	DSA IR 17-3.
☑	c. Verify WPS, welder qualifications and equipment.	Periodic	SI	DSA IR 17-3.

DSA 103-19: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS (Steel and Aluminum), 2019 CBC

1705A.2.1, Table 1705A.2.1; AISC 303-16, AISC 341-16, AISC 358-16, AISC 360-16; AISI S100-16

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19.1 SHOP WELDING:				
	Test or Special Inspection	Type	Performed By	Code References and Notes
<input checked="" type="checkbox"/>	a. Inspect groove welds, multi-pass fillet welds, single pass fillet welds > 5/16", plug and slot welds.	Continuous	SI	Table 1705A.2.1 Items 5a.1 4; AISC 360-16 (and AISC 341-16 as applicable); DSA IR 17-3.
<input checked="" type="checkbox"/>	b. Inspect single-pass fillet welds ≤ 5/16", floor and roof deck welds.	Periodic	SI	1705A.2.2, Table 1705A.2.1 Items 5a.5 & 5a.6; AISC 360-16 (and AISC 341-16 as applicable); DSA IR 17-3.
<input type="checkbox"/>	c. Inspect welding of stairs and railing systems.	Periodic	SI	1705A.2.1; AISC 360-16 (and AISC 341-16 as applicable); AWS D1.1 & D1.3; DSA IR 17-3.
<input type="checkbox"/>	d. Verification of reinforcing steel weldability other than ASTM A706.	Periodic	SI	1705A.3.1; AWS D1.4; DSA IR 17-3. Verify carbon equivalent reported on mill certificates.
<input type="checkbox"/>	e. Inspect welding of reinforcing steel.	Continuous	SI	Table 1705A.2.1 Item 5b, 1705A.3.1, Table 1705A.3 Item 2, 1903A.8; AWS D1.4; DSA IR 17-3.

19.2 FIELD WELDING:				
	Test or Special Inspection	Type	Performed By	Code References and Notes
<input checked="" type="checkbox"/>	a. Inspect groove welds, multi-pass fillet welds, single pass fillet welds > 5/16", plug and slot welds.	Continuous	SI	Table 1705A.2.1 Items 5a.1 4; AISC 360-16 (AISC 341-16 as applicable); DSA IR 17-3.
<input checked="" type="checkbox"/>	b. Inspect single-pass fillet welds ≤ 5/16".	Periodic	SI	Table 1705A.2.1 Item 5a.5; AISC 360-16 (AISC 341-16 as applicable); DSA IR 17-3.

DSA 103-19: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS (Steel and Aluminum), 2019 CBC

1705A.2.1, Table 1705A.2.1; AISC 303-16, AISC 341-16, AISC 358-16, AISC 360-16; AISI S100-16

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<input type="checkbox"/>	c. Inspect end-welded studs (ASTM A-108) installation (including bend test).	Periodic	SI	2213A.2; AISC 360-16 (AISC 341-16 as applicable); AWS D1.1; DSA IR 17-3.
<input checked="" type="checkbox"/>	d. Inspect floor and roof deck welds.	Periodic	SI	1705A.2.2, Table 1705A.2.1 Item 5a.6; AISC 360-16 (AISC 341-16 as applicable); AWS D1.3; DSA IR 17-3.
<input type="checkbox"/>	e. Inspect welding of structural cold-formed steel.	Periodic	SI*	1705A.2.5; AWS D1.3; DSA IR 17-3. The quality control provisions of AISI S240-15 Chapter D shall also apply. * May be performed by the project inspector when specifically approved by DSA.
<input type="checkbox"/>	f. Inspect welding of stairs and railing systems.	Periodic	SI*	1705A.2.1; AISC 360-16 (AISC 341-16 as applicable); AWS D1.1 & D1.3; DSA IR 17-3. * May be performed by the project inspector when specifically approved by DSA.
<input type="checkbox"/>	g. Verification of reinforcing steel weldability.	Periodic	SI	1705A.3.1; AWS D1.4; DSA IR 17-3. Verify carbon equivalent reported on mill certificates.
<input type="checkbox"/>	h. Inspect welding of reinforcing steel.	Continuous	SI	Table 1705A.2.1 Item 5b, 1705A.3.1, Table 1705A.3 Item 2, 1903A.8; AWS D1.4; DSA IR 17-3.

20. NONDESTRUCTIVE TESTING: 1705A.2.1, Table 1705A.2.1; AISC 303-16, AISC 341-16, AISC 358-16, AISC 360-16; AISI S100-16				
	Test or Special Inspection	Type	Performed By	Code References and Notes
<input checked="" type="checkbox"/>	a. Ultrasonic	Test	LOR	1705A.2.1, 1705A.2.5; AISC 341-16 J6.2, AISC 360-16 N5.5; ANSI/ASNT CP-189, SNT-TC-1A; AWS D1.1, AWS D1.8; DSA IR 17-2.

DSA 103-19: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS (Steel and Aluminum), 2019 CBC

1705A.2.1, Table 1705A.2.1; AISC 303-16, AISC 341-16, AISC 358-16, AISC 360-16; AISI S100-16

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<input type="checkbox"/>	b. Magnetic Particle	Test	LOR	1705A.2.1, 1705A.2.5; AISC 341-16 J6.2, AISC 360-16 N5.5; ANSI/ASNT CP-189, SNT-TC-1A; AWS D1.1, AWS D1.8; DSA IR 17-2.
<input type="checkbox"/>	c.	Test	LOR	

21. STEEL JOISTS AND TRUSSES: 1705A.2.1, Table 1705A.2.1; AISC 303-16, AISC 341-16, AISC 358-16, AISC 360-16; AISI S100-16				
	Test or Special Inspection	Type	Performed By	Code References and Notes
<input type="checkbox"/>	a. Verify size, type and grade for all chord and web members as well as connectors and weld filler material; verify joist profile, dimensions and camber (if applicable); verify all weld locations, lengths and profiles; mark or tag each joist.	Continuous	SI	1705A.2.3, Table 1705A.2.3; AWS D1.1; DSA IR 22-3 for steel joists only. 1705A.2.4; AWS D1.3 for cold-formed steel trusses.

22. SPRAY APPLIED FIRE-PROOFING: 1705A.2.1, Table 1705A.2.1; AISC 303-16, AISC 341-16, AISC 358-16, AISC 360-16; AISI S100-16				
	Test or Special Inspection	Type	Performed By	Code References and Notes
<input type="checkbox"/>	a. Examine structural steel surface conditions, inspect application, take samples, measure thickness and verify compliance of all aspects of application with DSA-approved documents.	Periodic	SI	1705A.14.
<input type="checkbox"/>	b. Test bond strength.	Test	LOR	1705A.14.6.

DSA 103-19: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS (Steel and Aluminum), 2019 CBC

1705A.2.1, Table 1705A.2.1; AISC 303-16, AISC 341-16, AISC 358-16, AISC 360-16; AISI S100-16

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<input type="checkbox"/>	c. Test density.	Test	LOR	1705A.14.5.
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	23. ANCHOR BOLTS AND ANCHOR RODS:			
	Test or Special Inspection	Type	Performed By	Code References and Notes
<input checked="" type="checkbox"/>	a. Anchor Bolts and Anchor Rods	Test	LOR	Sample and test anchor bolts and anchor rods not readily identifiable per procedures noted in DSA IR 17-11.
<input type="checkbox"/>	b. Threaded rod not used for foundation anchorage.	Test	LOR	Sample and test threaded rods not readily identifiable per procedures noted in DSA IR 17-11.

	Other Steel			
	Test or Special Inspection	Type	Performed By	Code References and Notes
<input type="checkbox"/>	a.			

Appendix: Work Exempt from DSA Requirements for Structural Tests / Special Inspections

Application Number: 04-120623	School Name: Star View Elementary	School District: Ocean View
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Exempt items given in DSA IR A-22 or the 2019 CBC (including DSA amendments) and those items identified below with a check mark by the design professional are NOT subject to DSA requirements for the structural tests / special inspections noted. **Items marked as exempt shall be identified on the approved construction documents.** The project inspector shall verify all construction complies with the approved construction documents.

	SOILS:
<input type="checkbox"/>	1. Deep foundations acting as a cantilever footing designed based on minimum allowable pressures per CBC Table 1806A.2 and having no geotechnical report for the following cases: A) free standing sign or scoreboard, B) cell or antenna towers and poles less than 35'-0" tall (e.g., lighting poles, flag poles, poles supporting open mesh fences, etc.), C) single-story structure with dead load less than 5 psf (e.g., open fabric shade structure), or D) covered walkway structure with an apex height less than 10'-0" above adjacent grade.
<input type="checkbox"/>	2. Shallow foundations, etc. are exempt from special inspections and testing by a Geotechnical Engineer for the following cases: A) buildings without a geotechnical report and meeting the exception item #1 criteria in CBC Section 1803A.2 supported by native soil (any excavation depth) or fill soil (not exceeding 12" depth per CBC Section 1804A.6), B) soil scarification/recompaction not exceeding 12" depth, C) native or fill soil supporting exterior non-structural flatwork (e.g., sidewalks, site concrete ramps, site stairs, parking lots, driveways, etc.), D) unpaved landscaping and playground areas, or E) utility trench backfill.

	CONCRETE/MASONRY:
<input checked="" type="checkbox"/>	1. Post-installed anchors for the following: A) exempt non-structural components (e.g., mechanical, electrical, plumbing equipment - see item 7 for "Welding") given in CBC Section 1617A.1.18 (which replaces ASCE 7-16, Section 13.1.4) or B) interior nonstructural wall partitions meeting criteria listed in exempt item 3 for "Welding."
<input type="checkbox"/>	2. Concrete batch plant inspection is not required for items given in CBC Section 1705A.3.3.2 subject to the requirements and limitations in that section.

Appendix: Work Exempt from DSA Requirements for Structural Tests / Special Inspections

Application Number: 04-120623	School Name: Star View Elementary	School District: Ocean View
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<input type="checkbox"/>	3. Non-bearing non-shear masonry walls may be exempt from certain DSA masonry testing and special inspection items as allowed per DSA IR 21-1.16. Refer to construction documents for specific exemptions accordingly for each applicable wall condition.
<input type="checkbox"/>	4. Epoxy shear dowels in site flatwork and/or other non-structural concrete.
<input checked="" type="checkbox"/>	5. Testing of reinforcing bars is not required for items given in CBC Section 1910A.2 subject to the requirements and limitations in that section.

	Welding:
<input checked="" type="checkbox"/>	1. Solid-clad and open-mesh gates with maximum leaf span or rolling section for rolling gates of 10' and apex height less than 8'-0" above lowest adjacent grade. When located above circulation or occupied space below, these gates are not located within 1.5x gate/fence height (max 8'-0") to the edge of floor or roof.
<input type="checkbox"/>	2. Handrails, guardrails, and modular or relocatable ramps associated with walking surfaces less than 30" above adjacent grade (excluding post base connections per the 'Exception' language in Section 1705A.2.1); fillet welds shall not be ground flush.
<input type="checkbox"/>	3. Non-structural interior cold-formed steel framing spanning less than 15'-0", such as in interior partitions, interior soffits, etc. supporting only self weight and light-weight finishes or adhered tile, masonry, stone, or terra cotta veneer no more than 5/8" thickness and apex less than 20'-0" in height and not over an exit way. Maximum tributary load to a member shall not exceed the equivalent of that occurring from a 10'x10' opening in a 15' tall wall for a header or king stud.
<input checked="" type="checkbox"/>	4. Manufactured support frames and curbs using hot rolled or cold-formed steel (i.e., light gauge) for mechanical, electrical, or plumbing equipment weighing less than 2000# (equipment only) (connections of such frames to superstructure elements using welding will require special inspection as noted in selected item(s) for Sections 19, 19.1 and/or 19.2 of listing above).
<input checked="" type="checkbox"/>	5. Manufactured components (e.g., Tolco, B-Line, Afcon, etc.) for mechanical, electrical, or plumbing hanger support and bracing (connections of such components to superstructure elements using welding will require special inspection as noted in selected item(s) for Sections 19, 19.1 and/or 19.2 of listing above).

Appendix: Work Exempt from DSA Requirements for Structural Tests / Special Inspections

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<input checked="" type="checkbox"/>	6. TV Brackets, projector mounts with a valid listing (see DSA IR A-5) and recreational equipment (e.g., playground structures, basketball backstops, etc.) (connections of such elements to superstructure elements using welding will require special inspection as noted in selected item(s) for section 19, 19.1 and/or 19.2 located in the Steel/Aluminum category).
<input checked="" type="checkbox"/>	7. Any support for exempt non-structural components given in CBC Section 1617A.1.18 (which replaces ASCE 7-16, Section 13.1.4) meeting the following: A) when supported on a floor/roof, <400# and resulting composite center of mass (including component's center of mass) $\leq 4'$ above supporting floor/roof, B) when hung from a wall or roof/floor, <20# for discrete units or <5 plf for distributed systems.

DSA 103-19: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS(SIGNATURE), 2019 CBC

Application Number: 04-120623	School Name: Star View Elementary	School District: Ocean View
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Name of Architect or Engineer in general responsible charge:	
Name of Structural Engineer (When structural design has been delegated):	
Signature of Architect or Structural Engineer:	Date:

Note: To facilitate DSA electronic mark-ups and identification stamp application, DSA recommends against using secured electronic or digital signatures.

DSA STAMP

DSA 103-19: LIST OF REQUIRED VERIFIED REPORTS, CBC 2019

Application Number: 04-120623	School Name: Star View Elementary	School District: Ocean View
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1. Soils Testing and Inspection: Geotechnical Verified Report Form DSA 293

2. Structural Testing and Inspection: Laboratory Verified Report Form DSA 291

3. Concrete Batch Plant Inspection: Laboratory Verified Report Form DSA 291

4. Post-installed Anchors: Laboratory Verified Report Form DSA 291, or, for independently contracting SI, Special Inspection Verified Report Form DSA 292

5. Masonry Inspection: Laboratory Verified Report Form DSA 291, or, for independently contracting SI, Special Inspection Verified Report Form DSA 292

6. Shop Welding Inspection: Laboratory Verified Report Form DSA 291, or, for independently contracting SI, Special Inspection Verified Report Form DSA 292

7. Field Welding Inspection: Laboratory Verified Report Form DSA 291, or, for independently contracting SI, Special Inspection Verified Report Form DSA 292

8. High-Strength Bolt Installation Inspection: Laboratory Verified Report Form DSA 291, or, for independently contracting SI, Special Inspection Verified Report Form DSA 292

CONTRACT CONSIDERATIONS

1. PART 1 GENERAL

A. SECTION INCLUDES

1. Application for payment
2. Defect assessment
3. Non-payment for rejected work
4. Change procedures
5. Alternates

B. APPLICATION FOR PAYMENT

1. The only acceptable progress and / or final billing to the District is the Billing Payment Request generated by the Construction Manager each month on behalf of the Prime Contractors.
2. Between the 20th & 25th of each month, the Construction Manager will send via e-mail a request of proposed billing percentages for each applicable budget line item for their contract to the Prime Contractors who have performed work for the current month.
 - a. Prime Contractors who have not been contacted by the 24th of the month must contact the Construction Manager to discuss their proposed billing percentages for the current month.
3. The Construction Manager's Team will review & approve requested percentages in draft form. Upon their review the Construction Manager's Superintendent shall then review the requested percentages in draft form with the Inspector for review & approval.
4. If any changes are made to these requested percentages by the Construction Manager's Team and/or Inspector, the Prime Contractors affected will be contacted and advised of their new percentages.
5. Once approved by the Construction Manager's Team & Inspector, on or about the 25th of the month, individual billings will be generated by the Construction Manager's home office and emailed to the appropriate Prime Contractors.
6. Prime Contractors will forward 4 "wet" signed in blue ink notarized copies where indicated of billing, and either hand carry or overnight to the Construction Manager home office for further processing by the Architect, Inspector, Construction Manager, and Owner.

C. DEFECT ASSESSMENT

1. Replace the work, or portions of the work, not conforming to specified requirements
2. If, in the opinion of the Architect, it is not practical to remove and replace the work, the Architect will direct one of the following remedies:
 - a. The defective work may remain, but the listed schedule of value will be adjusted to a new value at the discretion of the Architect.
 - b. The defective work will be partially repaired to the instructions and

satisfaction of the Architect and the listed schedule of value will be adjusted to reflect a new value at the discretion of the Architect.

D. NON-PAYMENT FOR REJECTED WORK

1. Payment will not be made for any of the following:
 - a. Products wasted or disposed of in a manner that is not acceptable
 - b. Products determined to be unacceptable before or after placement
 - c. Products not completely unloaded from the transporting vehicle
 - d. Products placed beyond the lines and levels for the required work
 - e. Products remaining on hand after completion of the work
 - f. Loading, hauling, and disposing of rejected products

E. CHANGE PROCEDURES

1. The Architect will advise of minor changes in the work not involving an adjustment to contract sum / price or contract time as authorized by the General Conditions on AIA Form G710 Architect's Supplemental Instructions.
2. The Architect may issue a Proposal Request which includes a detailed description of a proposed change with supplementary or revised drawings and specifications. Contractor will prepare and submit a detailed estimate within 14 days.
3. The Contractor may propose a change by submitting a Change Order Request to the Architect, describing the proposed change and its full effect on the work. Include a statement describing the reason for the change, and the effect on the contract sum and contract time with full documentation and a statement describing the effect on work by separate or other contractors.
4. Stipulated sum change order: Based on Proposal Request and Contractor's fixed price quotation or Contractor's Change Order Request as approved by the Architect.
5. Time and Material / Force Account Change Order: Submit itemized account and supporting data after completion of change, within time limits indicated in the General Conditions of the contract.
6. Maintain detailed records of work done on Time and Material / Force Account basis. Provide full information required for evaluation required for evaluation of proposed changes, and to substantiate costs for changes in the work as indicated in the General Conditions of the contract.
7. Construction Change Work Directive: Architect may issue a directive, signed by the Owner and Architect, instructing Contractor to proceed with a change in the work, for subsequent inclusion in a Change Order. Document will describe changes in the work, and designate method of determining any change in contract sum or contract time. Promptly execute the change.
8. Change order forms: AIA G701 Change Order.
9. Execution of change orders: Architect will issue change orders for signatures of parties as provided in the conditions of the contract.
10. All addenda (changes and/or revision prior to award of contract) and change orders (changes and revisions after award of contract) shall be approved by the Architect and the Division of the State Architect (DSA) prior to the start of construction covered by those changes and / or revisions.
11. Promptly revise Schedule of Values and Application for Payment forms to record each authorized Change Order as a separate line item and adjust the contract

- sum.
12. Promptly revise progress schedules to reflect any changes in contract time, revise sub-schedules to adjust times for other items of work affected by the change and resubmit.
 13. Promptly enter changes in project record documents

F. ALTERNATES

1. Alternates quoted on Bid Form will be reviewed and accepted or rejected at the Owner's option. Accepted alternates will be identified in the Owner-Contractor Agreement, or by change order at a later date.
2. Coordinate related work and modify surrounding work as required to integrate the work of each alternate.
3. Schedule of Alternates:
 - a. **Alternate No. 1 – Sun Control Louvers** - The base bid shall include procurement and installation of the Sun Control louvers called on sheet A2.21 and specification section 10 71 13.

The alternate shall include leaving the areas shown with the Sun Control Louvers as an open space.

- b. **Alternate No. 2 – Kiln and Storage Structures** - The base bid shall include all work associated with the Kiln and Storage Structures as shown on sheet A2.10.

The alternate shall include not installing the Kiln and Storage Structures but installing landscape and irrigation to make pallet similar to adjacent landscape area.

- c. **Alternate No. 3 – Tack Paneling** - Base bid shall include procurement and installation of Sound-Absorbing Walls Unnits as shown on the interior floor plan and elevations and per specification section 09 84 33.

The alternate shall include installation of typical 5/8" tack (non acoustical) panels.

- d. **Alternate No. 4 – Nichiha Paneling** - Base bid shall include procurement and installation of all Nichiha Paneling throughout the entire site as shown on sheets A3.10 and A3.11 and specification section 07 46 46.

The alternate shall include the procurement and installation of Lath and Plaster per specification section 09 24 00 at all locations the Nichiha Paneling is shown.

- e. **Alternate No. 5 – Irrigation Mainline** – Base Bid shall include the main irrigation line shown with a "solid line" to remain as existing.

The alternate shall include the main irrigation line shown as existing to be replaced like the new main line shown with “dashed solid line”

- f. Alternate No. 6 – Offsite Concrete Paving** – Base Bid shall include the procurement and installation of concrete at the area highlighted in SK-04 issued as part of Addendum 3.

The alternate shall include procurement and installation of decomposed granite in lieu of concrete per SK-04 issued as part of Addendum 3.

- 2. PART 2 PRODUCTS
Not Used
- 3. PART 3 EXECUTION
Not Used

END OF SECTION

Activity ID	Activity Name	Original Duration	Month																	
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
A1-13-11	Scratch & Brown Coat	10																		
A1-13-10	Insulation	5																		
A1-21-22	HVAC Set Units	1																		
A1-19-29	Plumbing - Hook Up HVAC Units	2																		
A1-22-39	Electrical - Hook Up HVAC Units	2																		
A1-13-12	Gypsum Board & Taping	20																		
A1-13-22	Cement Board & Taping	5																		
A1-04-13	Masonry Veneer	15																		
A1-17-14	Interior Paint - Coats 1 & 2	5																		
A1-13-15	Remove Scaffold	3																		
A1-13-18	Fiber Cement Siding	10																		
A1-11-16	Install Exterior Hollow Metal Doors & Hardware	2																		
A1-15-10	Suspended Acoustical Ceiling Grid	5																		
A1-13-25	Ceramic Tiling	8																		
A1-22-09	Pendant Lighting	5																		
A1-22-10	Electrical - Light Fixtures	5																		
A1-21-23	HVAC Trim Out	2																		
A1-09-03	Flashing & Sheet Metal -After Roofing	3																		
A1-17-17	Exterior Paint - Coats 1 & 2	3																		
A1-08-13	Install Casework	10																		
A1-09-13	Gutter & Downspouts	5																		
A1-12-02	Install Glass & Glazing	5																		
A1-11-03	Install Interior Doors & Harware	2																		
A1-19-32	Plumbing Trim Out/Set Finish	4																		
A1-18-15	Interior & Exterior Signage	3																		
A1-15-16	Acoustical Ceiling Tile & Phase Change	5																		
A1-17-19	Exterior Final Coat of Paint	3																		
A1-18-22	Toilet, Bath & Laundry Accessories	3																		
A1-13-20	Install Fire Extinguisher Cabinets & Extinguishers	1																		
A1-22-11	Electrical Trim Out & Install Projectors	5																		
A1-16-34	Flooring Prep, Install & Base (LVT & Carpet)	7																		
A1-21-24	HVAC Start-up & Balance	4																		
A1-08-23	Install Countertops	5																		
A1-17-21	Interior Final Coat of Paint	2																		
A1-18-21	Final Cleaning	5																		
A1-00-06	Incomplete Work List	10																		
A1-00-41	Punch List	10																		
Building B - Classroom Building																				
B-00-01	Mobilize	1																		
B-22-02	Electrical Safe Off	3																		
B-22-03	Temporary Power & Lighting	2																		
B-19-04	Plumbing Safe Off	3																		
B-21-05	HVAC Safe Off	3																		
B-02-06	Abatement	10																		
B-02-07	Demolition	10																		
B-02-26	Temporary Supports	2																		
B-22-08	Electrical Demolition	5																		
B-19-09	Plumbing Demolition	3																		

Activity ID	Activity Name	Original Duration	Month																	
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
B-21-10	HVAC Demolition	3				<div></div> HVAC Demolition														
B-BIM-00	INTERIOR SCAN / MODEL GENERATION	30				<div></div> INTERIOR SCAN / MODEL GENERATION														
B-BIM-10	BIM MODEL SUBMITTAL	10				<div></div> BIM MODEL SUBMITTAL														
B-BIM-20	BIM CORDINATION / SIGN OFF	15				<div></div> BIM CORDINATION / SIGN OFF														
B-BIM-30	BIM SHOP DRAWINGS	10				<div></div> BIM SHOP DRAWINGS														
B-19-19	Plumbing Underground / Patch Back	10							<div></div> Plumbing Underground / Patch Back											
B-19-29	Electrical Underground & Patch Back	10							<div></div> Electrical Underground & Patch Back											
B-04-12	Set Forms & Pour Concrete Curbs, Slabs and Pads	15							<div></div> Set Forms & Pour Concrete Curbs, Slabs and Pads											
B-13-10	Framing & Blocking	15							<div></div> Framing & Blocking											
B-22-11	Electrical Rough In & Top OutThrough Roof	15								<div></div> Electrical Rough In & Top OutThrough Roof										
B-21-12	HVAC Rough In	8								<div></div> HVAC Rough In										
B-22-13	Plumbing Rough In & Top OutThrough Roof	10								<div></div> Plumbing Rough In & Top OutThrough Roof										
B-12-27	Install Folding Doors	3								<div></div> Install Folding Doors										
B-09-18	Roofing & Roof Accessories	15								<div></div> Roofing & Roof Accessories										
B-13-14	Insulation (Roof & Walls)	10								<div></div> Insulation (Roof & Walls)										
B-11-14	HM Frame & Door Installation	5								<div></div> HM Frame & Door Installation										
B-21-32	HVAC Install Indoor Units	2								<div></div> HVAC Install Indoor Units										
B-18-24a	Install Kitchen Hood	2								<div></div> Install Kitchen Hood										
B-21-42	HVAC Install Mixing Boxes	2								<div></div> HVAC Install Mixing Boxes										
B-21-52	HVAC Install Exterior Units	2								<div></div> HVAC Install Exterior Units										
B-13-15	Drywall, Durrock Tape & Mud	20								<div></div> Drywall, Durrock Tape & Mud										
B-04-02	Block / Veneer Patch Back - Infill	5								<div></div> Block / Veneer Patch Back - Infill										
B-13-16	Plaster Patch Back	4								<div></div> Plaster Patch Back										
B-21-62	HVAC Install Piping	6								<div></div> HVAC Install Piping										
B-04-32	Masonry Cleaning	5								<div></div> Masonry Cleaning										
B-21-72	HVAC Install Controls	5								<div></div> HVAC Install Controls										
B-22-16	Pull Wire (electrical, lighting, low voltage & fire alarm)	10								<div></div> Pull Wire (electrical, lighting, low voltage & fire alarm)										
B-17-17	Paint - 1st & 2nd Coats	5								<div></div> Paint - 1st & 2nd Coats										
B-13-25	Access Doors	1								<div></div> Access Doors										
B-13-35	Fire Stopping / Joint Sealers	3								<div></div> Fire Stopping / Joint Sealers										
B-18-34a	Install Walk In Cooler	5								<div></div> Install Walk In Cooler										
B-08-18	Casework	6								<div></div> Casework										
B-15-21	T-Bar Grid	5								<div></div> T-Bar Grid										
B-13-37	Fire Extinguishers	1								<div></div> Fire Extinguishers										
B-11-17	Door Hardware	5								<div></div> Door Hardware										
B-12-17	Install Aluminum Storefront & Glazing	10								<div></div> Install Aluminum Storefront & Glazing										
B-14-01	Ceramic Tiling	5								<div></div> Ceramic Tiling										
B-04-43	Pour Walk In Cooler Slab	2								<div></div> Pour Walk In Cooler Slab										
B-21-22	HVAC Trim Out	7								<div></div> HVAC Trim Out										
B-22-23	Light Fixtures	10								<div></div> Light Fixtures										
B-18-42	FRP	5								<div></div> FRP										
B-22-19	Electrical Trim Out	8								<div></div> Electrical Trim Out										
B-19-20	Plumbing Trim Out	4								<div></div> Plumbing Trim Out										
B-18-33	Toilet, Bath & Laundry Accessories	3								<div></div> Toilet, Bath & Laundry Accessories										
B-15-31	Ceiling Tile & Phase Change Material	7								<div></div> Ceiling Tile & Phase Change Material										
B-22-24	Permanent Power On	1								<div></div> Permanent Power On										
B-21-25	HVAC Start Up	1								<div></div> HVAC Start Up										
B-16-26	Floor Preperation	4								<div></div> Floor Preperation										

Activity ID	Activity Name	Original Duration	Month																	
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
B-21-31	Air Balance	2																		
B-16-12	Epoxy Flooring	5																		
B-18-32	Signage	2																		
B-16-36	Moisture Control	4																		
B-16-27	Flooring & Base	4																		
B-08-28	Countertops	3																		
B-18-65	Install Kitchen Equipment	10																		
B-17-28	Paint - Final Coat	5																		
B-18-18	Sound Absorbing Wall Panels	10																		
B-22-29	TV Installation	2																		
B18-74a	Preliminary Health Inspection	1																		
B-18-01a	Visual Display Boards	10																		
B-22-49	Camera System Trim Out/Terminations/Programming	5																		
B-22-59	Door Access Control Trim Out/Terminations/Programming	5																		
B-22-69	Fire Alarm Trim Out/Terminations/Programming	5																		
B-22-79	Structured Cabling Trim Out/Terminations/Programming	5																		
B-22-78	Security Trim Out/Terminations/Programming	5																		
B-22-89	Clock/PA Trim Out/Terminations/Programming	5																		
B-18-84a	Final Health Inspection	1																		
B-18-11a	Final Clean	5																		
B-00-34	Incomplete Work List	10																		
B-00-44	Punch List	10																		
Building A - Classroom Building																				
A-00-01	Mobilize	1																		
A-22-02	Electrical Safe Off	3																		
A-22-03	Temporary Power & Lighting	2																		
A-19-04	Plumbing Safe Off	3																		
A-21-05	HVAC Safe Off	3																		
A-02-06	Abatement	10																		
A-02-07	Demolition	10																		
A-22-08	Electrical Demolition	5																		
A-19-09	Plumbing Demolition	3																		
A-21-10	HVAC Demolition	3																		
A-02-26	Temporary Supports	5																		
A-BIM-40	INTERIOR SCAN/MODEL GENERATION	30																		
A-BIM-50	BIM MODEL SUBMITTAL	10																		
A-BIM-60	BIM CORDINATION/SIGN OFF	15																		
A-BIM-70	BIM SHOP DRAWINGS	10																		
A-19-10	Plumbing Underground/Patch Back	10																		
A-22-09	Electrical Underground/Patch Back	10																		
A-04-12	Set Forms & Pour Concrete Curbs, Slab and Pads	15																		
A-13-10	Framing & Blocking	15																		
A-22-11	Electrical Rough In & Top Out Thru Roof	15																		
A-21-12	HVAC Rough In	8																		
A-19-13	Plumbing Rough In & Top Out Thru Roof	10																		
A-12-17	Install Aluminum Storefront & Glazing	5																		
A-12-30	Install Folding Doors	3																		
A-09-18	Roofing & Roof Accessories	15																		

Second Baseline

Remaining Work

Actual Work

Critical Remaining Work

Milestone

% Complete

Star View ES Modernization

Ledesma & Meyer Construction Co. Inc.

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Date

17-Jun-22

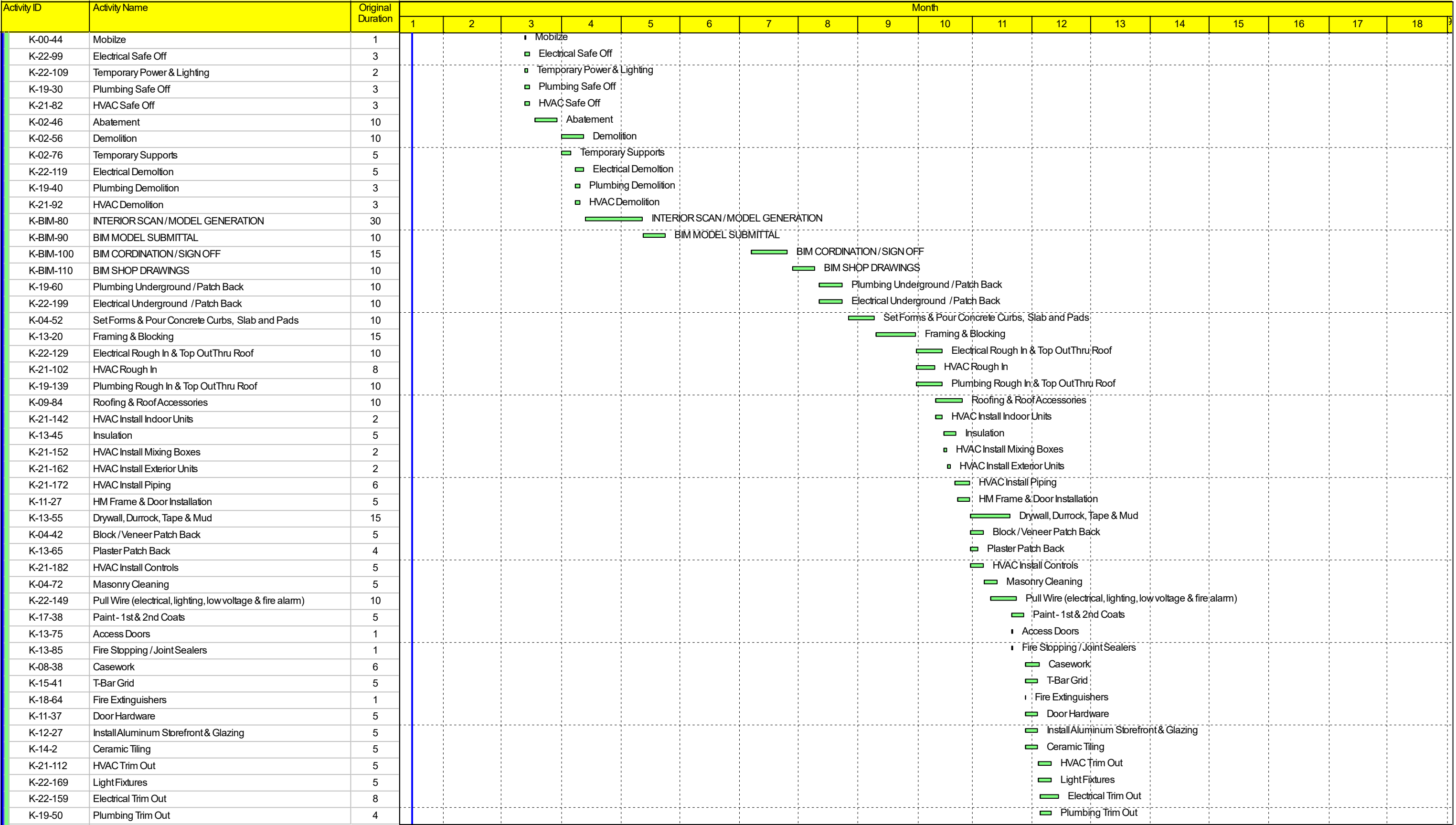
Revision

Schedule Update

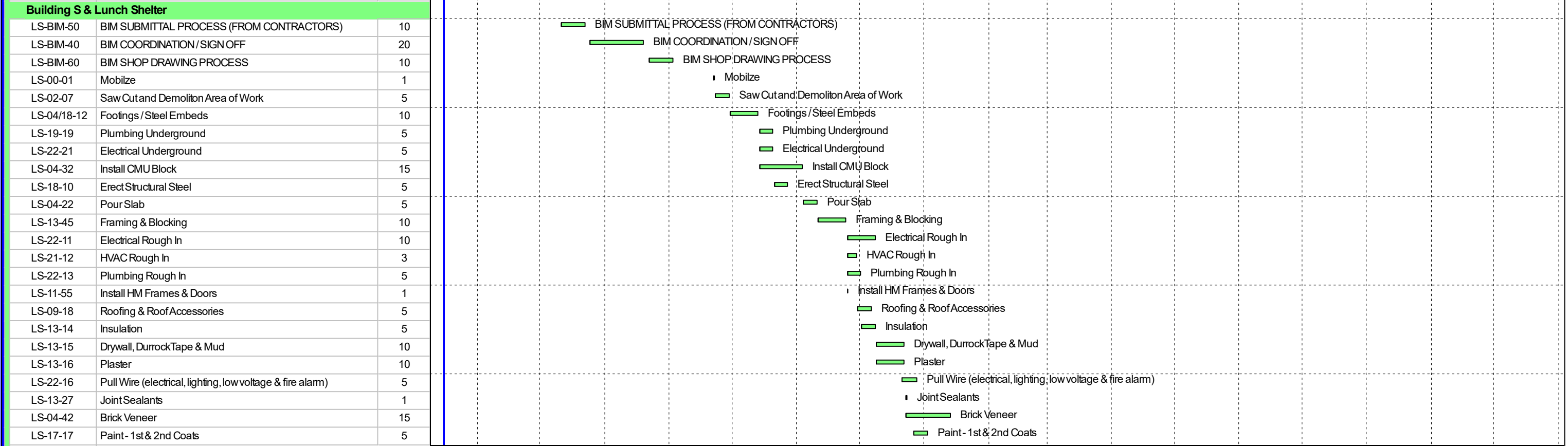
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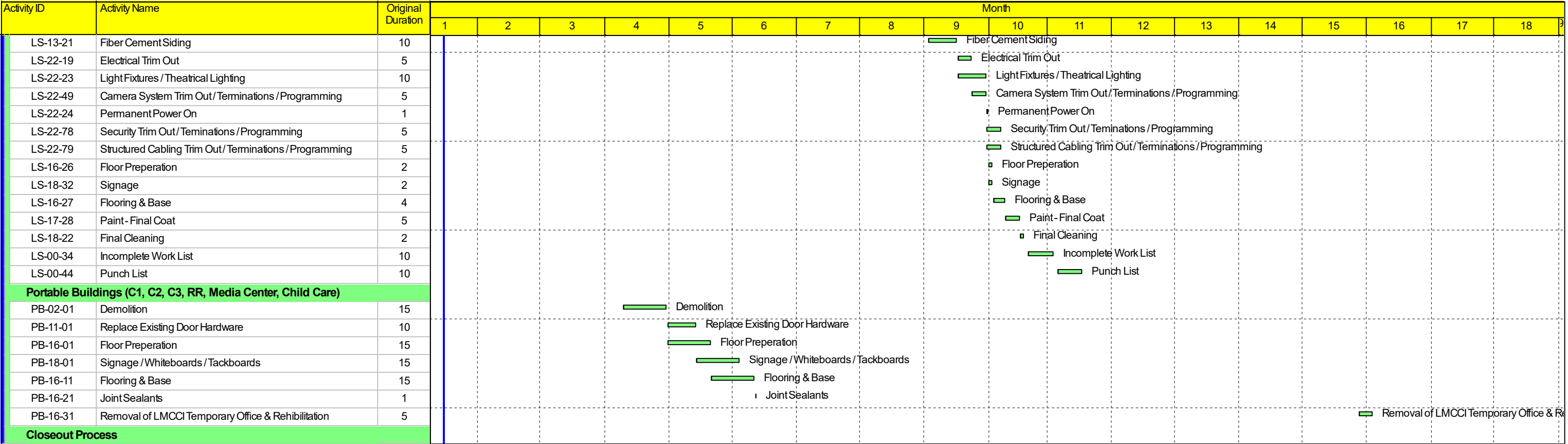
Approved

Activity ID	Activity Name	Original Duration	Month																	
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
A-21-32	HVAC Install Indoor Units	2																		
A-13-14	Insulation	5																		
A-21-42	HVAC Install Mixing Boxes	2																		
A-21-52	HVAC Install Exterior Units	2																		
A-21-62	HVAC Install Piping	6																		
A-11-14	HM Frame & Door Installation	5																		
A-13-15	Drywall, Durock, Tape & Mud	15																		
A-04-02	Block / Veneer Patch Back	5																		
A-13-16	Plaster Patch Back	4																		
A-21-72	HVAC Install Controls	5																		
A-04-32	Masonry Cleaning	5																		
A-22-16	Pull Wire (electrical, lighting, low voltage & fire alarm)	10																		
A-17-17	Paint - 1st & 2nd Coats	5																		
A-13-25	Access Doors	1																		
A-13-35	Fire Stopping / Joint Sealers	1																		
A-08-18	Casework	6																		
A-15-21	T-Bar Grid	5																		
A-13-34	Fire Extinguishers	1																		
A-11-17	Door Hardware	5																		
A-14-02	Ceramic Tiling	5																		
A-21-22	HVAC Trim Out	5																		
A-22-23	Light Fixtures	10																		
A-18-01	Visual Display Boards	10																		
A-22-19	Electrical Trim Out	8																		
A-19-20	Plumbing Trim Out	4																		
A-08-28	Countertops	3																		
A-22-39	Security Trim Out/Terminations/Programming	5																		
A-18-31	Sound Absorbing Wall Panels	10																		
A-18-33	Toilet, Bath & Laundry Accessories	3																		
A-15-11	Ceiling Tile & Phase Change Material	5																		
A-22-49	Camera System Trim Out/Terminations/Programming	5																		
A-22-59	Door Access Control Trim Out/Terminations/Programming	5																		
A-22-69	Fire Alarm Trim Out/Terminations/Programming	5																		
A-22-79	Structured Cabling Trim Out/Terminations/Programming	5																		
A-22-89	Clock/PA Trim Out/Terminations/Programming	5																		
A-22-24	Permanent Power On	1																		
A-21-25	HVAC Start Up	1																		
A-16-26	Floor Preperation	4																		
A-21-31	Air Balance	2																		
A-18-32	Signage	2																		
A-16-36	Moisture Control	4																		
A-16-27	Flooring & Base	4																		
A-17-28	Paint - Final Coat	5																		
A-22-29	TV Installation	2																		
A-18-22	Final Clean	3																		
A-00-34	Incomplete Work List	10																		
A-00-64	Punch List	10																		
Building K - Kindergarten Building																				



Activity ID	Activity Name	Original Duration	Month																		
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
K-08-48	Countertops	3																			
K-22-209	Security Trim Out/Terminations /Programming	5																			
K-18-61	SoundAbsorbing Walls	5																			
K-22-179	PermanentPower On	1																			
K-18-74	Toilet,Bath & LaundryAccessories	3																			
K-21-122	HVAC Start Up	1																			
K-16-47	Floor Preperation	4																			
K-21-132	Air Balance	2																			
K-18-54	Signage	2																			
K-18-51	Visual Display Boards	5																			
K-15-71	Ceiling Tile & Phase Change Material	5																			
K-22-219	Camera System Trim Out/Terminations /Programming	5																			
K-22-229	DoorAccess Control Trim Out/Terminations /Programming	5																			
K-22-239	Fire Alarm Trim Out/Terminations/Programming	5																			
K-22-249	Structured Cabling Trim Out/Terminations /Programming	5																			
K-22-259	Clock /PA Trim Out/Terminations /Programming	5																			
K-16-67	Moisture Control	4																			
K-16-57	Flooring & Base	4																			
K-17-48	Paint- Final Coat	5																			
K-22-189	TV Installation	2																			
K-18-44	Final Clean	3																			
K-00-54	Incomplete Work List	10																			
K-00-74	Punch List	10																			







DLR Group

Architecture

Engineering

Planning

Interiors

Star View Elementary School

Modernization

8411 Worthy Drive

Midway City, CA 92655

DLR Group Project No. 75-21602-00

Addendum # 03

A# 04-120623

June 15, 2022

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DLR GROUP
1650 Spruce Street
Riverside, CA 92507
951/682-0470
951/682-1801

June 15, 2022

Addendum # 3

Star View Elementary School A# 04-120623



The following changes, additions, deletions, clarifications, or corrections shall become part of the Proposal and Contract Documents for Marine View Middle School Ocean View School District. Addendum#1 Revised Documents shall replace original Contract Documents in its entirety. All other terms, specifications, and conditions remain the same. Each proposer is responsible for transmitting this information to all affected subcontractors and suppliers prior to the receipt of proposals. Each proposer shall acknowledge receipt of this Addendum on its proposal Form.

Modifications are identified by “clouds” and the following:

Deletions ~~striketrough~~

Insertions/Substitutions **italic-underlined**.

GENERAL DRAWINGS

ITEM NO. G-3.01 SHEET G1.00 – COVER SHEET

1. Sheet index updated for new sheets QT1.01 Theater Lighting and Design and QT2.01 Theater Details

CIVIL DRAWINGS

ITEM NO. C-3.01 SHEET C 100 – TITLE SHEET

1. Revised construction notes 70 and 71 and deleted construction notes 72, 73 and 74.

ITEM NO. C-3.02 SHEET C 500 – STORM DRAIN IMPROVEMENT PLAN

1. Clarification of drains and lines
2. All storm drain lines to be 6" h.d.p.e in the new playground improvement area, as noted, and connected to the back of existing catch basin on the south side of Worthy Drive main entry. Contractor to verify existing catch basin bottom elevation and pipe installation at 1% min slope
3. New storm drain lines to be 10" h.d.p.e. and catch basins to be 24" x 24" Brook box 2424CB with steel traffic grates as noted

ITEM NO. C-3.03 SHEET C 600 – SEWER & WATER IMPROVEMENT PLAN

1. Added a proposed fire hydrant along Newland Street with construction notes.

ARCHITECTURAL DRAWINGS

ITEM NO. A-3.01 SHEET AD1.10 – DEMOLITION PLAN – BUILDINGS B & C

1. CLASSROOM 208 & KEYNOTE LEGEND – Added keynote D380 which is applicable to entire length of wall that's existing to remain

ITEM NO. A-3.02 SHEET A2.11 – FLOOR PLAN – BUILDINGS A & K

1. For clarity, elevation call out added to CLASSROOM A108

ITEM NO. A-3.03 SHEET A2.11 – FLOOR PLAN – BUILDINGS A & K

1. HEALTH A137 – Revised door, window and casework locations.

ITEM NO. A-3.04 SHEET A2.20 – REFLECTED CEILING PLAN – BUILDINGS B & S

1. FOOD SERVICE B108 – Removed ACT in cooler area and at entry doors for air curtains.
2. STAFF RESTROOM B108B – Revised ceiling finish.

- ITEM NO. A-3.05 SHEET A2.21 – REFLECTED CEILING PLAN – BUILDINGS A & K**
1. STAFF LOUNGE A107 – Added new finish tag (AI-1) to plans. See Enlarged Plans & Finish Schedule for more info.
 2. ADMINISTRATION A125– Added new finish tag (AI-1) to plans. See Enlarged Plans & Finish Schedule for more info.
- ITEM NO. A-3.06 SHEET A4.11 – ENLARGED RESTROOMS**
1. STAFF RESTROOM B108 (DTLS 32, 33,34 & 35) – Added new finish tag (TB-2) to elevations. See Finish Schedule for more info.
 2. DETAIL 14 - RESTROOM A107A – SOUTH – Added N554 and N555.
 3. DETAIL 22 - RESTROOM A127 – NORTH – Added N554 and N555.
 4. DETAIL 33 - STAFF RESTROOMS B108B – EAST – Added N554 and N555.
 5. DETAIL 53 - RESTROOM A135 – EAST – Added N554 and N555.
- ITEM NO. A-3.07 SHEET A4.12 – ENLARGED CUSTODIAN ROOMS**
1. CUSTODIAL A136 (DTLS 12, 13, 14, & 15) – Revised finishes and added detail. See Finish Schedule for more info.
 2. CUSTODIAL A113 (DTLS 22, 23, 24, & 25) – Revised finishes and added detail. See Finish Schedule for more info
- ITEM NO. A-3.08 SHEET A4.20 – ENLARGED TYPICAL CLASSROOM**
1. DTL 23 – ENLARGED RCP – Added splice detail at Axiom perimeter.
- ITEM NO. A-3.09 SHEET A4.22 – ENLARGED STAFF LOUNGE**
1. STAFF LOUNGE A107 – Added new finish tag (AI-1) to plans. See Finish Schedule for more info.
- ITEM NO. A-3.10 SHEET A4.23 – ENLARGED ADMIN**
1. DTL 31 – ADMIN ENLARGED PLAN - HEALTH A137 – Revised door, window and casework locations.
 2. DTL 35 – HEALTH ROOM EAST – Revised door, window, casework and electrical locations.
- ITEM NO. A-3.11 SHEET A4.24 – ENLARGED ADMIN**
1. DTL 41 – ADMIN ENLARGED RCP & KEYNOTE LEGEND – Replaced “Ecoustic Panels by Unika Vaev” with (AI-1), spray applied insulation. See Finish Schedule for more info.
- ITEM NO. A-3.12 SHEET A5.10 – INTERIOR FINISH SCHEDULE**
1. Added finishes: TB-1, TB-2, AI-1 & PT-1B
- ITEM NO. A-3.13 SHEET A5.20 – FINISH PLANS – BUILDINGS B & S**
1. FOOD SERVICE B108 - Added PT-1B at existing brick wall.
 2. STAFF RESTROOM B108B – Revised base finish.
 3. CUSTODIAN B113 – revised floor, wall and base finishes.

- ITEM NO. A-3.14** **SHEET A5.21 – FINISH PLANS – BUILDINGS A & K**
1. CUSTODIAN A136 – revised floor, wall and base finishes.
- ITEM NO. A-3.15** **SHEET A8.10 – WALL TYPES**
1. Notes and annotation for wall framing updated to clarify wall framing to be metal stud per structural
- ITEM NO. A-3.16** **SHEET A8.11 – WALL TYPES**
1. Notes and annotation for wall framing updated to clarify wall framing to be metal stud per structural
- ITEM NO. A-3.17** **SHEET A10.30 – DETAILS - CEILING**
1. Added detail 54A.
2. Revised notes in detail 11.
- ITEM NO. A-3.18** **SHEET A10.60 – DETAILS - MISC**
1. Added detail 54.

MECHANICAL DRAWINGS

- ITEM NO. M-3.01** **SHEET M0.02 – MECHANICAL SCHEDULE**
1. Upsize VRF fan coil units FC/K-1 and FC/K-2.
- ITEM NO. M-3.02** **SHEET M2.01 – MECHANICAL PLAN- BUILDING B & S**
1. Added 1" lining to supply and return duct.
2. Added 1" lining, 3-foot elbow and wire mesh screen to E.A. duct.
3. Revised three supply duct size in Food Service B108.
- ITEM NO. M-3.03** **SHEET M2.03 – MECHANICAL PLAN- BUILDING A & K**
1. Added 1" lining to supply and return duct.
2. Added 1" lining, 3-foot elbow and wire mesh screen to E.A. duct.
3. Added thermostat for FC/A-15, FC/A-14, FC/A-13, FC/A-12, FC/A-11, FC/A-10 and FC/A-9.
4. Upsize VRF fan coil units FC/K-1 and FC/K-2.
5. Revised CFM for FC/K-1 and FC/K-2.
6. Added CFM for Workroom K103.
- ITEM NO. M-3.04** **SHEET M5.01 – MECHANICAL DETAIL**
1. Added note in Detail # 6.
- ITEM NO. M-3.05** **SHEET M5.02 – MECHANICAL DETAIL**
1. Revised note in Detail # 8.

PLUMBING DRAWINGS

- ITEM NO. P-3.01** **SHEET P0.02 – SCHEDULE**
1. Added plumbing fixture tag SS-2 to plumbing fixture schedule.
- ITEM NO. P-3.02** **SHEET P3.01 – PLUMBING PLAN BUILDINGS B AND S WASTE & VENT**
1. Added a floor sink in custodian room.
- ITEM NO. P-3.03** **SHEET P3.03 – PLUMBING PLAN BUILDINGS B AND S WATER & GAS**
1. Added trap primer water to floor sinks in food service.
2. Revised hot water to food wells instead of cold water.
3. Added trap primer water to new floor sink in custodian room.

ELECTRICAL DRAWINGS

- ITEM NO. E-3.01** **SHEET E7.01 – LIGHTING FIXTURE SCHEDULE**
1. Added references to theatrical lighting plans QT1 for locations of theatrical lighting fixtures
- ITEM NO. E-3.02** **SHEET E1.01 – ELECTRICAL SITE PLAN**
1. Revised Note #16 to: "STUB TWO (2) TELECOM SERVICE PROVIDER 4" CONDUITS AND CAP."
2. Revised note #13 to 1-1/4"C for power.
- ITEM NO. E-3.03** **SHEET E2.01 – LIGHTING PLANS BUILDINGS B AND S**
1. Added circuits for lighting controls as described on QT drawings.
- ITEM NO. E-3.04** **SHEET E6.11 – PANEL SCHEDULES**
1. Added circuits to panel LA4 for theatrical lighting controls.

THEATER DRAWINGS

- ITEM NO. TH-3.01** **SHEET QT1.01 – THEATER LIGHTING AND DESIGN**
1. New sheet to clarify theater lighting and design
- ITEM NO. TH-3.02** **SHEET QT2.01 – THEATER DETAILS**
1. New sheet to clarify theater lighting and design

SPECIFICATIONS

ITEM NO. SP-3.01 TABLE OF CONTENTS

1. Revised to include Sections issued for the first time with this Addendum

ITEM NO. SP-3.02 11 61 03 THEATRICAL NETWORKED LIGHTING CONTROL SYSTEM

1. Issued for the first time with this Addendum

ITEM NO. SP-3.03 11 61 09 STAGE LIGHTING FIXTURES

1. Issued for the first time with this Addendum

ITEM NO. SP-3.04 11 61 73 THEATRICAL WIRING DEVICES

1. Issued for the first time with this Addendum

ITEM NO. SP-3.05 32 92 01 TURF SEEDING

1. Issued for the first time with this Addendum

MISC.

ITEM NO. MC-3.01 OFF SITE WORK

1. New stamped and approved Sheet C400.1 Precise Grading Plan, approved by City of Westminster Public Works Department Engineering Division

ITEM NO. MC-3.02 SITE EXCERPT SK-01 – EXISTING PORTABLE C4/C5

1. Demo of portable building C4 and C5.
2. Space to become parking with 1,400sf of concrete paving, 2,500sf of asphalt paving, 8 wheel stops, 8 parking stall striping, 500sf of landscape and irrigation

ITEM NO. MC-3.03 SITE EXCERPT SK-02 - FENCING

1. Change linear footage of chain-link fencing/gates to decorative fencing/gates as noted

ITEM NO. MC-3.04 SITE EXCERPT SK-03 – DROP OFF ZONE

1. Replace 5,000sf of rubberized surface/concrete drainage slab with 4,000sf of concrete paving, 1,000sf of landscape/irrigation, and (4) trees

ITEM NO. MC-3.05 SITE EXCERPT SK-04 – SITE PAVING

1. Replace concrete paving with compacted DG
2. Salvage 250sf of brick relic/pavers and return to District

END OF ADDENDUM

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01 40 00	QUALITY REQUIREMENTS
01 42 00	REFERENCES
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
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DIVISION 03 – CONCRETE

03 10 00	CONCRETE FORMING AND ACCESSORIES
03 20 00	CONCRETE REINFORCING
03 30 00	CAST-IN-PLACE CONCRETE
03 54 16	HYDRAULIC CEMENT UNDERLAYMENT

DIVISION 04 – MASONRY

04 01 10	MASONRY CLEANING
04 20 00	UNIT MASONRY
04 43 13	MANUFACTURED STONE MASONRY VENEER

DIVISION 05 – METALS

05 12 00	STRUCTURAL STEEL FRAMING
05 31 00	STEEL DECKING
05 40 00	COLD FORMED METAL FRAMING
05 50 00	METAL FABRICATIONS
05 52 13	PIPE AND TUBE RAILINGS

DIVISION 06 – WOOD, PLASTICS AND COMPOSITES

06 10 53	MISCELLANEOUS ROUGH CARPENTRY
06 16 00	SHEATHING

06 41 16 PLASTIC-LAMINATE-CLAD ARCHITECTURAL CABINETS
06 64 00 PLASTIC PANELING

DIVISION 07 – THERMAL AND MOISTURE PROTECTION

07 01 50.19 PREPARATION FOR REROOFING
07 21 00 THERMAL INSULATION
07 21 19 FOAMED-IN-PLACE INSULATION
07 22 00 THERMAL STORAGE BLANKETS
07 25 00 WEATHER BARRIERS
07 46 46 FIBER-CEMENT SIDING
07 52 16.13 SBS MODIFIED BITUMINOUS MEMBRANE ROOFING
07 62 00 SHEET METAL FLASHING AND TRIM
07 72 00 ROOF ACCESSORIES
07 84 13 PENETRATION FIRESTOPPING
07 84 43 JOINT FIRESTOPPING
07 92 00 JOINT SEALANTS

DIVISION 08 – OPENINGS

08 11 13 HOLLOW METAL DOORS AND FRAMES
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SECTION 116103 – THEATRICAL NETWORKED LIGHTING CONTROL SYSTEM

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes all labor, materials, equipment and services necessary to manufacture and deliver to job site a complete Lighting Control System, as shown on the drawings and/or specified herein, including but not limited to the following:
 - 1. DMX structure
 - a. Summary
 - 1) Mains-fed and feed-through relay panels, as indicated on drawings.
 - 2) Lighting control network enclosure (DIN enclosure) and contents, including:
 - a) DMX Scene Controller
 - b) DMX splitters with related cabling
 - c) Interfaces with other building systems as required, such as building automation, A/V controls, fire alarm control panel, and related input/output interfaces.
 - d) Battery backup
 - 3) DMX input/output plates, and other fixed control devices.
 - 4) DMX Stage lighting control console and associated equipment.
 - 5) Architectural lighting control stations (house light stations), including button stations and DMX touchscreen stations.
 - 6) Architectural lighting DMX distribution system including emergency control overrides (emergency lighting transfer specified elsewhere).
 - b. Design intent
 - 1) Lighting Control System shall manage performance lighting for each “Type 2” space, independently from each other, with the following minimum capabilities:
 - a) Record presets based on live DMX levels generated by lighting control stations and/or lighting control console.
 - b) Recall presets through user input, timeclock events, or external triggers (Building Automation System, Audiovisual System, Fire Alarm).
 - c) Manipulate color and intensity of individual lighting fixtures through lighting control stations.
 - d) Allow simultaneous control of lighting fixtures by lighting control stations and lighting control console, with owner-defined priority levels for each. Control stations may be locked out during performance conditions.
 - e) Emergency override of DMX levels when triggered by Fire Alarm.

- f) Loss of power phase sense device triggers emergency override of DMX levels.

1.3 Installation of this equipment is typically by the Electrical Contractor. Confirm scope with the Construction Manager prior to bid.

1.4 It shall be the responsibility of the Lighting Control System Manufacturer to furnish equipment complete in all respects and to provide any additional equipment required to fulfill the intent of these drawings and specifications regardless of whether or not such items are herein specified or indicated.

1.5 MANUFACTURING STANDARDS

A. All work shall be manufactured in accordance with the latest editions of applicable publications and standards of the following organizations:

1. National Electric Code (NEC) and all prevailing local and state regulations including:
 - a. ANSI/NFPA 70: National Electrical Code
2. Entertainment Services and Technology Association (ESTA) including:
 - a. ANSI/ESTA E1.3-2001(R2016): Lighting Control Systems – 0-10V Analog Control Specification
 - b. ANSI/ESTA E1.11-2008 (R2018): USITT DMX512-A
 - c. ANSI/ESTA E1.17-2015: Architecture for Control Networks (ACN)
 - d. ANS/ESTA E1.20-2010: Remote Device Management over USITT DMX512
 - e. ANSI/ESTA E1.27-1-2006 (R2016): Portable Control Cables for DMX512
 - f. ANSI/ESTA E1.27-2-2009 (R2014): Permanently Installed Control Cables for DMX512
 - g. ANSI/ESTA E1.31-2018: ACN transport of DMX-512
3. Occupational Safety & Health Act (OSHA)

1.5 SUBMITTALS WITH BIDS

A. Submit with bid a schedule listing the following time estimates:

1. Length of time required to prepare shop drawings.
2. Length of time required to supply all equipment.

1.6 SUBMITTALS

A. Lighting Control System Manufacturer shall prepare and submit complete shop drawings according to the requirements set forth in the Contract Documents.

B. Product Data Sheets

1. For Manufacturer standard panels, enclosures, modules, devices, and other equipment, with options and other variables clearly noted on data sheets.

C. Shop Drawings

1. Shop drawings shall be reviewed by the Architect before fabrication shall begin.

- a. Such review does not relieve the Lighting Control System Manufacturer of the responsibility of providing equipment in accordance with this Specification.
 2. Shop drawings shall show optical or transformer isolation of all control data lines between dimmer racks, panels, and architectural lighting processor or DMX distribution enclosure.
 3. Shop drawings shall show materials, finishes, metal gauges, overall and detail dimensions, sizes, electrical and mechanical connections, fasteners, welds, provisions for the work of others, and similar information.
 4. Shop drawings shall indicate complete details of equipment, including manufacturer's catalog numbers for components, and shall include complete wiring diagrams.
 5. Any deviation from this Specification shall be "starred" and noted in letters a minimum 1/4" high.
 - a. In order for a deviation to be considered, it shall upgrade the quality of the equipment or respond to a field condition.
 6. The reviewed shop drawings shall be up-dated to show any changes made during manufacturing and assembly and shall be sent to the Architect before the equipment is delivered.
- D. Lighting Control System Manufacturer shall provide installation instructions for all equipment. These instructions shall include connection diagrams, termination designations, etc.
- E. Coordination Drawings:
 1. Submit evidence that lighting controls are compatible with connected monitoring and control devices and systems specified in other Sections.
 - a. Show interconnecting signal and control wiring and interfacing devices that prove compatibility of inputs and outputs.
 - b. For networked controls, list network protocols and provide statements from manufacturers that input and output devices meet interoperability requirements of the network protocol.
- F. After the installation is complete, the Lighting Control System Manufacturer shall provide the Owner with Operations and Maintenance Manuals not more than fourteen (14) days after the checkout is completed.
 1. One (1) O&M manual shall be a printed "hard" copy and O&M manual shall also be provided in electronic format on two (2) flash drives.
 2. Each O&M manual shall include, but not be limited to, the following:
 - a. Copies of all "record" shop drawings.
 - b. Catalog cuts of all equipment provided.
 - c. Recommendations for periodic maintenance.
 - d. Catalog numbers and manufacturer's names and addresses for perishable items such as pilot lamps and fuses.
 - e. Diagnostic procedures.
 - f. Internet address for online access to manuals, product literature and troubleshooting guides.
 - g. Emergency and normal repair telephone contact sheet for 7-day, 24-hour service.

3. Lighting Control System Manufacturer shall provide the Owner with three (3) instruction manuals for each control console type.
 - a. Instruction manual shall be supplied to the Owner's Representative on the day of the Lighting Control System checkout.
 - b. Instruction manuals may be requested by the Owner's Representative at a date prior to the system checkout.

1.7 SYSTEM INTEGRATOR

- A. System Integrator shall be responsible for scope outlined in this Specification and for the following related Specification sections:
 1. 116109 – Stage Lighting Fixtures and Accessories
- B. System Integrator must have minimum five (5) years' experience with supply, installation, commissioning, and integration of theatrical and architectural lighting control systems. System Integrator must have at least ten (10) recent projects of similar scope and characteristics to those specified herein.
- C. System integrator shall be responsible for furnishing factory authorized personnel for system startup, programming, commissioning, and Owner training.
 1. Approved Integrators for the Work of this Section include:
 - a. 4 Wall Los Angeles
5435 W. San Fernando Rd.
Los Angeles, CA 90039
Contact: 818-252-7481
 - b. Clearwing Systems Integration
5640 South 40th Street,
Phoenix, AZ 85040
Contact: 602-850-6333
 - c. LVH Entertainment Systems
300 Irving Drive
Oxnard, CA 93030
Contact: 800-313-2033
 - d. Musson Theatrical
890 Walsh Ave
Santa Clara, CA 95050
Contact: 408-986-0210
 - e. Pacific Coast Entertainment
7601 Woodwind Drive
Huntington Beach, CA 92647
Contact: 714-841-6455

1.8 PROJECT CONDITIONS

- A. Do not install equipment until following conditions can be maintained in spaces to receive equipment:
 - 1. Ambient temperature: 0 degrees to 40 degrees C (32 degrees to 104 degrees F).
 - 2. Relative humidity: Maximum 90 percent, non-condensing.
 - 3. Lighting Control System must be protected from dust during installation.

1.9 COORDINATION

- A. Coordinate lighting control components to form an integrated interconnection of compatible components.
 - 1. Match components and interconnections for optimum performance of lighting control functions.
 - 2. Coordinate lighting controls with BAS if applicable. Design display graphics showing building areas controlled; include the status of lighting controls in each area.
 - 3. Coordinate lighting controls with Audiovisual system if applicable. Program appropriate preset triggers and supply necessary strings to AV contractor.
 - 4. Coordinate lighting controls with that in Sections specifying distribution components that are monitored or controlled by power monitoring and control equipment.
- B. Coordinate lighting control loads specified in this Section with components providing overcurrent protection as specified in Division 26 Section "Panelboards."

1.10 DELIVERY

- A. The Lighting Control System Manufacturer shall coordinate delivery of all equipment with the Construction Manager and/or Electrical Contractor.
- B. If required by the Construction Manager or Electrical Contractor, equipment shall be delivered in a minimum of three (3) separate shipments that shall include:
 - 1. Shipment #1: All items in which conduit is terminated which includes dimmer racks, panels, control station back boxes, etc.
 - 2. Shipment #2: All items in which wiring is terminated including control station faceplates, etc.
 - 3. Shipment #3: All items that are not required until system activation by the Lighting Control System Manufacturer's field service representative. This shall include dimmer modules, electronics modules, control consoles, gateways, monitors, cables, etc.
- C. Lighting Control System Manufacturer shall deliver all material to the job site suitably crated, packed, and protected, and bearing the manufacturer's identification label and the nomenclature of the product(s) found in each carton or crate.

- D. If, through no fault of the Owner, the timely completion of the work of this Section is imperiled, the Lighting Control System Manufacturer shall prevent or minimize any delay by shipping the required product to the job site by air freight, at no additional cost to the Owner.
- E. Bid price shall include full freight and insurance charges for all items to the job site.

1.11 JOB SUPERVISION

- A. When Contractor wiring is complete, the Lighting Control System Manufacturer shall a Factory-Authorized Technician to the job site and prior to energizing the system to test and adjust the system.
- B. Factory-Authorized Technician shall instruct designated Owner's representatives in operation and maintenance of the Lighting Control System. Refer training requirements in Part 3.

1.12 QUALITY ASSURANCE

- A. Manufacturer: Minimum 10 years' experience in manufacture of architectural and theatrical lighting controls.
- B. Manufacturer's Quality System: Registered to ISO 9001:2000 Quality Standard, including in-house engineering for product design activities.
- C. Source Limitations: Obtain lighting control and power distribution components through one source from a single manufacturer wherever possible. All components shall be furnished by the Integrator regardless of source.
- D. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, Article 100, by a testing agency acceptable to authorities having jurisdiction, and marked for intended use.
- E. Comply with 47 CFR, Subparts A and B, for Class A digital devices.
- F. Comply with NFPA 70.

1.13 SOFTWARE SERVICE AGREEMENT

- A. Technical Support: Beginning with Substantial Completion, provide software support for two (2) years. Support shall include 24-hour telephone support with guaranteed callback time of less than one hour.
- B. Upgrade Service: Update software and firmware to latest version at Project completion. Install and program software upgrades that become available within two (2) years from date of Substantial Completion. Upgrading of software shall include operating systems where applicable. Upgrade shall include new or revised licenses for use of the software.
 - 1. Provide 30-day notice to Owner to allow scheduling and access to system and to allow Owner to upgrade computer equipment, if necessary.

1.14 WARRANTY

- A. Lighting Control System Manufacturer agrees to make all repairs, including replacement of components and parts, made necessary due to defects in design, workmanship, and materials without additional cost to the Owner for a period of two (2) years from the date of acceptance of the completed system.
- B. In the event of a system failure during the warranty period, manufacturer agrees to send to the job the necessary field service technician(s) within twenty-four (24) hours of notification.
 - 1. Technician(s) shall remain on the job until all necessary repairs have been made and the system is operational to the satisfaction of the Owner.

PART 2 - PRODUCTS

2.1 LIGHTING CONTROL SYSTEM MANUFACTURER

- A. Approved manufacturers for the work of this Section shall be:
 - a. Electronic Theatre Controls – Middleton, WI
 - 1) Randy Pybas – Regional Manager West
 - a) 323-203-3266
 - b) randy.pybas@etcconnect.com
 - b. Strand Lighting – Dallas, TX
 - 1) Andrew Feldman – Regional Sales Manager – West
 - a) 1-818-254-5884
 - b) andrew.feldman@signify.com
 - c. Pathway Connectivity – Calgary - Alberta, Canada
 - 1) 403-243-8110
 - 2) orders@pathwayconnect.com
- B. Additional basis of design manufacturers for individual items as noted.
- C. Equal Manufacturers:
 - 1. Subject to Division 01 Specifications, other manufacturers may submit for consideration as equal to the design basis manufacturer products. Submittals for consideration must show conformance to project Specifications and system design requirements.
 - 2. Final determination of suitability shall be at the discretion of the Specifier.

2.2 INTEGRATED LIGHTING CONTROL PANELBOARDS (LCP-##)

- A. General:
 - 1. Each panelboard shall consist of up to (48) network-controlled motorized breakers. System shall be UL listed and labeled.
 - 2. Circuit breakers shall be configured for single or dual pole load control as scheduled.
 - 3. Breakers shall be remotely operated by network communication link.

4. Panelboard shall have the capability to act as a standalone lighting control system with the following capabilities:
 - a. Internal Astronomical Time Clock for programmed events.
 - b. Accepts input from external button stations for recall of presets.
 - c. Signal arbitration to prioritize inputs by source (sACN, DMX, Preset Stations, Time Clock, etc).
 - d. Configurable loss-of-signal behavior including 'hold last look' and 'activate preset'.
 5. Panelboard shall be equipped with UL924 rated input for triggering emergency 'panic' preset.
 6. USB port for upload of configuration files and firmware updates.
- B. Physical:
1. Cabinets and Enclosures: NEMA 1 enclosure sized to accept required relays. Surface mounted cover as required with captive screws in a hinged, lockable configuration.
 2. Interior: Interiors shall be provided with installed and tested motorized breakers and interface modules.
 3. Panel side-mount enclosure shall provide low voltage control interface between network and motorized breakers, compliant with partitioning requirements for separation of line and low voltage.
- C. Electrical:
1. Some Panelboards shall be equipped with a hydraulic/magnetic full-load-rated main circuit breaker, as noted on each panel's associated Panelboard Schedule on QT-series Drawings. AIC rating as specified by Electrical Engineer.
 2. Power Supply: Transformer assembly shall include internal overcurrent protection with automatic reset and metal oxide varistor protection against power line spikes.
 3. Circuit Breakers shall contain solenoid actuators to move poles between open and closed positions. Overcurrent conditions shall cause a closed contact to open into 'tripped' position for ready identification of state:
 - a. Coil:
 - 1) Magnetically held, momentary coil activation (50 milliseconds)
 - 2) 2.2 VA max per breaker to allow simultaneous or sequenced control of up to 10 breakers per control wire run.
 - 3) Split coil - ½ for ON, ½ for OFF.
 - b. Power Contacts:
 - 1) 20A or 30A tungsten and NEMA electronic ballast rated, as scheduled.
 - 2) Rated for 50,000 ON/OFF cycles at full load.
 - 3) Support #6 - #14 AWG solid or stranded wire.
 - 4) 120V and 277V rated.
 - 5) FCC approved for commercial use.
- D. Control Electronics:
1. Control electronics shall be integral to the panel side enclosure, providing network and user interface for individual control of motorized circuit breakers in panelboard.

2. Configuration of network addressing shall be by means of digital graphical display interface or by network port. Status LEDs shall indicate presence of Power and DMX signal.
3. Control and communication signals shall be accommodated by means of system network and DMX512 interfaces.
 - a. The system network interface shall serve as primary integrating means between the rack electronics and the lighting control network, and shall also support remote configuration, file storage, playback, and monitoring capabilities from other devices on the network.
 - b. There shall be at least one (1) optically isolated DMX512 input and one (1) optically isolated DMX512 output per panel.
4. Furnish ride-through power supply to permit electronics to remain energized during short duration loss of power, such as during transfer to backup generator.
5. Furnish 0-10v control interface card in each panel.

E. Basis of Design

1. Basis of Design for Integrated Lighting Control Panelboards shall be:
 - a. SensorIQ, as manufactured by Electronic Theatre Controls

2.3 LIGHTING CONTROL RELAY PANELS (LRP-##)

A. General:

1. Each relay panel shall consist of up to (48) network-controlled relays. System shall be UL listed and labeled.
2. Relays shall be configured for single or dual pole load control as scheduled.
3. Relays shall be remotely operated by network communication link.
4. Relay panel shall have the capability to act as a standalone lighting control system with the following capabilities:
 - a. Internal Astronomical Time Clock for programmed events.
 - b. Accepts input from external button stations for recall of presets.
 - c. Signal arbitration to prioritize inputs by source (sACN, DMX, Preset Stations, Time Clock, etc).
 - d. Configurable loss-of-signal behavior including 'hold last look' and 'activate preset'.
5. Relay panel shall be equipped with UL924 rated input for triggering emergency 'panic' preset.
6. USB port for upload of configuration files and firmware updates.

B. Physical:

1. Cabinets and Enclosures: NEMA 1 enclosure sized to accept required relays. Surface mounted cover as required with captive screws in a hinged, lockable configuration.
2. Interior: Interiors shall be provided with installed and tested relays and interface modules.
3. Panel side-mount enclosure shall provide low voltage control interface between network and relays, compliant with partitioning requirements for separation of line and low voltage.
4. Provide physical separators between relays fed by 120V and 277V circuits, as well as between relays fed by Normal and Emergency circuits, as noted on each panel's associated Relay Panel Schedule on QT-series Drawings.

- C. Electrical:
 - 1. Relays:
 - a. Mechanically held latching relays, 20A or 30A tungsten and NEMA electronic ballast rated, as scheduled.
 - b. Rated for 50,000 ON/OFF cycles at full load.
 - c. Support #10 - #14 AWG solid or stranded wire.
 - d. 120V and 277V rated.
 - e. FCC approved for commercial use.
- D. Control Electronics:
 - 1. Control electronics shall be integral to the panel side enclosure, providing network and user interface for individual control of relays in panelboard.
 - 2. Configuration of network addressing shall be by means of digital graphical display interface or by network port. Status LEDs shall indicate presence of Power and DMX signal.
 - 3. Control and communication signals shall be accommodated by means of system network and DMX512 interfaces.
 - a. The system network interface shall serve as primary integrating means between the rack electronics and the lighting control network, and shall also support remote configuration, file storage, playback, and monitoring capabilities from other devices on the network.
 - b. There shall be at least one (1) optically isolated DMX512 input and one (1) optically isolated DMX512 output per panel.
 - 4. Furnish ride-through power supply to permit electronics to remain energized during short duration loss of power, such as during transfer to backup generator.
 - 5. Furnish 0-10v control interface card in each panel.
- E. Basis of Design
 - 1. Basis of Design for Lighting Control Relay Panels shall be:
 - a. Echo Feedthrough, as manufactured by Electronic Theatre Controls

2.4 LIGHTING CONTROL NETWORK AND INTERFACE

- A. General:
 - 1. Furnish and install a complete lighting control network system, capable of supporting the specified dimmer racks and relay panels, stage lighting control consoles, architectural control stations, time and calendar schedules, and related network devices indicated on the drawings and in this Specification.
 - 2. The network shall use Category 5e Ethernet distribution to communicate between control consoles, dimmer racks, nodes, and computers.
 - 3. Manufacturer specified wiring and topology shall be used to communicate with control stations, sensor devices and relay panels.

2.5 LIGHTING CONTROL NETWORK HARDWARE

- 1. D.I.N. Enclosure containing the following:
 - a. DMX Scene Controller
 - 1) Preset record based on live DMX levels (min. 32 presets)
 - 2) Preset recall (min. 32 presets) with adjustable fade times
 - b. DMX splitters with related cabling

- c. Time Clock
- d. Interfaces with other building systems as required, such as building automation, A/V controls, fire alarm control panel, and related input/output interfaces.
 - 1) Furnish minimum eight (8) dry contact closures configurable as input or output signals
- e. Battery backup

2.6 DMX IN/OUT PLATES

- A. General
 - 1. DMX connector plates in surface or recessed backboxes, provided by Lighting System Manufacturer and installed by E.C.
 - 2. Refer drawings for quantity, configuration, and placement.
 - 3. Each DMX out connector shall home run to a gateway at the ALP.
 - 4. DMX in ports shall all be on Universe 1 and may be split from one gateway connection.
- B. Connectors
 - 1. DMX-IN: 5-pin XLR connector(s), male
 - 2. DMX-OUT: 5-pin XLR connector(s), female
- C. Labeling
 - 1. DMX devices shall have Control Device Number (i.e. 'DMX-5') clearly indicated with minimum 1/4" tall white on black characters on the faceplate. Label shall be centered above control port(s).
 - a. All faceplate labels shall be as shown on the QT-series Drawings and verified in Shop Drawings.
 - 2. Furnish and install removable adhesive labels for each Theatrical Control Device back box and rear of faceplate, indicating the Control Device Number (i.e. 'DMX-5') and serial code to facilitate programming and commissioning.

2.7 STAGE LIGHTING CONTROL CONSOLES

- A. General
 - 1. For each console, furnish all power and interface devices, cabling, and accessories necessary for a fully functioning system.
- B. Consoles
 - 1. Basis of Design: ETC ColorSource AV40
 - a. Performance Requirements:
 - 1) Min. (40) Playback faders
 - 2) Min. (80) Multi-parameter Control Channels/Devices
 - 3) Min. Two DMX/RDM port (1024 outputs)
 - 4) Min. Two USB port
 - 5) 32 GB onboard storage for show files
 - b. Accessories:
 - 1) (1) standalone LED gooseneck task light
 - 2) (1) Dust Cover

- 3) (1) 15'-0" DMX-512 5-pin XLR patch cable
- 4) (1) Case

2.8 ARCHITECTURAL LIGHTING CONTROL STATIONS (HOUSE LIGHT STATIONS)

A. General

- 1. Stations shall serve as user interface to recall and manipulate common room lighting presets via the lighting control network. Stations shall occur in the following styles:
 - a. Fixed Touchscreen stations
 - 1) Station programming shall support discrete screen shots configurable for preset recall, virtual faders, clock and time scheduling functions, dynamic color wheel for LED fixture color selection.
 - 2) Station shall be configured with general lighting on/off and code lockout for additional features on home page.
 - 3) Design display graphics showing stage areas controlled; include the status of lighting controls in each area.
 - b. Button Stations
 - 1) Basis of design: ETC Echo Inspire
 - 2) Two-wire, topology-free communication structure
 - 3) No exposed fasteners
 - 4) Two-color rear-illuminated button
 - 5) Color: from MFG standards
 - 6) Programmable preset recall from scene controllers

2.9 ARCHITECTURAL LIGHTING DMX DISTRIBUTION SYSTEM

- A. Provide bi-directional DMX repeater(s) as required with sufficient DMX outputs for control of DMX enabled architectural lighting fixtures.
- B. Provide emergency DMX bypass device(s) as noted on drawings, for lighting control override during loss of power or emergency evacuations. Bypass device(s) shall receive the following feeds:
 - 1. Panic signal from Fire Alarm Control Panel
 - 2. Loss of power signal from Emergency Bypass Detection Kit with power sense feed

PART 3 - EXECUTION

3.1 EXECUTION

- A. Verify that surfaces are ready to receive work.
- B. Verify field dimensions and coordinate physical size of all equipment with the architectural requirements of the spaces into which they are to be installed. Allow space for adequate ventilation and circulation of air.
- C. Verify that required utilities are available, in proper location, and ready for use.

- D. Beginning of installation means installer accepts existing conditions.
- E. Install in accordance with manufacturer's instructions and approved shop drawings.
- F. All wiring shall be installed in conduit.
- G. All branch load circuits shall be live tested before connecting the loads to the lighting control panels.

3.2 SUPPORT SERVICES

- A. System Startup
 - 1. Upon completion of installation, Contractor shall notify the Lighting Control System manufacturer that the system is ready for formal checkout and programming. No power shall be applied to the Lighting Control System unless specifically authorized by written instructions from the manufacturer.
 - 2. Manufacturer shall provide Factory-Authorized Technician to confirm proper installation and operation of all system components.
- B. Testing
 - 1. System shall undergo complete functional testing by a Factory-Authorized Technician. All loads shall be tested live for continuity and freedom from defects and all control wiring shall be tested for continuity and connections prior to energizing the system components.
 - 2. Contractor shall be responsible for correction of any improper wiring or component installation as identified by the Factory-Authorized Technician during testing. Contractor shall be responsible for any return visits by Factory-Authorized Technician resulting from lack of system readiness for checkout or from any incomplete or incorrect wiring or installation.
- C. Initial Programming
 - 1. Programming of initial button assignments, touch screen page layouts, normal and emergency presets, control priorities, sensor settings, time clock events, etc, shall be performed by a Factory-Authorized Technician. Consultant shall provide, in Contract Drawings, supplemental materials, or both, instructions for initial programming; however, all final decisions regarding programming shall be at the direction of the Owner.

3.3 COMMISSIONING AND OWNER TRAINING

- A. General
 - 1. Manufacturer's authorized technician shall perform Owner Training.
 - 2. Class size is limited to twelve (12) participants and shall include at minimum:
 - a. Owner shall provide a list of participants by title. For example, 'Technical Director, Master Carpenter, Master Electrician, etc.' To facilitate scheduling, include only mandatory participants on this list. Attendees not on the list will still be permitted to attend.
 - 3. The Lighting System Integrator shall schedule instruction with the Owner's designated representatives. Agenda shall be sent in advance. All O&M materials, as designated in this Specification, shall be available at the time of training.

4. Instruction shall not necessarily follow immediately after the system check-out and activation.
5. Instruction shall be independent of the system check-out and activation. Length of engineering check-out and activation shall not affect the length of instruction time.
6. At Owner's discretion, instruction may occur in multiple time blocks.
7. Written documentation of Owner training shall be provided to the Owner upon completion.
 - a. Form to include:
 - 1) The date, time, and location of training.
 - 2) Name, title, company and signature of trainer.
 - 3) Name, title, and signature of all participants.
 - 4) Topics covered at training.
 - b. If training is non-continuous, provide one form for each training segment.
8. Training may be video and audio recorded by the Owner at the Owner's expense.
9. Provide up to eight (8) hours of Owner training to include the following:
 - a. Minimum of two (2) separate training sessions with Owner, as follows:
 - 1) First session shall occur at conclusion of startup and system commissioning and shall include four (4) hours training time with Owner representatives. This session shall include the following general subjects, but shall be tailored to Owner's preference at time of training:
 - a) General system overview.
 - b) Routine care and maintenance.
 - c) Lighting Control Station operation and configuration, including review of initial programming provided by Consultant.
 - d) Lighting Control Console introduction and basic programming
 - e) Review of warranty and software updates
 - 2) Second session shall occur no less than two weeks following substantial completion, but within one month of initial training. This session shall include up to an additional four (4) hours training time with Owner representatives. This session shall include the following general subjects, but shall be tailored to Owner's preference at time of training:
 - a) In-depth Lighting Control Console operation and programming.
 - b) Lighting Control Station preset review and adjustment to reflect operational needs.
 - c) Other review as requested by Owner.

END OF SECTION 116103

SECTION 11 61 09 – STAGE LIGHTING FIXTURES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes all labor, materials, equipment and services necessary to furnish and deliver to the job site, for installation by others, the Stage Lighting Fixture package specified herein, including but not limited to, the following:
 - 1. Stage lighting fixtures and accessories.
 - 2. Miscellaneous items.

1.3 SUBMITTALS WITH BID

- A. Stage Lighting Fixture Supplier shall provide a list of all items with manufacturer's catalog numbers for each item.
- B. Bid shall include a unit price for each item listed in 2.3 of this Specification.
 - 1. Unit pricing may be used by the Owner to determine the value of any additions to or deletions from the equipment list.
 - 2. Failure to provide unit pricing may result in the disqualification of the bid.
- C. Stage Lighting Fixture Supplier shall submit with bid the following time estimates
 - 1. Length of time required to supply all equipment.

1.4 SUBMITTALS

- A. Stage Lighting Fixture Supplier shall submit each item in this Article according to the Conditions of the Contract and Division 1 Specification Sections.
- B. Shop drawings shall include catalogue cuts of all items listed in 2.3 Stage Lighting Fixture & Equipment Schedule of this specification for review.

1.5 DELIVERY

- A. Delivery shall be as required in the Contract Documents.
 - 1. Stage Lighting Fixture Supplier shall confirm the delivery dates with the Construction Manager and/or Owner a minimum of 30 days in advance of scheduled delivery.
- B. Bid price shall include full freight and insurance charges for delivery of all of the equipment to the job site.
- C. Deliver all material to the job site suitably crated, packed, and protected.

1. Each crate or carton shall be clearly marked on the outside with the manufacturer's identification labels and the nomenclature of the product contained within.

1.6 WARRANTY

- A. The Stage Lighting Fixture Supplier shall assure that this equipment is provided free of defects in materials and workmanship and shall provide a warranty under this contract agreeing to make all applicable repairs, including replacement of materials, at no cost to the Owner for a period of one (1) year from the date of final acceptance.
- B. If, through no fault on the part of the Owner, the Stage Lighting Fixture Supplier is unable to meet the required delivery dates established at the time of the signing of an agreement, Fixture Supplier agrees to furnish substitute equipment of the same quantity and of comparable type and quality to the job site.
 1. This equipment will be extended to the Owner at no additional cost until the delivery of the presentation area lighting fixture list has been completed.

1.7 STAGE LIGHTING FIXTURE INSTRUCTION

- A. Stage Lighting Fixture Supplier shall provide Owner's designated representative(s) with up to eight (8) hours of instruction in the configuration, programming and operation of the LED stage lighting fixtures.

1.8 STAGE LIGHTING FIXTURE SUPPLIERS

- A. Stage Lighting Fixture Suppliers for Work of this Section include the following:
 1. Barbizon Arizona
1320 S Priest Dr., Suite 105
Tempe, AZ 85281
Contact: Mike Riordan mriordan@barbizon.com
480-237-047
 2. Clearwing Productions Arizona
5640 South 40th Street,
Phoenix, AZ 85040
Contact: Jill Maurer jmaurer@clearwing.com
602-850-6333
 3. LVH Entertainment Systems
300 Irving Drive
Oxnard, CA 93030
Contact: Mark Stickelmaier mark@lvhentertainment.com
800-313-2033
 4. Sacramento Theatrical Lighting
950 Richards Blvd.
Sacramento, CA 95811
Contact: Steve Odehnal steveo@stlltg.com
916-447-3258

5. Stagecraft Industries Inc.
5051 N. Lagoon Ave.
Portland, OR 97217
Contact: Kevin Shetterly kevin@stagecraftindustries.com
503-286-1600

PART 2 - PRODUCTS

2.1 STAGE LIGHTING FIXTURES

- A. LED stage lighting fixtures shall be supplied with all standard including the following:
1. Yoke mounting hardware as indicated on drawings.
- B. The manufacturer(s) for each fixture is included in this Specification. No substitutions will be allowed and each item furnished shall conform in all respects to the product description found on the data sheets.

2.2 INSTALLATION

- A. Bolt to structure with tamper resistant hardware per QT details.

2.3 STAGE LIGHTING FIXTURE & EQUIPMENT SCHEDULE

- A. The following is a listing of stage lighting fixtures and miscellaneous equipment to be furnished.

Item	Description	Quantity	Manufacturer
1.	Architectural Spot fixture	15	Chauvet E-910FC IP
2.	Architectural Wash fixture	15	Chauvet Par H7 IP
3.	4' Linear Wash fixture Batten	8	Chauvet COLORado Solo
4.	Provide power and data connections in conduit. Refer to lighting schedules on QT drawings.		

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Contractor shall install a functioning 'house plot' for Owner's use, at direction of Owner and Specifier.
1. Contractor shall hang, circuit, aim, configure, address, and patch into lighting console, all stage lighting fixtures at the direction of Owner and Specifier, providing final addressing and patching data to Owner upon completion.

2. Contractor shall program stage lighting cues into stage lighting console and/or architectural lighting preset system at direction of Owner and Specifier.

3.2 OPERATION AND MAINTENANCE MANUALS

- A. Upon delivery, the Manufacturer shall provide Operation and Maintenance manuals in quantity identified in Division 1, neatly organized and bound in hard ring binders. Minimum of (3) manuals shall be furnished to Owner, one (1) bound hard copy and two (2) electronically on portable USB drives.
 1. Inventory of Stage Lighting Fixtures and Accessories delivered.
 2. Catalog cut sheets for all device types.
 3. Maintenance and care instructions and recommendations.
 4. Warranty information.
 5. Addressing and patching data.

END OF SECTION

SECTION 11 61 73 – THEATRICAL WIRING DEVICES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.

1.2 WORK OF THIS SECTION

- A. This Section includes all labor, materials, equipment and services necessary to manufacture and deliver to job site, for installation by Electrical Contractor, theatrical wiring devices, including back boxes, as shown on the QT drawings and/or specified herein, including but not limited to the following:
 - 1. Recessed receptacle boxes
 - 2. Surface mount receptacle boxes
- B. It shall be the responsibility of the Theatrical Wiring Device Manufacturer to furnish equipment complete in all respects and to provide any additional equipment required to fulfill the intent of these drawings and specifications regardless of whether or not such items are herein specified or indicated.

1.3 SUBMITTALS

- A. Theatrical Wiring Device Manufacturer shall prepare and submit complete shop drawings according to requirements set forth in the Contract Documents.
- B. Shop drawings shall show bussing for each outlet box and shall utilize the exact circuit numbering method detailed on the drawings.
- C. Furnish catalog cuts, drawings, and/or descriptive material of catalog items as requested by the Architect.
- D. Furnish all of the above for review by the Architect prior to commencing any work.
 - 1. Such review does not relieve the Wiring Device Manufacturer of the responsibility of providing equipment in accordance with this Specification.
- E. Any deviation from this Specification is to be "starred" and noted in letters a minimum 1/4" high.
 - 1. In order for a deviation to be considered it shall upgrade the quality of the equipment or respond to a field condition.

1.4 MANUFACTURING STANDARDS

- A. All work shall be manufactured in accordance with the latest editions of applicable publications and standards of the following organizations:
 - 1. National Electric Code (NEC) and all prevailing local and state regulations
 - 2. National Electrical Manufacturers Association (NEMA)
 - 3. Occupational Safety & Health Act (OSHA)

- B. All applicable products shall bear label of Underwriters Laboratories (UL).
- C. All equipment shall be thoroughly tested in Manufacturer's shop prior to shipment to insure mechanical and electrical integrity.

1.5 LABELING

- A. All theatrical wiring devices shall be permanently identified with means and methods as noted on the drawings and elsewhere in this specification.
- B. Each faceplate and back box shall be tagged with a removable label identifying the WD box "number.

1.6 DELIVERY, STORAGE AND HANDLING

- A. Delivery shall be as required in Construction Documents.
- B. The Theatrical Wiring Device Manufacturer shall coordinate delivery of all equipment with the Construction Manager and/or Electrical Contractor.
- C. Theatrical Wiring Device Manufacturer shall, if requested by the Construction Manager and/or Electrical Contractor, deliver theatrical wiring devices items in the following two (2) separate shipments:
 - 1. Shipment #1: Shipment shall include back boxes for all theatrical wiring device items so that the Electrical Contractor may terminate all conduit.
 - 2. Shipment #2: Shipment shall include faceplates for all theatrical wiring device items.
 - 3. Theatrical Wiring Device Manufacturer shall notify the Construction Manager and/or Electrical Contractor 24 hours prior to delivery of equipment.
- D. Deliver all material to the job site suitably crated, packed, and protected.
 - 1. Each crate or carton shall be clearly marked on the outside with the Manufacturer's identification label and the nomenclature of the product contained within.

1.7 WARRANTY

- A. The Wiring Device Manufacturer shall assure that this equipment is provided free of defects in materials and workmanship and shall provide a warranty under this contract for a period of two (2) year from the date of final acceptance.
- B. During the warranty period, repair or replacement of defective materials and/or repair of faulty workmanship shall be provided, at no cost to the Owner, within ten (10) days written notice of the defect(s).

1.8 THEATRICAL WIRING DEVICE MANUFACTURERS

- A. Theatrical Wiring Device Manufacturers for work of this section shall include:
 - 1. Altman Lighting
57 Alexander St.
Yonkers, NY 10701
Contact: Nick Champion nchampion@altmanltg.com
800-425-8626

2. Electronic Theatre Controls (ETC)
3031 Pleasant View Road
Middleton, WI 53562
Contact: Randy Pybas randy.pybas@etcconnect.com
Joe DiNardo joe.dinardo@etcconnect.com
Heidi Bowers heidi.bowers@etcconnect.com
Rob Raff rob.raff@etcconnect.com
Sylvia Sinclair sylvia.sinclair@etcconnect.com
800-688-41163
3. Lex Products
15 Progress Dr.
Shelton, CT 06484
Contact: Tom Siko tsiko@lexproducts.com
800-643-4460
4. Performance Electric Inc.
126A McDougall Ct.
Greenville, SC 29607
Contact: Larry Easterday save@performancedistro.com
864-288-2021
5. SSRC
170 Fortis Dr.
Duncan, SC 29334
Contact: Aaron Clark aclark@ssrconline.com
864-848-9770
6. Stagecraft Industries Inc.
5051 N. Lagoon Ave.
Portland, OR 97217
Contact: Kevin Shetterly kevins@stagecraftindustries.com
503-286-1600

PART 2 - PRODUCTS

2.1 RECESSED AND SURFACE MOUNT RECEPTACLE BOXES

- A. Provide recessed and surface mount receptacle boxes as listed herein and shown on the drawings.
- B. Steel face plates with receptacles shall be constructed of min. 18 gauge steel, painted black.
 1. Provide mounting holes on faceplate.
 2. White circuit numbers, 1/4" in height, shall be engraved directly into a black lamicoid or plastic laminate label plate attached with non-corroding screw fasteners or rivets.
- C. Provide solid copper buss bars for each receptacle plate as follows:
 1. Adjacent neutral pairs for each circuit.
 2. Adjacent hot leg pairs for each circuit.
 3. Grounds for each receptacle plate.

- D. Boxes shall be prewired with 125° Celsius high temperature wire to molded barrier terminal blocks.
- E. All connectors shall be standard Edison parallel blade U ground connectors.
- F. Back boxes for surface and recessed mounted receptacle boxes shall be constructed of min. 18 gauge steel, painted black.

END OF SECTION

SECTION 329201 TURF SEEDING

PART 1- GENERAL

1.01 DESCRIPTION

- A. The Contractor shall furnish all labor, material, and equipment that is required to complete the work described herein in strict accordance with the terms of this specification and the contract documents.
- B. The work shall be for all new turf areas shown on the plans and shall include incorporation of soil amendments, fine grading, planting and turf establishment.

1.02 REQUIREMENTS

- A. Rough grading shall be performed per the grading plans. Final grades shall consider the incorporation of soil amendments, tilling, and water settling. Refer to the General Notes for the process required to determine final grades.
- B. Contractor shall coordinate planting procedures to make certain that all heads, lines and other system components are properly located and at the correct elevations. The turf irrigation system must be fully functional and approved by the Owner prior to planting the turf.
- C. Contractor shall complete the installation, aiming, final testing and approval of sports lighting prior to hydroseed installation.

1.03 SUBMITTALS

- A. General: Submit each item in this Article according to the Conditions of the Contract.
- B. Product Certificates signed by manufacturers, certifying that their products comply with specified requirements.
 - 1. Manufacturer's certified analysis for standard products.
 - 2. Analysis for other materials by a recognized laboratory made according to the methods established by the Association of Official Analytical Chemists, where applicable.
 - 3. Certification of type of seed, identifying seed source, including name and telephone number of supplier.
- C. Samples of each of the following:
 - 1. 5 lb. of mulch required for Project, in labeled plastic bag.
- D. Qualification data for firms and persons specified in the "Quality Assurance" Article to demonstrate their capabilities and experience. Include lists of completed projects with project names and addresses, names and addresses of architects and owners, and other information specified.
- E. Material test reports from qualified independent testing agency indicating and interpreting test results relative to compliance of the following materials with requirements indicated.

1. Analysis of any imported topsoil.

- F. Maintenance instructions recommending procedures to be established by Owner for maintenance of landscaping during an entire year. Submit before expiration of required maintenance periods.

1.04 QUALITY ASSURANCE

- A. Installer Qualifications: Engage an experienced Installer who has completed hydroseeding work or brillion spreading machine work similar in material design, and extent to that indicated for this Project and with a record of successful landscape establishment.

1. Installer's Field Supervisor: Require Installer to maintain an experienced full-time supervisor on the Project site during times that hydroseeding is in progress.

- B. Topsoil Analysis: See Section 329113 SOIL PREPARATION

1.05 DELIVERY, STORAGE AND HANDLING

- A. Delivery: Delivery schedule at least ten (10) calendar days prior to the intended date of the first delivery.

1. Packaged Materials: Deliver packaged materials in containers showing weight, analysis, and name of manufacturer. Protect materials from deterioration' during delivery and while stored at site.
2. Seed: Harvest, deliver, store, and handle seed according to the requirements of the American Sod Producer's Association's (ASPA) "Specifications for Turf grass Sod Materials and Transplanting/Installing.
3. Deliver seeding materials after preparations for planting have been completed.
4. Inspection: Seeding material shall be inspected upon arrival at the job site, and unacceptable material shall be removed from the job site.
5. Fertilizer: Delivery of fertilizer to the site shall be in original, unopened containers bearing manufacturer's chemical analysis. Instead of containers, fertilizer may be furnished in bulk. A chemical analysis shall be provided for bulk deliveries.
6. Soil Amendments: Soil amendments shall be delivered to the site in the original unopened containers bearing the manufacturer's chemical analysis. In lieu of containers, soil amendments may be furnished in bulk. A chemical analysis shall be provided for bulk deliveries.
7. Chemical Treatment: Chemical treatment materials shall be delivered to the site in the original unopened containers with legible labels indicating the Environmental Protection Agency (EPA) registration number and the manufacturer's registered uses.

- B. Storage: Materials shall be stored in areas designated by the Owner.

1. Seed and Fertilizer: Chemical treatment materials shall not be stored with other landscape materials.

- C. Time Limitation: Hydroseeded slurry mixture which has not been applied within three (3) hours after mixing shall be rejected and replaced at the Contractor's expense.

1.06 PROJECT CONDITIONS

- A. Utilities: Determine location of above grade and underground utilities and perform work in a manner which will avoid damage. All requisite repairs to damage caused by work of this section shall be at contractor's expense. Hand excavate, as required. Maintain grade stakes until removal is mutually agreed upon by parties concerned.
- B. Excavation: When conditions detrimental to plant growth are encountered, such as rubble, fill, adverse drainage conditions, or obstructions, notify the Owner before planting.

1.07 COORDINATION AND SCHEDULING

- A. Coordinate installation of seed during normal planting seasons, generally between April 15 and September 1.

1.08 WARRANTY

- A. General Warranty: The special warranty specified in this Article shall not deprive the Owner of other rights the Owner may have under other provisions of the Contract Documents and shall be in addition to, and run concurrent with, other warranties made by the Contractor under requirements of the Contract Documents.
- B. Special Warranty: Warrant the hydros seeding for a period for 90 days.
- C. Remove and replace dead planting materials immediately unless required to plant in the succeeding planting season.
- D. Replace planting materials that are more than 25 percent dead or in an unhealthy condition at the end of the warranty period.
- E. Plant Replacements shall be of the same variety and size as specified on plans and be replaced at no cost to the Owner.

1.09 LAWN MAINTENANCE

- A. Begin maintenance of lawns immediately after each area is established and continue until acceptable lawn is established, but for not less than the following periods:
 - 1. Seeded Lawns: 90 days.
 - 2. When full maintenance period has not elapsed before end of planting season, or if lawn is not fully established at that time, continue maintenance during next planting season.
- B. Maintain and establish lawns by watering, fertilizing, weeding, mowing, trimming, replanting, and other operations. Roll, regrade, and replant bare or eroded areas and re-mulch to produce a uniformly smooth lawn. All lawns shall be uniform in color leaf texture shoot density and be reasonably free of visible imperfections at acceptance. A proper stand of turf will be defined as a minimum of 100 grass plants per square foot and where no gaps are larger than 4 inches in diameter.

- C. Watering: Provide and maintain temporary piping, hoses, and lawn-watering equipment to convey water from sources and to keep lawns uniformly moist to a depth of 4 inches (100 mm). Contractor is responsible for all cost involved in getting water to the site and for water utilized during the length of the project.
 - 1. Water lawn at the minimum rate of 1 inch (25 mm) per week or at such intervals and at such a rate that wilting, puddling, or runoff do not occur.
- B. Post-Fertilization: Ammonium phosphate fertilizer shall be applied at the rate of six pounds per 1,000 square feet (one pound actual nitrogen) after the first month and again prior to the final acceptance. The application shall avoid excessive high nitrogen levels. Seeded areas must be adequately rooted prior to nitrogen application. If not properly rooted foliar application of 12-48-8 fertilizer may be required. Consult with Owner's representative and seed supplier.
- E. Mow lawns to a height of 1 inch whenever the average height becomes 1 1/2 inches. The clipping shall be removed. Repeat mowing as required to maintain specified height without cutting more than 40 percent of the grass height. Remove no more than 40 percent of grass-leaf growth in initial or subsequent mowings. Do not delay mowing until grass blades bend over and become matted. Do not mow when grass is wet and mow only when the soil is firm.
 - 1. Fertilizers: All fertilizers shall be uniform in composition, free flowing, and suitable for application with equipment. Application rates shall be as follows: FE-138 iron chelate at two pounds per 1,000 square feet, one and one-half pounds of phosphate P205 per 1,000 square feet and one pound of plant-absorbable nitrogen per 1,000 square feet.

PART 2 - PRODUCTS

2.01 MATERIALS

A. Seed

- 1. Seed Classification: State-certified seed of the latest season's crop shall be provided in original sealed packages bearing the producer's guaranteed analysis for mixture percentage, purity, germination, weed seed content, and inert material. Labels shall be in conformance with all applicable USDA rules and regulations and all applicable state seed laws.
- 2. Seed Mixture: Seed shall be provided in bulk quantities to attain the required pure live seed (P.L.S.) rates in a mixture proportioned by weight as follows:

LBS/1,000 sq. ft.	Botanical Name	Common Name
5 LBS PLS*	Cynodon dactylon – Hybrid Bermuda (Tifgreen 328 or Tifway 419) Poa pratensis – Kentucky Bluegrass Lolium perenne – Perennial Ryegrass (Or Approved Equal)	Ball Park Blend

* PLS (Pure Live Seed) = percent purity x percent germination = 100.
See specifications for application and soil preparation.

3. Weed Seed: Weed seed shall not exceed one percent (1 %) by weight of the total mixture. Wet, moldy, or otherwise damaged seed will be rejected. Perform field mixes on site in the presence of the Owner's representative.
- B. Topsoil: If required shall comply with ASTM D 5268, have a pH range of 5.5 to 7.4 percent organic material minimum, free of stones 1 1/2" larger in any dimension, and other extraneous materials harmful to plant growth.
1. Topsoil Source: Reuse surface soil stockpiled on the site. Verify suitability of surface soil to produce topsoil meeting requirements and amend when necessary. Supplement with imported topsoil when quantities are insufficient. Clean topsoil of roots, plants, sods, stones, clay lumps, and other extraneous materials harmful to plant growth.
 2. Topsoil Source: Amend existing surface soil to produce topsoil. Supplement with imported topsoil when required.
- C. Soil Amendments: Soil amendments shall consist of fertilizer and soil conditioners meeting the following requirements:
1. Fertilizer: Commercial grade, free flowing, uniform in composition.

Granular Fertilizer: Ferrous Sulphate (hydrated) shall be commercial grade.
 2. Soil Conditioner: For a single use or in combination to meet requirements for topsoil.
 - a. Gypsum: Commercially packaged, free flowing, minimum 95% calcium sulphate by volume, free of any toxic material, and one hundred percent (100%) of the ground material shall pass through a 10-mesh screen and at least fifty percent (50%) shall pass through a 100-mesh screen.
 - b. Organic Soil Conditioner: Decomposed wood derivatives: Ground bark, sawdust, or other wood waste material free of stones, sticks, Soil, and toxic substances harmful to plants, stabilized with nitrogen and having the following properties:

Particle Size: Minimum percent by weight particle size - minimum percent by weight passing;

	<u>Percent</u>
No. 4 mesh Screen	95
No. 8 mesh Screen	80

Nitrogen Content: Minimum percent based on dry weight:

	<u>Percent</u>
Redwood Sawdust	0.5
Fir or Cedar Sawdust	0.7
Fir or Pine Bark	1.0
 - c. Mulch: Mulch shall be free from weeds, mold, and other deleterious materials.

- d. Lime: ASTM C 602, Class T, agricultural limestone containing a minimum 80 percent calcium carbonate equivalent, with a minimum 99 percent passing a No. 8 (2.36 mm) sieve and a minimum 75 percent passing a No. 60 (250 micrometer) sieve.
 - e. Aluminum Sulfate: Commercial grade, unadulterated add at.
 - f. Sand: Clean, washed, natural or manufactured sand, free of toxic materials.
 - g. Peat Humus: Finely divided or granular texture, with a pH range of 6.0 to 7.5, composed of partially decomposed moss Peat (other than sphagnum), peat humus, or reed-sedge peat.
 - h. Manure: Well-rotted, unbleached stable or cattle manure containing not more than 25 percent by volume of straw, sawdust, or other bedding materials; free of toxic substances, stones, sticks, soil, weed seed, and material harmful to plant growth-
 - i. Herbicides- EPA registered and approved, of type recommended by manufacturer.
 - j. Water- reclaimed water.
3. Mulch: Mulch shall be free from weeds, mold, and other deleterious materials.
- a. Wood Cellulose Fiber Mulch: Wood cellulose fiber mulch for use with hydraulic application of seed and fertilizer shall consist of specially prepared wood cellulose fiber processed to contain no growth or germination-inhibiting factors and dyed an appropriate color to facilitate visual metering of the application of materials (sawdust or grass clippings are not acceptable fibers). On an air-dry weight basis, the wood cellulose fiber shall contain a maximum of twelve percent (12 %) moisture, plus or minus three percent (3 %) at the time of manufacture. The combination of wood cellulose and recycled newsprint fibers shall contain a maximum of ten percent (10 %) moisture plus or minus three percent (3 %) at the time of manufacture. The pH range for either mix shall be between 4.5 and 6.5. The wood cellulose fiber shall be manufactured so that:

After addition and agitation in slurry tanks with fertilizers, seeds, water and other approved additives; the fibers in the material will become uniformly suspended to form a homogeneous slurry,

When hydraulically sprayed on the ground, the material will form a blotter-like cover impregnated uniformly with seed.

The cover will allow the absorption of moisture and allow rainfall or applied water to percolate to the underlying soil. Shrinkage after wetting shall not exceed twenty percent (20%) of the surface area.
4. Water: Water shall be of a quality suitable for irrigation and shall not contain elements toxic to plant life.
5. Chemical Treatment Material: Chemical treatment material shall be EPA registered and approved herbicide, insecticide, and fungicide.

6. Erosion Control Material: Erosion control material shall be a totally organic vegetable-based gel supplied in dry, powdered form, at least seventy percent (70 %) of which is ninety-two percent (92 %) pure muciloid, derived from plantago ovata-insularis husk. Erosion control material shall be water-soluble, non-toxic, hydrophilic, and shall not inhibit germination.
7. Agricultural Sulfur: Agricultural sulfur shall be first quality commercial grade, commercially packaged, free flowing, of a flour or sulfur finely-ground form.

2.04 FERTILIZER

- A. Bonemeal: Commercial, raw, finely ground; minimum of 4 percent nitrogen and 20 percent phosphoric acid.
- B. Superphosphate: Commercial, Phosphate mixture, soluble; minimum of 20 percent available phosphoric acid.
- C. Commercial Fertilizer: Commercial-grade complete fertilizer of neutral character consisting of fast and slow-release nitrogen, 50 percent derived from natural organic sources of urea-form, phosphorous, and potassium in the following composition:
- D. Slow-Release Fertilizer: Granular fertilizer consisting of 50 percent water-insoluble nitrogen, phosphorous, and Potassium in the following composition:
 1. Composition: 20 percent nitrogen, 10 percent phosphorous, and 10 percent potassium, by weight.

2.05 EROSION CONTROL MATERIALS

May be required on steep slopes to maintain turf establishment. To be field determined.

- A. Fiber Mesh: Biodegradable twisted jute or spun-coil mesh, 0.92 lb. per sq. yd. (0.5 long kg per sq. m). Minimum, with 50 to 65 percent open area. Include manufacturer's recommended steel wire staples, 6 inches (150 mm).

PART 3 - EXECUTION

3.01 SEEDING CONDITIONS

- A. Seeding Time: Seed shall be sown when soil temperatures are consistently above 70° F, and generally will be between April 15 to September 1.
 1. Conditions: Hydroseeding operations shall be performed only during periods when beneficial results can be obtained. When drought, excessive moisture or other unsatisfactory conditions prevail, the work shall be stopped when directed. When special conditions warrant a variance to the seeding operations, proposed times shall be submitted in writing to and approved by the Owner's representative.

3.02 PREPARATION OF SEEDED AREAS

- A. Preparation of Seeded Areas:

1. Contractor shall verify the rough grades are as indicated on the grading plans and the areas to receive hydroseeding are ready for addition of soil amendments.
2. Site preparation work shall be performed only during periods when beneficial results can be obtained. When high winds, excessive moisture or other unsatisfactory conditions prevail, the work shall be stopped until satisfactory conditions resume.

B. Application of Soil Amendments:

1. Soil Test: See Section 329113 SOIL PREPARATION
2. Deviations: Deviations in the ground surface in relation to the grades indicated shall be corrected prior to addition of amendments.
3. Tillage:
 - a. Soil shall be tilled to a minimum depth of 6" (six inches) by rototilling, milling, or other method as approved by the Owners's representative
 - b. In order to prevent settlement following hydroseeding, Contractor shall settle and compact tilled area to approximately 85% maximum density. This shall be accomplished by water settling, rolling or other methods necessary to assure all voids are removed and soil has attained final settlement. Contractor will be responsible for repairs of any areas that settle following planting operations during the guarantee period.
 - c. Final Physical Nature: Upon completion of the tillage and settlement operation, the physical nature of the subsoil shall be such as to permit a water infiltration rate of not less than 0.6 inches per hour. Contractor shall verify this condition has been met. The resulting soil shall be a friable condition, suitable for planting.
4. Finish Grading:
 - a. Hydroseeded areas shall be filled as needed or have surplus soil removed to attain the proper finished grade. Drainage patterns shall be maintained as indicated on the drawings. Hydroseeded areas compacted by construction operation shall be completely pulverized by tillage. Soil used for repair of erosion or grade deficiencies shall conform to topsoil meeting same analysis as the existing onsite topsoil. Finished grade shall be one inch below the adjoining grade of any surfaced area or as otherwise indicated on the plans. New surfaces shall be blended to existing areas.
 - b. Hydroseeded areas shall have debris and stones larger than 1/2" in any dimension removed from the surface.
 - c. Finish graded areas shall be protected from damage by vehicular or pedestrian traffic and erosion.

C. Application of Soil Treatment Chemicals:

1. When soil treatment becomes necessary to remove a pest or weeds, a state-certified applicator shall apply required chemicals in accordance with EPA label restrictions

and recommendations. Provide hydraulic equipment for the liquid application of chemicals with a leak-proof tank, positive agitation methods, controlled application pressure and metering gages.

A chemical treatment plan shall be provided to the Owner as specified in the paragraph SUBMITTALS.

3.03 HYDROSEEDING

- A. General: Prior to seeding, any previously prepared seedbed areas compacted or damaged by interim rain, traffic, or other cause, shall be reworked to restore the ground condition previously specified. Seeding operations shall not take place when the wind velocity will prevent uniform seed distribution.
- B. Equipment Calibration: The equipment to be used and the methods of hydroseeding shall be subject to the inspection and approval of the Owner's representative prior to commencement of operations. Immediately prior to the commencement of operations, the Contractor shall conduct hydroseeding equipment calibration tests in the presence of the Owner's representative.
- C. Slurry Mix: The seed and mulch shall be mixed in the required amount of water to provide a homogeneous slurry and then uniformly applied under pressure at the following rates per acre:
 - Seed: At 130 pounds of pure live seed/acre
 - Mulch: Wood cellulose fiber mulch - 4100 pounds/acre
 - 1. Seed Moisture: The seed shall not remain in the hydroseeder for- longer than three (3) hours.
 - 2. Soil Moisture: Soil shall be moistened to a minimum depth of four inches (4") prior to seed application. Care must be taken not to allow the soil surface to be super-saturated with water prior to the hydroseeding operation. However, residual moisture must exist within the first one-quarter inch (1/4") of soil surface.

3.04 APPLICATION OPERATIONS

- A. Slurry shall be uniformly applied in the following two-step process under pressure over the entire area, utilizing a sweeping arched stream motion along the fiber to build on itself until a uniform coat is achieved. Both operations shall be completed for a particular area in one (1) working day. The hydroseeded area shall not be rolled.
 - 1. Seed mixture and one-third (1/3) of the wood cellulose fiber shall be added to the appropriate amount of water, thoroughly mixed to produce a homogeneous slurry, and be applied to designated areas.
 - 2. After the initial spraying, the Contractor shall then mix the remaining two-thirds (2/3) of the wood cellulose fiber and the fertilizer with the appropriate amount of water, thoroughly mixed to produce a homogeneous slurry, and apply to designated areas, at the following rates per acre (dry weight):
 - Wood cellulose fiber - 1,500 pounds
 - 10-10-10 commercial fertilizer - 100 pounds
 - Erosion control material - 60 pounds

- B. Initial Watering After Hydroseeding: slurry shall be allowed to dry for approximately two (2) hours before commencing syringe irrigation to germinate seed. Water shall be applied at a rate sufficient to ensure continuously moist soil conditions to a minimum depth of one inch (1"). Run-off and puddling shall be prevented.
- C. Protection of Hydroseeded Areas: Immediately after hydroseeding operations, the areas shall be protected against traffic or other use by fencing.
- D. Seed application by a billion seeding machine is acceptable without additional straw or mulch cover as described herein.

3.05 TURF ESTABLISHMENT AND GUARANTEE PERIOD

- A. Length of Period: On acceptable completion of the turf installation, the Turf Establishment Period will be in effect for a period of 90 days and final acceptance of the project by the Owner, whichever is longer. The Guarantee Period for the turf areas shall be 90 days. The turf will not be accepted separate from the remainder of the project. In order to begin the Turf Establishment Period the Owner must be satisfied that all work has been completed in accordance with the plans and specifications and that the irrigation system is fully functional and properly watering all turf areas.
- B. Proper Stand of Hydroseed: An acceptable healthy hydroseed condition is defined as follows:

"Turf Grass" Seed Mix shall have a solid soil surface growth ground covering with bare spots no larger than two inches (2 ") square and with barren areas not exceeding four percent (4 %) of the total seeded area. Within this growth covering there shall be at least seventy percent (70%) coverage of growing healthy turf.
- C. Maintenance During Establishment Period:
 - 1. General: Maintenance of the turfed areas shall include eradicating weeds, protecting embankments and ditches from erosion, maintaining mulch material, and protecting turfed areas from traffic.
 - 2. Repair: Turf condition shall be re-established as specified herein for eroded areas, damaged or barren areas. Mulch shall be repaired or replaced as required.
 - 3. Mowing: After a 75% stand of turf is achieved, scheduled mowing shall be performed at a 1" cutting height, 1 time per 7 day period, until establishment period has been completed.
 - 4. Watering: Watering shall be at intervals to obtain a moist soil condition to a minimum depth of two inches. Frequency of watering and quantity of water shall be adjusted in accordance with the growth of the turf. Run-off, puddling and wilting shall be prevented.
 - 5. Post-Fertilization: Ammonium phosphate fertilizer shall be applied at the rate of six pounds per 1,000 square feet (one pound actual nitrogen) after the first month and again prior to the final acceptance. The application shall avoid excessive high nitrogen levels. Stolons must be adequately rooted prior to nitrogen application. If not properly rooted foliar application of 12-48-8 fertilizer may be required. Consult with Owner's representative and stolon supplier.

6. Chemical Treatment:

- a. When a pest or disease becomes apparent during the Turf Establishment Period, a state-certified applicator shall apply required chemicals in accordance with EPA label restrictions and recommendations. Hydraulic equipment for the liquid application of chemicals shall be provided with a leak-proof tank, positive agitation methods, controlled application pressure and metering gages. Pre-emergent herbicides will not be used.
- b. A Chemical Treatment Plan shall be provided to the Owner as stated in the paragraph SUBMITTALS.

3.06 FINAL ACCEPTANCE

- A. At the end of the construction, a final inspection will be made. Rejected areas shall be replanted or repaired as directed by the Owner.
- B. Preliminary Inspection: Prior to the completion of the sod establishment period, a preliminary inspection shall be held by the Owner. Time for the inspection shall be established in writing. The acceptability of the seeded areas in accordance with the hydroseed establishment period shall be determined. An unacceptable stand of hydroseed shall be replanted or repaired as directed by the Owner and as soon as seeding conditions permit.
- C. Final Inspection: A final inspection shall be held by the Owner to determine that deficiencies noted in the preliminary inspection have been corrected. Time for the inspection shall be established in writing

3.07 CLEANUP AND PROTECTION

- A. During landscaping, keep pavements clean and work area in an orderly condition.
- B. Protect landscaping from damage due to landscape operations, operations by other contractors and trades, and trespassers. Maintain protection during installation and maintenance periods. Treat, repair, or replace damages landscape work as directed.

3.08 DISPOSAL OF SURPLUS AND WASTE MATERIALS

- A. Disposal: Remove surplus soil and waste material, including excess subsoil, unsuitable soil, trash, and debris, and legally dispose of it off the Owner's property.

END OF SECTION 32 92 01