

# Project Manual

For

## Parker Whitney Elementary School Replace Existing Fire Alarm System

5145 Topaz Avenue, Rocklin, CA 95677

### VOLUME 1 and 2

Bidding and Contract Requirements  
And  
Specifications

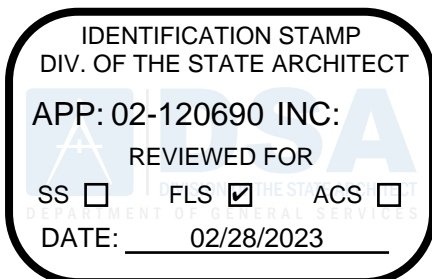
for the

### Rocklin Unified School District

2615 Sierra Meadows Drive, Rocklin, CA 95677

Date: November 23, 2022

PBK Project No.: 220394



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# Project Manual

for:

## **Parker Whitney Elementary School Replace Existing Fire Alarm System**

5145 Topaz Avenue, Rocklin, CA 95677

for the

## **Rocklin Unified School District**

Date: November 23, 2022

PBK Project No.: 220394

### **Design Team:**

**Architect:**

PBK  
Anthony Harris, Architect  
2520 Venture Oaks Way  
Suite 440  
Sacramento, CA 95833  
Phone: (916) 682-9494

**Electrical:**

LEAF Engineers  
Larry Myers, PE  
2520 Venture Oaks Way  
Suite 440  
Sacramento, CA 95833  
Phone: (916) 927-3333

**Fire Alarm:**

LEAF Engineers  
Chuck Yanez  
2520 Venture Oaks Way  
Suite 440  
Sacramento, CA 95833  
Phone: (916) 927-3333

**DIVISION**

*Project Manual Cover Sheet and Seal Page.*

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# BIDDING and CONTRACT REQUIREMENTS

For

Parker Whitney Elementary School  
Replace Existing Fire Alarm  
System

For the

Rocklin Unified School District  
2615 Sierra Meadows Drive, Rocklin CA. 95677

Date: November 23, 2022

PBK Project No.: 220394

**NOTICE INVITING BIDS**

**ROCKLIN UNIFIED SCHOOL DISTRICT**

NOTICE IS HEREBY GIVEN that the ROCKLIN UNIFIED SCHOOL DISTRICT, acting by and through its Governing Board, hereinafter referred to as "District," will receive prior to **2:00:00 PM of April 18, 2023.** sealed bids for the award of a Contract for the following:

**PARKER WHITNEY ELEMENTARY SCHOOL  
REPLACE EXISTING FIRE ALARM SYSTEM**

All bids shall be made and presented only on the forms provided by the District. Bids shall be received in the Maintenance and Operations of the ROCKLIN UNIFIED SCHOOL DISTRICT, 4090 Del Mar, Suite B, Rocklin, and shall be opened and publicly read aloud at the above stated time and place. Any bids received after the time specified above, or after any extensions due to material changes, shall be returned unopened.

CONTRACTOR should consult the General Conditions, Supplementary Conditions, and General Requirements regarding Milestones and Liquidated Damages.

**Prequalification of Bidders**

As a condition of submitting a bid for this Project, and in accordance with California Public Contract Code section 20111.6, prospective bidders are required to submit to the District a completed set of prequalification documents on forms provided by the District. These documents will be the basis for determining which bidders are qualified to bid on this Project. The District pre-qualifies bidders on a quarterly basis. The approved bidders list is available at 2615 Sierra Meadows Drive, Rocklin, CA. 95677.

**Miscellaneous Information**

Bids shall be received in the place identified above and shall be opened and publicly read aloud at the above-stated time and place.

The bid documents are available on the District's website.

**There will be a mandatory Pre-Bid Conference at Parker Whitney Elementary School, 5140 Topaz Avenue, Rocklin, CA. 95677, at 2:00 PM on Monday, March 27, 2023.** Any Contractor bidding on the Project who fails to attend the entire mandatory job walk and conference will be deemed a non-responsive bidder, and bid will be returned unopened.

Each bidder shall be a licensed contractor pursuant to the California Business and Professions Code and be licensed to perform the work called for in the Contract Documents. The successful bidder must possess a valid and active Class B, C-10, or C-16 license at the time of award and throughout the duration of this Contract. The Contractor's California State License number shall be clearly stated on the bidder's proposal.

Subcontractors shall be licensed pursuant to California law for the trades necessary to perform the Work called for in the Contract Documents.

Each bid must strictly conform with, and be responsive to, the Contract Documents, as defined in the General Conditions.

The District reserves the right to reject any or all bids, or to waive any irregularities or informalities in any bids or in the bidding. Notwithstanding the provisions of Section 10125, the estimate of cost maybe

approved by the District, which includes alternates contemplating addition to, or deletions from, the base bid, provided that all the following requirements are met:

1. The lowest bid shall be determined in a manner that prevents any information that would identify any of the bidders or proposed subcontractors or suppliers from being revealed to the public entity before the ranking of all bidders from lowest to highest has been determined.

Each bidder shall submit with the bid — on the form furnished with the Contract Documents — a list of the designated subcontractors on this Project, as required by the Subletting and Subcontracting Fair Practices Act, California Public Contract Code section 4100 et seq.

In accordance with California Public Contract Code section 22300, the District will permit the substitution of securities for any moneys withheld by the District to ensure performance under the Contract. At the request and expense of the Contractor, securities equivalent to the amount withheld shall be deposited with the District, or with a state or federally chartered bank as the escrow agent, who shall then pay such moneys to the Contractor. Upon satisfactory completion of the Contract, the securities shall be returned to the Contractor.

Each bidder's bid must be accompanied by one of the following forms of bidder's security: (1) cash, (2) a cashier's check made payable to the District, (3) a certified check made payable to the District, or (4) a bidder's bond executed by a California admitted surety, as defined in Code of Civil Procedure section 995.120, made payable to the District in the form set forth in the Contract Documents. Such bidder's security must be in an amount not less than ten percent (10%) of the maximum amount of bid as a guarantee that the bidder will enter into the proposed Contract, if the same is awarded to such bidder, and will provide the required Performance and Payment Bonds, insurance certificates, and any other required documents. In the event of failure to enter into said Contract, or provide the necessary documents, said security will be forfeited.

The Contractor and all subcontractors shall comply with the requirements set forth in Division 2, Part 7, Chapter 1 of the Labor Code. The District has obtained from the Director of the Department of Industrial Relations the general prevailing rate of per diem wages, and the general prevailing rate for holiday and overtime work in the locality in which this work is to be performed for each craft, classification, or type of worker needed to execute the Contract. These per diem rates, including holiday and overtime work, as well as employer payments for health and welfare, pension, vacation, and similar purposes, are on file at the District, and are also available from the Director of the Department of Industrial Relations (<http://www.dir.ca.gov/oprl/pwappwage/PWAppWageStart.asp>). Pursuant to California Labor Code section 1720 et seq., it shall be mandatory upon the Contractor to whom the Contract is awarded, and upon any subcontractor under such Contractor, to pay not less than the said specified rates to all workers employed by them in the execution of the Contract.

A contractor or subcontractor shall not be qualified to bid on, nor be listed in a bid proposal, subject to the requirements of Section 4104 of the Public Contract Code, nor engage in the performance of any contract for public work, as defined in the Labor Code, unless currently registered and qualified to perform public work pursuant to Labor Code section 1725.5. It is not a violation of this section for an unregistered Contractor to submit a bid that is authorized by Section 7029.1 of the Business and Professions Code, or by Section 10164 or 20103.5 of the Public Contract Code, provided the Contractor is registered to perform public work pursuant to Section 1725.5 at the time the Contract is awarded.

The Contractor and all subcontractors shall furnish certified payroll records as required, pursuant to Labor Code section 1776, directly to the Labor Commissioner, in accordance with Labor Code section 1771.4 on at least a monthly basis (or more frequently if required by the District or the Labor Commissioner), and in a format prescribed by the Labor Commissioner. Monitoring and enforcement of the prevailing wage laws and related requirements will be performed by the Labor Commissioner/ Department of Labor Standards Enforcement (DLSE).

No bidder may withdraw any bid for a period of 90 calendar days after the date set for the opening of bids.

Separate payment and performance bonds, each in an amount equal to 100% of the total Contract amount, are required, and shall be provided to the District prior to execution of the Contract and shall be in the form set forth in the Contract Documents.

All bonds (Bid, Performance, and Payment) must be issued by a California admitted surety, as defined in California Code of Civil Procedure section 995.120.

Where applicable, bidders must meet the requirements set forth in Public Contract Code section 10115 et seq., Military and Veterans Code section 999 et seq., and California Code of Regulations, Title 2, section 1896.60 et seq. regarding Disabled Veteran Business Enterprise (DVBE) Programs. Forms are included in this Bid Package.

Any request for substitutions, pursuant to Public Contract Code section 3400, must be made at the time of Bid on the Substitution Request Form set forth in the Contract Documents, and be included with the bid.

No telephone or facsimile machine will be available to bidders on the District premises at any time.

COVID-19 Conditions: Contractors must conform to, and ensure that all subcontractors and other Project personnel including, but not limited to, workers and site visitors conform to all regulations, limitations, and requirements as put forth and recommended by Associated General Contractors of California (AGC), State of California Guidance on Outbreak of 2019 Novel Coronavirus (2019-nCoV) in Wuhan, China, and local Health Department agencies.

It is each bidder's sole responsibility to ensure the bid is delivered timely and received at the location designated as specified above. Any bid received at the designated location after the scheduled closing time for receipt of bids shall be returned to the bidder unopened.

Advertisement Dates:  
March 15, 2023  
March 22, 2023

**END OF SECTION 00 11 16**

**BID SCHEDULE**

**NO. 220394-01**

Rocklin Unified School District  
**Replace Existing Fire Alarm System**

A. In the District described above, all in strict conformance with the drawings and other Contract Documents on file at the Facilities and Strategic Planning Department of said District, for amounts set forth herein.

**B. BIDDER ACKNOWLEDGES THE FOLLOWING ADDENDUM:**

Number	Number	Number	Number	Number	Number	Number	Number
_____	_____	_____	_____	_____	_____	_____	_____

C. Acknowledge the inclusion of all addenda issued prior to bid in the blanks provided above. Your failure to do so may render your bid non-responsive.

**D. ITEM A. Total Cash Purchase Price in Words and Numbers:**

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\_\_\_\_\_ DOLLARS

(In Words – Printed or Typed)

E. **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 the Specifications:

ADD/DEDUCT \_\_\_\_\_ Dollars (\$ \_\_\_\_\_) ADD/DEDUCT \_\_\_\_\_ Dollars  
(\$ \_\_\_\_\_) ADD/DEDUCT \_\_\_\_\_ Dollars (\$ \_\_\_\_\_)

F. **TIME FOR COMPLETION.** The District may give a notice to proceed within ninety (90) days of the award of the bid by the District. Once the Contractor has received the notice to proceed, the Contractor shall complete the work in the time specified in the Agreement. By submitting this bid, Contractor has thoroughly studied this Project and agrees that the Contract Time for this Project is adequate for the timely and proper completion of the Project. Further, Contractor has included in the analysis of the time required for this Project, rain days, governmental delays, and the requisite time to complete Punch List:

1. In the event that the District desires to postpone giving the notice to proceed beyond this ninety (90) day period, it is expressly understood that with reasonable notice to the Contractor, giving the notice to proceed may be postponed by the District. It is further expressly understood by the Contractor, that the Contractor shall not be entitled to any claim of additional compensation as a result of the postponement of giving the notice to proceed.
2. If the Contractor believes that a postponement will cause a hardship, the Contractor

may terminate the contract with written notice to the District within ten (10) days after receipt by the Contractor of the District's notice of postponement. Should the Contractor terminate the Contract as a result of a notice of postponement, the District shall have the authority to award the Contract to the next lowest responsible bidder, if applicable.

3. It is understood that the District reserves the right to reject any or all bids, and/or waive any irregularities or informalities in this bid or in the bid process. The Contractor understands that this bid may not be withdrawn for a period of ninety (90) days after the date set for the opening of bids.
  
- G. Attached is bid security in the amount of not less than ten percent (10%) of the bid: In the form of a Bid bond (10% of the Bid), certified check, or cashier's check (circle one)
  
- H. The required List of Designated Subcontractors is attached hereto.
  
- I. The required Non-Collusion Declaration is attached hereto.
  
- J. The Substitution Request Form, if applicable, is attached hereto.
  
- K. 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 but 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 or she will also furnish and deliver to the District the Performance Bond and Payment Bond, all within five (5) calendar days after award of Contract, and that the work under the Contract shall be commenced by the undersigned bidder, if awarded the Contract, by the start date provided in the District's Notice to Proceed, and shall be completed by the Contractor in the time specified in the Contract Documents.
  
- L. The names of all persons interested in the foregoing proposal as principals are as follows:

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1. **Important Notice:** If bidder or other interested person is a corporation, state the legal name of such corporation, as well as the names of the president, secretary, treasurer, and manager thereof. If a co-partnership, state the true names of the firm, as well as the names of all individual co-partners comprising the firm. If bidder or other interested person is an individual, state the first and last name in full.
  
- M. **PROTEST PROCEDURES.** If there is a bid protest, the grounds shall be submitted as set forth in the Instructions to Bidders.
  
- N. The undersigned bidder shall be licensed and shall provide the following California Contractor's license information:
  1. License Number:
  2. License Expiration Date:
  3. Name on License:
  4. Class of License:
  5. DIR Registration Number

- O. If the bidder is a joint venture, each member of the joint venture must include the above information.
- P. Time is of the essence regarding this Contract, therefore, in the event the bidder to whom the Contract is awarded 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.
- Q. The bidder declares that he/she has carefully examined the location of the proposed Project, that he/she has examined the Contract Documents, including the Plans, General Conditions, Supplemental Conditions, Addenda, and Specifications, all others documents and requirements that are attached to and/or contained in the Project Manual, all other documents issued to bidders and read the accompanying instructions to bidders, and hereby proposes and agrees if this proposal is accepted, to furnish all materials and do all work required to complete the said work in accordance with the Contract Documents, in the time and manner therein prescribed for the unit cost and lump sum amounts set forth in this Bid Form.
- R. **DEBARMENT.** In addition to seeking remedies for False Claims under Government Code section 12650 et seq. and Penal Code section 72, the District may debar a Contractor pursuant to Article 15 of the General Conditions if the Board, or the Board may designate a hearing officer who, in his or her discretion, finds the Contractor has done any of the following:
1. Intentionally or with reckless disregard, violated any term of a contract with the District,
  2. Committed an act or omission which reflects on the Contractor's quality, fitness or capacity to perform work for the District,
  3. Committed an act or offense which indicates a lack of business integrity or business honesty, or
  4. Made or submitted a false claim against the District or any other public entity (see Government Code section 12650, et seq., and Penal Code section 72).
- S. **DESIGNATION OF SUBCONTRACTORS.** In compliance with the Subletting and Subcontracting Fair Practices Act (California Public Contract Code section 4100 et seq.) and any amendments thereof, each bidder shall list subcontractors on the District's form Subcontractor list. This subcontractor list shall be submitted with the bid and is a required form.

**SECTION CONTINUES ON NEXT PAGE**



Bid Schedule Continues:

I agree to receive service of notices at the e-mail address listed below.

I the below-indicated bidder, declare under penalty of perjury that the information provided, and representations made in this bid are true and correct.

---

Proper Name of Company

---

Name of Bidder Representative

---

Street Address

---

City, State, and Zip

(      )

---

Phone Number

(      )

---

Fax Number

---

E-Mail

By: \_\_\_\_\_ Date: \_\_\_\_\_

Signature of Bidder Representative

**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 a 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. If bidder is an individual, bidder's signature shall be placed above.

All signatures must be made in permanent blue ink.

**END OF SECTION 00 21 14**

PBK Architects  
Project No. 220394

Parker Whitney Elementary School - Replace Existing Fire Alarm System  
Rocklin Unified School District

**BID SCHEDULE**

**NO. 220394-xx**

Rocklin Unified School District

**BID SCHEDULE**

**NO. 220394-01**

Rocklin Unified School District  
**Replace Existing Fire Alarm System**

A. In the District described above, all in strict conformance with the drawings and other Contract Documents on file at the Facilities and Strategic Planning Department of said District, for amounts set forth herein.

**B. BIDDER ACKNOWLEDGES THE FOLLOWING ADDENDUM:**

Number	Number	Number	Number	Number	Number	Number	Number
_____	_____	_____	_____	_____	_____	_____	_____

C. Acknowledge the inclusion of all addenda issued prior to bid in the blanks provided above. Your failure to do so may render your bid non-responsive.

**D. ITEM A. Total Cash Purchase Price in Words and Numbers:**

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\_\_\_\_\_ DOLLARS

(In Words – Printed or Typed)

E. **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 the Specifications:

ADD/DEDUCT \_\_\_\_\_ Dollars (\$ \_\_\_\_\_) ADD/DEDUCT \_\_\_\_\_ Dollars  
(\$ \_\_\_\_\_) ADD/DEDUCT \_\_\_\_\_ Dollars (\$ \_\_\_\_\_)

F. **TIME FOR COMPLETION.** The District may give a notice to proceed within ninety (90) days of the award of the bid by the District. Once the Contractor has received the notice to proceed, the Contractor shall complete the work in the time specified in the Agreement. By submitting this bid, Contractor has thoroughly studied this Project and agrees that the Contract Time for this Project is adequate for the timely and proper completion of the Project. Further, Contractor has included in the analysis of the time required for this Project, rain days, governmental delays, and the requisite time to complete Punch List:

1. In the event that the District desires to postpone giving the notice to proceed beyond this ninety (90) day period, it is expressly understood that with reasonable notice to the Contractor, giving the notice to proceed may be postponed by the District. It is further expressly understood by the Contractor, that the Contractor shall not be entitled to any claim of additional compensation as a result of the postponement of giving the notice to proceed.
2. If the Contractor believes that a postponement will cause a hardship, the Contractor

**DDITION**

A. In the District described above, all in strict conformance with the drawings and other Contract Documents on file at the Facilities and Strategic Planning Department of said District, for amounts set forth herein.

**B. BIDDER ACKNOWLEDGES THE FOLLOWING ADDENDUM:**

Number	Number	Number	Number	Number	Number	Number	Number
_____	_____	_____	_____	_____	_____	_____	_____

C. Acknowledge the inclusion of all addenda issued prior to bid in the blanks provided above. Your failure to do so may render your bid non-responsive.

D. **ITEM A.** Total Cash Purchase Price in Words and Numbers:

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\_\_\_\_\_ DOLLARS

(In Words – Printed or Typed)

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ADD/DEDUCT \_\_\_\_\_ Dollars (\$ \_\_\_\_\_) ADD/DEDUCT \_\_\_\_\_ Dollars  
(\$ \_\_\_\_\_) ADD/DEDUCT \_\_\_\_\_ Dollars (\$ \_\_\_\_\_)

F. **TIME FOR COMPLETION.** The District may give a notice to proceed within ninety (90) days of the award of the bid by the District. Once the Contractor has received the notice to proceed, the Contractor shall complete the work in the time specified in the Agreement. By submitting this bid, Contractor has thoroughly studied this Project and agrees that the Contract Time for this Project is adequate for the timely and proper completion of the Project. Further, Contractor has included in the analysis of the time required for this Project, rain days, governmental delays, and the requisite time to complete Punch List:

1. In the event that the District desires to postpone giving the notice to proceed beyond this ninety (90) day period, it is expressly understood that with reasonable notice to the Contractor, giving the notice to proceed may be postponed by the District. It is further expressly understood by the Contractor, that the Contractor shall not be entitled to any claim of additional compensation as a result of the postponement of giving the notice to proceed.
2. If the Contractor believes that a postponement will cause a hardship, the Contractor may terminate the contract with written notice to the District within ten (10) days after receipt by the Contractor of the District’s notice of postponement. Should the Contractor terminate the Contract as a result of a notice of postponement, the District shall have the authority to award the Contract to the next lowest responsible bidder, if applicable.

3. It is understood that the District reserves the right to reject any or all bids, and/or waive any irregularities or informalities in this bid or in the bid process. The Contractor understands that this bid may not be withdrawn for a period of ninety (90) days after the date set for the opening of bids.
  
- G. Attached is bid security in the amount of not less than ten percent (10%) of the bid: In the form of a Bid bond (10% of the Bid), certified check, or cashier's check (circle one)
  
- H. The required List of Designated Subcontractors is attached hereto.
  
- I. The required Non-Collusion Declaration is attached hereto.
  
- J. The Substitution Request Form, if applicable, is attached hereto.
  
- K. 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 but 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 or she will also furnish and deliver to the District the Performance Bond and Payment Bond, all within five (5) calendar days after award of Contract, and that the work under the Contract shall be commenced by the undersigned bidder, if awarded the Contract, by the start date provided in the District's Notice to Proceed, and shall be completed by the Contractor in the time specified in the Contract Documents.
  
- L. The names of all persons interested in the foregoing proposal as principals are as follows:

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1. **Important Notice:** If bidder or other interested person is a corporation, state the legal name of such corporation, as well as the names of the president, secretary, treasurer, and manager thereof. If a co-partnership, state the true names of the firm, as well as the names of all individual co-partners comprising the firm. If bidder or other interested person is an individual, state the first and last name in full.
  
- M. **PROTEST PROCEDURES.** If there is a bid protest, the grounds shall be submitted as set forth in the Instructions to Bidders.
  
- N. The undersigned bidder shall be licensed and shall provide the following California Contractor's license information:
  1. License Number:
  2. License Expiration Date:
  3. Name on License:
  4. Class of License:
  5. DIR Registration Number
  
- O. If the bidder is a joint venture, each member of the joint venture must include the above information.
  
- P. Time is of the essence regarding this Contract, therefore, in the event the bidder to whom

the Contract is awarded 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.

- Q. The bidder declares that he/she has carefully examined the location of the proposed Project, that he/she has examined the Contract Documents, including the Plans, General Conditions, Supplemental Conditions, Addenda, and Specifications, all others documents and requirements that are attached to and/or contained in the Project Manual, all other documents issued to bidders and read the accompanying instructions to bidders, and hereby proposes and agrees if this proposal is accepted, to furnish all materials and do all work required to complete the said work in accordance with the Contract Documents, in the time and manner therein prescribed for the unit cost and lump sum amounts set forth in this Bid Form.
- R. **DEBARMENT.** In addition to seeking remedies for False Claims under Government Code section 12650 et seq. and Penal Code section 72, the District may debar a Contractor pursuant to Article 15 of the General Conditions if the Board, or the Board may designate a hearing officer who, in his or her discretion, finds the Contractor has done any of the following:
1. Intentionally or with reckless disregard, violated any term of a contract with the District,
  2. Committed an act or omission which reflects on the Contractor's quality, fitness or capacity to perform work for the District,
  3. Committed an act or offense which indicates a lack of business integrity or business honesty, or
  4. Made or submitted a false claim against the District or any other public entity (see Government Code section 12650, et seq., and Penal Code section 72).
- S. **DESIGNATION OF SUBCONTRACTORS.** In compliance with the Subletting and Subcontracting Fair Practices Act (California Public Contract Code section 4100 et seq.) and any amendments thereof, each bidder shall list subcontractors on the District's form Subcontractor list. This subcontractor list shall be submitted with the bid and is a required form.

**SECTION CONTINUES ON NEXT PAGE**

Bid Schedule Continues:

I agree to receive service of notices at the e-mail address listed below.

I the below-indicated bidder, declare under penalty of perjury that the information provided, and representations made in this bid are true and correct.

---

Proper Name of Company

---

Name of Bidder Representative

---

Street Address

---

City, State, and Zip

(      )

---

Phone Number

(      )

---

Fax Number

---

E-Mail

By: \_\_\_\_\_ Date: \_\_\_\_\_

Signature of Bidder Representative

**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 a 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. If bidder is an individual, bidder's signature shall be placed above.

All signatures must be made in permanent blue ink.

**END OF SECTION 00 21 14**



# Pre-Bid Sign-In Sheet

Date of Meeting:

Time of Meeting:

Place of Meeting:

Project:

Project No.

Name	Company	Email	Phone
01			
02			
03			
04			
05			
06			
07			
08			
09			
10			
11			
12			
13			
14			
15			





**IRAN CONTRACTING ACT CERTIFICATION**  
**(Public Contract Code sections 2202-2208)**  
**(To be Executed by Bidder and Submitted with Bid)**

As required by Public Contract Code (PCC) section 2204 for contracts of one million dollars (\$1,000,000.00) or more, please insert bidder's or financial institution's name and Federal ID Number (if available), and complete **one (1)** of the options below. Please note that California law establishes penalties for providing false certifications, including civil penalties equal to the greater of two hundred fifty thousand dollars (\$250,000.00) or twice the amount of the contract for which the false certification was made, contract termination, and three (3) year ineligibility to bid on contracts (PCC §2205).

**OPTION #1 - CERTIFICATION**

I, the official named below, certify I am duly authorized to execute this certification on behalf of the bidder/financial institution identified below, and the bidder/financial institution identified below is **not** on the current list of persons engaged in investment activities in Iran created by the California Department of General Services (DGS) and is not a financial institution extending twenty million dollars (\$20,000,000.00) or more in credit to another person/bidder for 45 days or more, if that other person/bidder will use the credit to provide goods or services in the energy sector in Iran and is identified on the current list of persons engaged in investment activities in Iran created by DGS (PCC §2204[a]).

<i>Bidder Name/Financial Institution (Printed)</i>		<i>Federal ID Number (or N/A)</i>
<i>By (Authorized Signature)</i>		
<i>Printed Name and Title of Person Signing</i>		
<i>Date Executed</i>	<i>Executed in</i>	

**OPTION #2 – EXEMPTION**

Pursuant to Public Contract Code sections 2203(c) and (d), a public entity may permit a bidder/financial institution engaged in investment activities in Iran, on a case-by-case basis, to be eligible for, or to bid on, submit a proposal for, or enter into or renew a contract for goods and services. If you have obtained an exemption from the certification requirement under the Iran Contracting Act, please fill out the information below, and attach documentation demonstrating the exemption approval.

<i>Bidder Name/Financial Institution (Printed)</i>		<i>Federal ID Number (or N/A)</i>
<i>By (Authorized Signature)</i>		
<i>Printed Name and Title of Person Signing</i>		<i>Date Executed</i>

**END OF SECTION 00 40 00**

**SUFFICIENT FUNDS DECLARATION**  
**(Labor Code section 2810)**  
**(To Be Executed by Bidder and Submitted with Bid)**

Owner: Rocklin Unified School District

Contract for: \_\_\_\_\_ Project

I, \_\_\_\_\_, declare that I am the \_\_\_\_\_ of \_\_\_\_\_, the entity making and submitting the bid for the above Project that accompanies this Declaration, and that such bid includes sufficient funds to permit \_\_\_\_\_ [name of entity] to comply with all local, state, or federal labor laws or regulations during the performance of the Contract for the Project, including payment of prevailing wage, and that \_\_\_\_\_ [the entity] will comply with the provisions of Labor Code section 2810(d) if awarded the Contract.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct and executed on \_\_\_\_\_ 20\_\_, at \_\_\_\_\_ [city], \_\_\_\_\_ [state].

Date: \_\_\_\_\_

\_\_\_\_\_  
Signature

Print Name: \_\_\_\_\_

Print Title: \_\_\_\_\_

**END OF SECTION 00 40 01**

**BID FORM AND PROPOSAL**

To: Governing Board of Rocklin Unified School District (District)

From: \_\_\_\_\_  
(Proper Name of Bidder)

The undersigned declares that the Contract Documents including, without limitation, the Notice to Bidders and the Instructions to Bidders have been read and agrees and proposes to furnish all necessary labor, materials, and equipment to perform and furnish all work in accordance with the terms and conditions of the Contract Documents, including, without limitation, the Drawings and Specifications of Project: Replace Existing Fire Alarm System (Project), for the following categories: electrical and fire alarm (Work) and will accept in full payment for that Work the following total lump sum amount, all taxes included:

\_\_\_\_\_ dollars \$ \_\_\_\_\_  
Base Bid

**[IF APPLICABLE] Additive/Deductive Alternates:**

**Alternate #1**

\_\_\_\_\_ dollars \$ \_\_\_\_\_  
Additive/Deductive

**[DESCRIBE SCOPE OF WORK HERE]**

Descriptions of alternates are primarily scope definitions and do not necessarily detail the full range of materials and processes needed to complete the construction.

1. **[IF APPLICABLE] Allowance.** The Bidder's Base Bid and each alternate shall include a fifteen percent (15%) allowance for unforeseen items.

The above allowance shall only be allocated for unforeseen items relating to the Work. Contractor shall not bill for or be due any portion of this allowance unless the District has identified specific work, Contractor has submitted a price for that work or the District has proposed a price for that work, the District has accepted the cost for that work, and the District has prepared a change order incorporating that work. Contractor hereby authorizes the District to execute a unilateral deductive change order at or near the end of the Project for all or any portion of the allowance not allocated.

2. The undersigned has reviewed the Work outlined in the Contract Documents and fully understands the scope of Work required in this Proposal, understands the construction and project management function(s) is described in the Contract Documents, and that each Bidder who is awarded a contract shall be in fact a prime contractor, not a subcontractor, to the District, and agrees that its Proposal,

if accepted by the District, will be the basis for the Bidder to enter into a contract with the District in accordance with the intent of the Contract Documents.

3. The undersigned has notified the District in writing of any discrepancies, omissions, or of any doubt, questions, or ambiguities about the meaning of any of the Contract Documents, and has contacted the Construction Manager before bid date to verify the issuance of any clarifying Addenda.
4. The undersigned agrees to commence work under this Contract on the date established in the Contract Documents and to complete all work within the time specified in the Contract Documents.
5. The liquidated damages clause of the General Conditions and Agreement is hereby acknowledged.
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 90 days.
7. The following documents are attached hereto:
  - a. Bid Form
  - b. Bid Bond on the District's form or other security
  - c. Designated Subcontractors List
  - d. Contractor's Certificate Regarding Drug Free Workplace
  - e. Non-Collusion Declaration
  - f. Prime Bidder DVBE Participation Statement
  - g. Contractor's Certificate Regarding Worker's Compensation
  - h. DIR Registration Certificate
  - i. Iran Contracting Act Certification **[IF CONTRACT VALUE IS \$1,000,000 OR MORE]**
  - j. Contractor's Certificate Regarding Alcoholic Beverage and Tobacco-Free Campus Policy
  - k. Substitution Request Form (If Substitution Request Form is not submitted then NO Substitutions will be allowed after the bids are opened)
  - l. Site-Visit Certification **[IF A SITE VISIT WAS REQUIRED]**

**SECTION CONTINUES ON NEXT PAGE**

8. Receipt and acceptance of the following addenda is hereby acknowledged:

No.\_\_\_\_, Dated \_\_\_\_\_ No.\_\_\_\_, Dated \_\_\_\_\_

No.\_\_\_\_, Dated \_\_\_\_\_ No.\_\_\_\_, Dated \_\_\_\_\_

No.\_\_\_\_, Dated \_\_\_\_\_ No.\_\_\_\_, Dated \_\_\_\_\_

9. Bidder acknowledges that the license required for performance of the Work is a B of C-10 license.
10. The undersigned hereby certifies that Bidder can furnish labor that can work in harmony with all other elements of labor employed or to be employed on the Work.

11. Bidder specifically acknowledges and understands that if it is awarded the Contract, that it shall perform the Work of the Project while complying with all requirements of the Department of Industrial Relations, and with all requirements of the Project Labor Agreement.  
<http://www.dir.ca.gov/>.
12. The Bidder represents that he or she is competent, knowledgeable, and has special skills with respect to the nature, extent, and inherent conditions of the Work to be performed. Bidder further acknowledges that there are certain peculiar and inherent conditions existent in the construction of the Work that may create, during the Work, unusual or peculiar unsafe conditions hazardous to persons and property.
13. Bidder expressly acknowledges that he or she is aware of such peculiar risks and has the skill and experience to foresee and to adopt protective measures to perform the Work adequately and safely with respect to such hazards.
14. Bidder expressly acknowledges that he or she is aware that if a false claim is knowingly submitted (as the terms "claim" and "knowingly" are defined in the California False Claims Act, Cal. Gov. Code, §12650 et seq.), the District will be entitled to civil remedies set forth in the California False Claim Act. It may also be considered fraud and the Contractor may be subject to criminal prosecution.
15. The undersigned Bidder certifies that, at the time of bidding, and throughout the period of the contract, Bidder is licensed by the State of California to do the type of work required under the terms of the Contract Documents and registered as a public works contractor with the Department of Industrial Relations. Bidder further certifies that he or she is regularly engaged in the general class and type of work called for in the Contract Documents.

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

Dated this \_\_\_\_\_ day of \_\_\_\_\_ 20 \_\_\_\_

Name of Bidder \_\_\_\_\_

Type of Organization \_\_\_\_\_

Signed by \_\_\_\_\_

Title of Signer \_\_\_\_\_

Address of Bidder \_\_\_\_\_

Contractor's License No(s): No.: \_\_\_\_\_ Class: \_\_\_\_\_ Expiration Date: \_\_\_\_\_

Taxpayer's Identification No. of Bidder \_\_\_\_\_

Telephone Number \_\_\_\_\_

Fax Number \_\_\_\_\_

E-mail \_\_\_\_\_ Web page \_\_\_\_\_

**SECTION CONTINUES ON NEXT PAGE**

Public Works Contractor Registration No.: \_\_\_\_\_

If Bidder is a corporation, affix corporate seal.

Name of Corporation: \_\_\_\_\_

President: \_\_\_\_\_

Secretary: \_\_\_\_\_

Treasurer: \_\_\_\_\_

Manager: \_\_\_\_\_

**END OF SECTION 00 41 01**

**CHECKLIST OF MANDATORY BID FORMS**

(For Contractor's use and reference only. Note: This list is not all inclusive. Additional documents may be required. Bidders should consult all Contract and Bid Documents.)

- Bid Form
- Bid Bond (or Bid Guarantee form if Security is other than Bid Bond)
- Designation of Subcontractors
- Contractor's Certificate Regarding Drug-Free Workplace
- Non-Collusion Declaration
- Prime Bidder Certification of DVBE Participation
- Contractor's Certificate Regarding Workers' Compensation
- DIR Registration Certification
- Acknowledgment of Bidding Practices Regarding Indemnity
- Contractor's Certificate Regarding Alcoholic Beverage and Tobacco-Free Campus Policy
- Substitution Request Form (if Substitution Request Form is not submitted then NO Substitutions will be allowed after the bids are opened)
- Site-Visit Certificate.

**END OF SECTION 00 41 02**



**BID GUARANTEE FORM**

**(Use only when not using a Bid Bond)**

Note: Use this form, in lieu of Bid Bond form, when a cashier's check or certified check is accompanying the bid.

Accompanying this proposal is a cashier's check payable to the order of the Rocklin Unified School District, or a certified check payable to the order of the Rocklin Unified School District, in an amount equal to ten percent (10%) of the base bid and alternates (\$\_\_\_\_\_).

The proceeds of this check shall become the property of said District if this proposal shall be accepted by the District through the District's Governing Board, and the undersigned fails to execute a Contract with, and furnish the sureties required by, the District within the required time; otherwise, said check is to be returned to the undersigned.

\_\_\_\_\_

Bidder

**END OF SECTION 00 41 03**

**BID BOND FORM**

- A. KNOW ALL MEN BY THESE PRESENT that we, the undersigned (hereafter called "Principal"), and \_\_\_\_\_ (hereafter called "Surety"), are hereby held and firmly bound unto the Rocklin Unified School District (hereafter called "District") in the sum of \_\_\_\_\_ (\$\_\_\_\_\_) for the payment of which, well and truly to be made, we hereby jointly and severally bind ourselves, successors, and assigns.

SIGNED this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_.

- B. The condition of the above obligation is such that whereas the Principal has submitted to the District a certain Bid, attached hereto and hereby made a part hereof, to enter into a Contract in writing for the construction of the:

**Parker Whitney Elementary School  
Replace Existing Fire Alarm System**

- C. NOW, THEREFORE,
1. If said Bid is rejected, or
  2. If said Bid is accepted and the Principal executes and delivers a Contract or the attached Agreement form within 30 calendar days after acceptance (properly completed in accordance with said Bid), and furnishes bonds for the faithful performance of said Contract and for payment of all persons performing labor or furnishing materials in connection therewith, then
  3. This obligation shall be void; otherwise, the same shall remain in force and effect.
- D. Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration, or addition to the terms of the Contract, or the call for bids, or the work to be performed thereunder, or the specifications accompanying the same, shall in anyway affect the obligation under this bond, and does hereby waive notice of any such change, extension of time, alteration, or addition to the terms of said Contract, or the call for bids, or the work, or to the specifications.
- E. In the event that suit is brought upon this bond by the District and judgment is recovered, the Surety shall pay all costs incurred by the District in such suit, including without limitation, attorneys' fees to be fixed by the court.

**SECTION CONTINUES ON NEXT PAGE**

**IN WITNESS WHEREOF, Principal and Surety have hereunto set their hands and seals, and such of them as are corporations have caused their corporate seals to be hereto affixed and these presents to be signed by their proper officers, on the day and year first set forth above.**

(Corporate Seal)

By \_\_\_\_\_  
Principal's Signature

\_\_\_\_\_  
Typed or Printed Name

\_\_\_\_\_  
Principal's Title

(Corporate Seal)

By \_\_\_\_\_  
Surety's Signature

\_\_\_\_\_  
Typed or Printed Name

\_\_\_\_\_  
Title

(Attached Attorney in Fact Certificate)

\_\_\_\_\_  
Surety's Name

\_\_\_\_\_  
Surety's Address

\_\_\_\_\_  
Surety's Phone Number

**SECTION CONTINUES ON NEXT PAGE**

**IMPORTANT:**

Surety companies executing bonds must possess a certificate of authority from the California Insurance Commissioner authorizing them to write surety insurance defined in California Insurance Code section 105, and if the work or project is financed, in whole or in part, with federal, grant, or loan funds, it must also appear on the Treasury Department's most current list (Circular 570 as amended).

**THIS IS A REQUIRED FORM.**

Any claims under this bond may be addressed to:

Name and Address of Surety:

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---

Name and Address of agent or representative for service of process in California if different from above:

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---

---

Telephone Number of Surety and agent or representative for service of process in California:

---

**END OF SECTION 00 41 04**

**BID TALLY FORM**

Date:

Project Name: Replace Existing Fire Alarm System  
School District: Rocklin Unified School District

**General Contractor Name:** \_\_\_\_\_

**General Contractor No.** \_\_\_\_\_

**Bid Amount.**           **\$** \_\_\_\_\_

**DOCUMENTATION CHECKLIST:**

1.  BID FORM (10%)
2.  BID BOND (10%)
3.  DESIGNATION OF SUBCONTRACTORS
4.  CONTRACTOR'S CERTIFICATE REGARDING DRUG-FREE WORKPLACE
5.  FINGERPRINTING NOTICE AND ACKNOWLEDGMENT
6.  NON-COLLUSION DECLARATION
7.  IRAN CONTRACTING ACT CERTIFICATION
8.  PAYMENT BOND
9.  PERFORMANCE BOND
10.  PRIME BIDDER CERTIFICATION OF DVBE PARTICIPATION
11.  PRIME BIDDER GOOD FAITH EFFORT WORKSHEET
12.  ROOF PROJECT CERTIFICATION
13.  SUFFICIENT FUNDS DECLARATION
14.  WORKERS' COMPENSATION CERTIFICATE
15.  DIR REGISTRATION CERTIFICATION
16. ADDENDA    1        2        3        4

**END OF SECTION 00 41 05**

### **DESIGNATION OF SUBCONTRACTORS**

In compliance with the Subletting and Subcontracting Fair Practices Act (California Public Contract Code section 4100 et seq.) and any amendments thereof, each Bidder shall set forth below: (a) the name, license number, and location of the place of business of each subcontractor who will perform work or labor or render service to the Contractor, who will perform work or labor or work or improvement to be performed under this Contract, or a subcontractor licensed by the State of California who, under subcontract to the Contractor, specially fabricates and installs a portion of the work or improvements according to detailed Drawings contained in the Plans and Specifications in an amount in excess of 1/2-of-one-percent (.5%) of the Contractor's total bid; and (b) the portion and description of the work that will be done by each subcontractor under this Act. The Contractor shall list only one (1) subcontractor for each such portion as is defined by the Contractor in this bid. All subcontractors shall be properly licensed by the California State Licensing Board.

If a Contractor fails to specify a subcontractor, or if a Contractor specifies more than one (1) subcontractor for the same portion of Work to be performed under the Contract in excess of 1/2-of-one-percent (.5%) of the Contractor's total bid, the Contractor shall be deemed to have agreed that the Contractor is fully qualified to perform that portion, and that the Contractor alone shall perform that portion.

No Contractor whose bid is accepted shall: (a) substitute any subcontractor, (b) permit any subcontractor to be voluntarily assigned or transferred, or allow the relevant portion of the work to be performed by anyone other than the original subcontractor listed in the original bid, or (c) sublet or subcontract any portion of the work in excess of 1/2-of-one-percent (.5%) of the Contractor's total bid where the original bid did not designate a subcontractor, except as authorized in the Subletting and Subcontracting Fair Practices Act.

Subletting or subcontracting of any portion of the work in excess of 1/2-of-one-percent (.5%) of the Contractor's total bid, where no subcontractor was designated in the original bid, shall only be permitted in cases of public emergency or necessity, and then only after a finding, reduced to writing as a public record, of the authority awarding this Contract setting forth the facts constituting the emergency or necessity.

All subcontractors (of any tier) performing any portion of the Work must comply with the Labor Code sections 1725.5 and 1771.1, and must be properly and currently registered with the California Department of Industrial Relations and qualified to perform public works pursuant to Labor Code section 1725.5 throughout the duration of the Project.

**NOTE:** If alternate bids are called for and bidder intends to use different or additional subcontractors on the alternates, a separate list of subcontractors must be provided for each such alternate.

**SECTION CONTINUES ON NEXT PAGE**



Proper Name of Bidder: \_\_\_\_\_

Date: \_\_\_\_\_

Name: \_\_\_\_\_

Signature of Bidder Representative: \_\_\_\_\_

Address: \_\_\_\_\_

Phone: \_\_\_\_\_

**END OF SECTION 00 43 36**



**DIR REGISTRATION CERTIFICATION**  
**CERTIFICATION OF CONTRACTOR AND SUBCONTRACTOR**  
**DEPARTMENT OF INDUSTRIAL RELATIONS REGISTRATION**

**THIS IS A REQUIRED FORM**

Pursuant to Labor Code Section 1725.5, a contractor or subcontractor must be registered with the Department of Industrial Relations in order to bid on, to be listed in a bid or to engage in the performance of any defined public work contract.

I \_\_\_\_\_, \_\_\_\_\_ certify that  
(Name) (Title)

\_\_\_\_\_ is currently registered as a contractor with Department of  
(Contractor Name)

Industrial Relations (DIR):

Contractor's DIR Registration Number: \_\_\_\_\_

Expiration Date: June 30, 20\_\_

Contractor further acknowledges:

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

Failure to comply with any of the above may result in a determination of non-responsiveness.

I declare under penalty of perjury under California law that the forgoing is true and correct.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

**END OF SECTION 00 45 02**

**FINGERPRINTING NOTICE AND ACKNOWLEDGMENT**  
**(Education Code Section 45125.2[a])**

**Note: This document must be executed and submitted with the bid.**

- A. Business entities entering into contracts with the Owner for the construction, reconstruction, rehabilitation, or repair of a facility must comply with Education Code sections 45125.1 and 45125.2. Such entities are responsible for ensuring full compliance with the law and should therefore review all applicable statutes and regulations. The following information is provided simply to assist such entities with compliance with the law:
  - 1. If the Owner determines that your employee(s), or you as a sole proprietorship, will have more than limited contact with students, then you must take one or more of the following steps:
    - a. Install a physical barrier at the worksite to limit contact with pupils.
    - b. Have an employee (if not a sole proprietorship), who the Department of Justice has ascertained has not been convicted of a violent or serious felony, continually monitor and supervise employees. The entity shall verify in the Independent Contractor Student Contact Form to the Owner that the employee charged with monitoring and supervising its employees has no such convictions (see attached).
    - c. Arrange, with Owner's approval, for surveillance by Owner's personnel.
- B. If one or more of these steps is taken, you are not required to comply with Education Code section 45125.1.
- C. If you are providing the services in an emergency or exceptional situation, you are not required to comply with Education Code section 45125.2. An emergency or exceptional situation is one in which pupil health or safety is endangered, or when repairs are needed to make a facility safe and habitable. Owner shall determine whether an emergency or exceptional situation exists.

**I have read the foregoing and agree to comply with the requirements of Education Code §§ 45125.1 and 45125.2 as applicable.**

Dated: \_\_\_\_\_

\_\_\_\_\_  
Signature

Name: \_\_\_\_\_

Title: \_\_\_\_\_

**SECTION CONTINUES ON NEXT PAGE**

**ATTACHMENT**

- A. Under Education Code section 45125.1, no employee of a contractor or subcontractor, and no sole proprietor, who has been convicted of or has criminal proceedings pending for a violent or serious felony may come into contact with any student. A violent felony is any felony listed in subdivision (c) of Section 667.5 of the Penal Code. Those felonies are presently defined as:
1. Murder or voluntary manslaughter.
  2. Mayhem.
  3. Rape as defined in paragraph (2) or (6) of subdivision (a) of Section 261 or paragraph (1) or (4) of subdivision (a) of Section 262.
  4. Sodomy as defined in subdivision (c) or (d) of Section 286.
  5. Oral copulation as defined in subdivision (c) or (d) of Section 288a.
  6. Lewd or lascivious act as defined in subdivision (a) or (b) of Section 288.
  7. Any felony punishable by death or imprisonment in the state prison for life.
  8. Any felony in which the defendant inflicts great bodily injury on any person other than an accomplice that has been charged and proved as provided for in Section 12022.7, 12022.8, or 12022.9 on or after July 1, 1977, or as specified prior to July 1, 1977, in Sections 213, 264, and 461, or any felony in which the defendant uses a firearm in which use has been charged and proved as provided in subdivision (a) of Section 12022.3, or Section 12022.5 or 12022.55.
  9. Any robbery.
  10. Arson, in violation of subdivision (a) or (b) of Section 451.
  11. Sexual penetration as defined in subdivision (a) or (j) of Section 289.
  12. Attempted murder.
  13. A violation of Section 18745, 18750, or 18755.
  14. Kidnapping.
  15. Assault with the intent to commit a specified felony, in violation of Section 220.
  16. Continuous sexual abuse of a child, in violation of Section 288.5.
  17. Carjacking, as defined in subdivision (a) of Section 215.
  18. Rape, spousal rape, or sexual penetration, in concert, in violation of Section 264.1.
  19. Extortion, as defined in Section 518, which would constitute a felony violation of Section 186.22 of the Penal Code.
  20. Threats to victims or witnesses, as defined in Section 136.1, which would constitute a felony violation of Section 186.22 of the Penal Code.
  21. Any burglary of the first degree, as defined in subdivision (a) of Section 460, wherein it is charged and proved that another person, other than an accomplice, was present in the residence during the commission of the burglary.
  22. Any violation of Section 12022.53.
  23. A violation of subdivision (b) or (c) of Section 11418.
- B. A serious felony is any felony listed in subdivision (c) Section 1192.7 of the Penal Code. Those felonies are presently defined as:
1. Murder or voluntary manslaughter; (2) Mayhem; (3) Rape; (4) Sodomy by force, violence, duress, menace, threat of great bodily injury, or fear of immediate and unlawful bodily injury on the victim or another person; (5) Oral copulation by force, violence, duress, menace, threat of great bodily injury, or fear of immediate and unlawful bodily injury on the victim or another person; (6) Lewd or lascivious act on a child under the age of 14 years; (7) Any felony punishable by death or imprisonment in the state prison for life; (8) Any felony in which the defendant personally inflicts great bodily injury on any person, other than an accomplice, or any felony in which the defendant personally uses a firearm; (9) Attempted murder; (10) Assault with intent to commit rape, or robbery; (11) Assault with a deadly weapon or instrument on a peace officer; (12) Assault by a life prisoner on a non-inmate; (13) Assault with a deadly weapon by an inmate; (14) Arson; (15) Exploding a destructive device or any explosive

with intent to injure; (16) Exploding a destructive device or any explosive causing bodily injury, great bodily injury, or mayhem; (17) Exploding a destructive device or any explosive with intent to murder; (18) Any burglary of the first degree; (19) Robbery or bank robbery; (20) Kidnapping; (21) Holding of a hostage by a person confined in a state prison; (22) Attempt to commit a felony punishable by death or imprisonment in the state prison for life; (23) Any felony in which the defendant personally used a dangerous or deadly weapon; (24) Selling, furnishing, administering, giving, or offering to sell, furnish, administer, or give to a minor any heroin, cocaine, phencyclidine (PCP), or any methamphetamine-related drug, as described in paragraph (2) of subdivision (d) of Section 11055 of the Health and Safety Code, or any of the precursors of methamphetamines, as described in subparagraph (A) of paragraph (1) of subdivision (f) of Section 11055 or subdivision (a) of Section 11100 of the Health and Safety Code; (25) Any violation of subdivision (a) of Section 289 where the act is accomplished against the victim's will by force, violence, duress, menace, or fear of immediate and unlawful bodily injury on the victim or another person; (26) Grand theft involving a firearm; (27) Carjacking; (28) Any felony offense, which would also constitute a felony violation of Section 186.22; (29) Assault with the intent to commit mayhem, rape, sodomy, or oral copulation, in violation of Section 220; (30) Throwing acid or flammable substances, in violation of Section 244; (31) Assault with a deadly weapon, firearm, machine gun, assault weapon, or semiautomatic firearm or assault on a peace officer or firefighter, in violation of Section 245; (32) Assault with a deadly weapon against a public transit employee, custodial officer, or school employee, in violation of Sections 245.2, 245.3, or 245.5; (33) Discharge of a firearm at an inhabited dwelling, vehicle, or aircraft, in violation of Section 246; (34) Commission of rape or sexual penetration in concert with another person, in violation of Section 264.1; (35) Continuous sexual abuse of a child, in violation of Section 288.5; (36) Shooting from a vehicle, in violation of subdivision (c) or (d) of Section 26100; (37) Intimidation of victims or witnesses, in violation of Section 136.1; (38) Criminal threats, in violation of Section 422; (39) Any attempt to commit a crime listed in this subdivision other than an assault; (40) Any violation of Section 12022.53; (41) A violation of subdivision (b) or (c) of Section 11418; and (42) Any conspiracy to commit an offense described in this subdivision.

**SECTION CONTINUES ON NEXT PAGE**

**INDEPENDENT CONTRACTOR STUDENT CONTACT FORM**

Contractor Name: \_\_\_\_\_  
Supervisor/Foreman Name: \_\_\_\_\_  
Start Date: \_\_\_\_\_  
Completion Date: \_\_\_\_\_  
Location of Work: \_\_\_\_\_  
Hours of Work: \_\_\_\_\_  
Length of Time on Grounds: \_\_\_\_\_  
Number of Employees on the Job: \_\_\_\_\_

Yes    No  
       Employees or sole proprietor will have more than limited contact with students as determined by Owner, or if by Contractor, please explain:

\_\_\_\_\_  
\_\_\_\_\_

If yes, the following steps will be taken to ensure student safety (check):

- A physical barrier will be installed at the worksite to limit contact with pupils.
- Employees (if not a sole proprietorship) will be continually monitored and supervised by an employee who has not been convicted of a violent or serious felony.

Name of Supervising Employee:  
\_\_\_\_\_

Date of Department of Justice verification that supervising employee has not been convicted of a violent or serious felony:  
\_\_\_\_\_

Name of employee who is the custodian of the Department of Justice verification information:  
\_\_\_\_\_

- Owner agrees: Employees or sole proprietor will be surveilled by Owner's personnel.

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge.

Dated: \_\_\_\_\_  
Signature \_\_\_\_\_  
Printed Name: \_\_\_\_\_  
Title: \_\_\_\_\_

**Note: This document must be executed and submitted with the executed Agreement between Owner and Contractor.**

**END OF SECTION 00 45 03**

**CONTRACTOR CERTIFICATION REGARDING BACKGROUND CHECKS**

**Rocklin Unified School District  
Replace Existing Fire Alarm System**

\_\_\_\_\_ certifies that he/she has performed one of the following:

Name of Contractor/Consultant

Pursuant to Education Code section 45125.1, Contractor has conducted criminal background checks, through the California Department of Justice, of all employees providing services to the District, pursuant to the contract/purchase order dated \_\_\_\_\_, and that none have been convicted of serious or violent felonies, as specified in Penal Code sections 1192.7(c) and 667.5(c), respectively.

As further required by Education Code section 45125.1, attached hereto as Attachment "A" is a list of the names of the employees of the undersigned who may come in contact with pupils.

OR

Pursuant to Education Code section 45125.2, Contractor will ensure the safety of pupils by one or more of the following methods:

1. The installation of a physical barrier at the worksite to limit contact with pupils.

2. Continual supervision and monitoring of all employees of the entity by an employee of the entity whom the Department of Justice has ascertained has not been convicted of a violent or serious felony.

I declare under penalty of perjury under the laws of the United States that the foregoing is true and correct.

Date \_\_\_\_\_, 20\_\_\_\_

Name of Contractor/Consultant: \_\_\_\_\_

Signed: \_\_\_\_\_

Contractor/Consultant

**SECTION CONTINUES ON NEXT PAGE**

**ATTACHMENT A:**

**CONTRACTOR CERTIFICATION REGARDING BACKGROUND CHECKS**

*(INSERT NAMES OF EMPLOYEES WHO MAY COME IN CONTACT WITH PUPILS)*

**END OF SECTION 00 45 06**

**NON-COLLUSION DECLARATION**

The undersigned declares:

I am the \_\_\_\_\_ [Title] of \_\_\_\_\_ [Name of Company], the party making the foregoing bid.

The bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation. The bid is genuine and not collusive or sham. The bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid. The bidder has not directly or indirectly colluded, conspired, connived, or agreed with any bidder or anyone else to put in a sham bid, or to refrain from bidding. The bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price of the bidder or any other bidder, or to fix any overhead, profit, or cost element of the bid price, or of that of any other bidder. All statements contained in the bid are true. The bidder has not, directly or indirectly, submitted his or her bid price, or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, to any corporation, partnership, company, association, organization, bid depository, or to any member or agent thereof, to effectuate a collusive or sham bid, and has not paid, and will not pay, any person or entity for such purpose.

Any person executing this declaration on behalf of a bidder that is a corporation, partnership, joint venture, limited liability company, limited liability partnership, or any other entity, hereby represents that he or she has full power to execute, and does execute, this declaration on behalf of the bidder.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct and that this declaration is executed on \_\_\_\_\_ [Date] at \_\_\_\_\_ [City], \_\_\_\_\_ [State].

Signed: \_\_\_\_\_

Printed Name: \_\_\_\_\_

**END OF SECTION 00 45 19**



**CONTRACTOR'S CERTIFICATE REGARDING  
WORKERS' COMPENSATION FORM**

- A. Labor Code section 3700 in relevant part provides:
1. Every employer except the State shall secure the payment of compensation in one or more of the following ways:
    - a. By being insured against liability to pay compensation by one or more insurers duly authorized to write compensation insurance in this State.
    - b. By securing from the Director of Industrial Relations a certificate of consent to self-insure, which may be given upon furnishing satisfactory proof to the Director of Industrial Relations of ability to self-insure, and to pay any compensation that may become due to employees.
    - c. For any county, city, city and county, municipal corporation, public district, public agency, or any political subdivision of the state, including each member of a pooling arrangement under a joint exercise of powers agreement (but not the state itself), by securing from the Director of Industrial Relations a certificate of consent to self-insure against workers' compensation claims, which certificate may be given upon furnishing satisfactory proof to the director of ability to administer workers' compensation claims properly, and to pay workers' compensation claims that may become due to its employees. On or before March 31, 1979, a political subdivision of the state, which, on December 31, 1978, was uninsured for its liability to pay compensation, shall file a properly completed and executed application for a certificate of consent to self-insure against workers' compensation claims. The certificate shall be issued and be subject to the provisions of Section 3702.

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

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(Signature)

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(Print)

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(Date)

In accordance with Article 5 (commencing at section 1860), Chapter 1, Part 7, Division 2 of the Labor Code, the above certificate must be signed and submitted with the Contractor's bid.

**END OF SECTION 00 45 26**

**WORKERS' COMPENSATION CERTIFICATE**

Labor Code Section 3700, in relevant part, provides:

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

(a) By being insured against liability to pay compensation in one or more insurers duly authorized to write compensation insurance in this state.

(b) By securing from the Director of Industrial Relations a certificate of consent to self-insure either as an individual employer or as one employer in a group of employers. Said certificate may be given upon furnishing proof satisfactory to the Director of Industrial Relations of ability to self-insure and to pay any compensation that may become due to his or her employees, ..."

I am aware of the provisions of the Labor Code Section 3700, which require every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of that code, and I will comply with such provisions before commencing the performance of the work of this contract. I shall supply the Owner with certificates of insurance evidencing that Workers' Compensation Insurance is in effect and providing that the Owner will receive 30 days' notice of cancellation.

\_\_\_\_\_  
Name of Contractor

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Print Name

\_\_\_\_\_  
Date

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

**END OF SECTION 00 45 26**

**NOTICE OF AWARD**

Dated: \_\_\_\_\_ 20\_\_\_\_

To: \_\_\_\_\_  
(Contractor)

\_\_\_\_\_  
(Address)

From: Governing Board (Board) of Rocklin Unified School District (District or Owner)

Project: \_\_\_\_\_ Project No. \_\_\_\_\_ (Project).

Contractor has been awarded the referenced Contract on \_\_\_\_\_, 20\_\_\_\_ by action of the superintendent or superintendent's designee, pursuant to a delegation of authority by the District's Board.

The Contract Price is \_\_\_\_\_ Dollars (\$ \_\_\_\_\_).

Three (3) copies of each of the Contract Documents (except Drawings) accompany this Notice of Award. Three (3) sets of the Drawings will be delivered separately or otherwise made available. Additional copies are available at cost of reproduction.

You must comply with the following conditions precedent within \_\_\_\_\_ (\_\_\_\_) calendar days of the date of this Notice of Award.

Contractor shall execute and submit the following documents by 5:00 p.m. of the \_\_\_\_\_ (\_\_\_\_)th calendar day following the date of the Notice of Award:

- A. Performance Bond (100%): On the form provided in the Contract Documents and fully executed as indicated on the form.
- B. Payment Bond (Contractor's Labor & Material Bond) (100%): On the form provided by the District and fully executed as indicated on the form.
- C. Insurance Certificates and Endorsements as required.
- D. Workers' Compensation Certification.
- E. Prevailing Wage and Related Labor Requirements Certification.

After you comply with these conditions, District will return to you one (1) fully signed counterpart of the Agreement.

**ROCKLIN UNIFIED SCHOOL DISTRICT**

BY: \_\_\_\_\_

NAME: \_\_\_\_\_

TITLE: \_\_\_\_\_

**END OF SECTION 00 51 01**

**NOTICE TO PROCEED**

Dated: \_\_\_\_\_ 20\_\_

To: \_\_\_\_\_  
(Contractor)

ADDRESS: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

PROJECT: \_\_\_\_\_

PROJECT/CONTRACT NO.: \_\_\_\_\_ between the **Rocklin Unified School District** and Contractor (Contract).

You are notified that the Contract Time under the above Contract will commence to run on \_\_\_\_\_, 20\_\_. By that date, you are to start performing your obligations under the Contract Documents. In accordance with the Agreement executed by Contractor, the date of completion is \_\_\_\_\_, 20\_\_. **[ENSURE THIS PARAGRAPH IS CONSISTENT WITH §4 OF DOCUMENT 00 00 19 (AGREEMENT)]**

You must submit the following documents by 5:00 p.m. of the \_\_\_\_\_ (\_\_\_\_th) calendar day following the date of this Notice to Proceed:

- A. Contractor's preliminary schedule of construction.
- B. Contractor's preliminary schedule of values for all of the Work.
- C. Contractor's preliminary schedule of submittals, including Shop Drawings, Product Data, and Samples submittals.
- D. Contractor's Safety Plan specifically adapted for the Project.
- E. A complete subcontractors list, including the name, address, telephone number, facsimile number, California State Contractors License number, classification, and monetary value of all Subcontracts.

Thank you. We look forward to a very successful Project.

**ROCKLIN UNIFIED SCHOOL DISTRICT**

BY: \_\_\_\_\_

NAME: \_\_\_\_\_

TITLE: \_\_\_\_\_

**END OF SECTION 00 51 02**

## **AGREEMENT BETWEEN OWNER AND CONTRACTOR**

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This Agreement between Owner and Contractor (“Agreement”) is entered into effective upon receipt of fully executed contract between the Rocklin Unified School District, Placer County, California (“Owner”) and \_\_\_\_\_ Contractor”), with Owner and Contractor each a “Party” and together the “Parties” to this Agreement.

Contractor and Owner agree as follows:

**1. SCOPE OF WORK.** Contractor agrees to furnish all labor, equipment and materials, including tools, implements, and appliances and to perform all the work in a good and workmanlike manner, free from any and all liens and claims from mechanics, material suppliers, subcontractors, artisans, machinists, teamsters, freight carriers, and laborers, all in strict compliance with the Contract Documents, required for construction of the Project (the “Project”) described below and as more fully described in the attached exhibit “A”:

### **Project : Parker Whitney Elementary Fire Alarm Replacement**

Unless otherwise specifically noted, the Contractor shall provide and pay for all labor, materials, equipment, transportation, and other facilities and services necessary for the proper execution and completion of the Project. The Contractor shall at all times enforce strict discipline and good order among Contractor’s employees and subcontractors and shall not employ on the Project anyone not skilled in the task assigned. Any employee of Contractor or employee of Contractor’s subcontractors, suppliers or materialmen Owner deems not skilled for the task assigned shall, upon Owner’s request, be dismissed from the site.

**2. EXAMINATION OF SITE.** Contractor has visited the site and investigated the conditions on, in, out and about the site, including any buildings, which might affect the progress of the Project and is satisfied as to those conditions. No claim for money or time will be allowed as to such matters.

**3. CONTRACT DOCUMENTS.** The Contractor and Owner agree that the Contract Documents are composed of this Agreement, required insurance certificates, additional insured endorsement and declarations page, Designation of Subcontractors, Noncollusion Declaration, Roof Project Certification (where applicable), Sufficient Funds Declaration (Labor Code Section 2810), the Fingerprinting Notice and Acknowledgment, Independent Contractor Student Contact Form, any required bonds, and any specifications and plans. If there are specifications and plans, the specifications and plans are intended to cooperate, so that any work exhibited in the plans and not mentioned in the specifications, or vice versa, is to be executed the same as if both mentioned in the specifications and set forth in the plans to the true intent and meaning of the said plans and specifications, when taken together. The Contract Documents are

complementary, and each obligation of the Contractor, subcontractors, and material or equipment suppliers in any one shall be binding as if specified in all. Where requirements of the Contract Documents exceed those of the applicable building codes and ordinances, the Contract Documents shall govern. Contractor shall comply with all applicable Federal, State and local laws. The work shall constitute a “work of improvement” under Civil Code Section 8050 and Public Contract Code Section 7107.

**4. COMPLETION DATE.** The work to be completed under this Agreement shall begin no later than June 5, 2023, after fully executed contract is received and be completed on or before August 1, 2023 (the “Completion Date”) weather permitting.

**5. CONTRACT SUM.** The Contract Sum is the total amount payable by Owner to Contractor for the performance of work under the Contract Documents. The Contract Sum is \_\_\_\_\_ Cents (\$ \_\_\_\_\_), unless modified in accordance with the Contract Documents.

**6. CONTRACTOR’S LICENSE, REGISTRATION AND COMPLIANCE MONITORING.** In accordance with Section 3300 of the Public Contract Code, Contractor has a Class “C-10” which shall be maintained in good standing for the duration of Contractor’s work on the Project. Public works projects shall be subject to compliance monitoring and enforcement by the Department of Industrial Relations. The Owner shall not enter into any contract without proof of the Contractor’s current registration to perform public work under Labor Code Section 1725.5. The Contractor shall not enter into any subcontract without proof of the subcontractor’s current registration to perform public work under Labor Code Section 1725.5. A contractor or subcontractor shall not be qualified to enter into, or engage in the performance of, any contract of public work (as defined by Division 2, Part 7, Chapter 1 (§§1720 *et seq.*) of the Labor Code) unless currently registered and qualified under Labor Code Section 1725.5 to perform public work.

**7. LIQUIDATED DAMAGES.** Failure to complete the Project within the time and in the manner provided for in this Agreement shall subject the Contractor to liquidated damages. For purposes of liquidated damages, the concept of substantial completion shall not constitute completion and is not part of the Contract Documents. The actual occurrence of damages and the actual amount of the damages which the Owner would suffer if the Project were not completed within the specified times set forth are dependent upon many circumstances and conditions which could prevail in various combinations and, from the nature of the case, it is impracticable and extremely difficult to fix the actual damages. Damages which the Owner would suffer in the event of delay include, but are not limited to, loss of the use of the Project, disruption of activities, costs of administration, supervision and the incalculable inconvenience and loss suffered by the public.

Accordingly, the Parties agree that the amount herein set forth shall be the amount of damages which the Owner shall directly incur upon failure of the Contractor to complete the Project within the time specified: \$150, for each calendar day by which completion of

the Project is delayed beyond the Completion Date, as adjusted by change orders.

If the Owner accepts any work or makes any payment under this Agreement after a default by reason of delays, the payment or payments shall in no respect constitute a waiver or modification of any Agreement provisions regarding time of completion and liquidated damages.

**8. EARLY COMPLETION.** Regardless of the cause therefore, the Contractor may not maintain any claim or cause of action against the Owner for damages incurred as a result of its failure or inability to complete its work on the Project in a shorter period than established in this Agreement, the Parties stipulating that the period established in this Agreement is a reasonable time within which to perform the work on the Project.

**9. PAYMENT.** Owner will pay Contractor on a monthly basis for services satisfactorily performed after receipt of properly documented and submitted applications for payment. On or before the fifth day of each month, Contractor shall submit to Owner an itemized application for payment in the format supplied by the Owner indicating the amount of work completed since commencement of the work or since the last progress payment, as applicable. These applications shall be supported by evidence which is required by this Agreement and such other documentation as the Owner may require. The Contractor shall certify that the work for which payment is requested has been done and that the materials listed are stored where indicated. Contractor may be required to submit a detailed schedule of values upon request of the Owner and in such detail and form as the Owner shall request, showing the quantities, unit prices, overhead, profit, and all other expenses involved in order to provide a basis for determining the amount of progress payments. For each accepted payment, five percent (5%) shall be withheld and retained by the Owner, and the remainder shall be paid to the Contractor.

If the Contractor becomes liable under this section, the Owner, in addition to all other remedies provided by law, shall have the right to withhold any and all retained percentages of payments and/or progress payments, and to collect the interest thereon, which would otherwise be or become due the Contractor until the liability of the Contractor under this section has been finally determined. If the retained percentages and withheld progress payments appear insufficient to discharge all liabilities of the Contractor incurred under this Article, the Contractor and its sureties shall continue to remain liable to the Owner for such liabilities until all such liabilities are satisfied in full. Owner may withhold payment and/or retention, in whole, or in part, to such extent as may be necessary to protect the Owner from loss because of: (a) Defective work not remedied; (b) Stop Payment Notices filed, unless the Contractor at its sole expense provides a bond or other security satisfactory to the Owner in the amount of at least one hundred twenty-five percent (125%) of the claim, in a form satisfactory to the Owner, which protects the Owner against such claim and which Owner chooses to accept. Any stop payment notice release bond shall be executed by a California admitted, fiscally solvent surety, completely unaffiliated with and separate from the surety on the payment and performance bonds, that does not have any assets pooled with the payment and performance bond sureties. The surety insurer, at the time of issuance of the bond, unless

otherwise agreed to by Owner in writing, must have a rating not lower than “A-” as rated by A.M. Best Company, Inc. or other independent rating companies. Owner reserves the right to approve or reject the surety insurer selected by Contractor and to require Contractor to obtain a bond from a surety insurer satisfactory to the Owner; (c) Liquidated damages assessed against the Contractor; (d) Reasonable doubt that the work can be completed for the unpaid balance of any Contract Sum or by the completion date; (e) Damage to the Owner, another contractor, or subcontractor; (f) Unsatisfactory prosecution of the work by the Contractor; (g) Failure to store and properly secure materials; (h) Failure of the Contractor to submit on a timely basis, proper and sufficient documentation required by the Contract Documents; (i) Failure of the Contractor to maintain record drawings; (j) Erroneous estimates by the Contractor of the value of the work performed, or other false statements in an Application for Payment; (k) Unauthorized deviations from the Contract Documents; or (l) Failure of the Contractor to prosecute the work in a timely manner in compliance with established progress schedules and completion dates; (m) Subsequently discovered evidence or observations nullifying the whole or part of a previously issued payment; (n) Failure to pay subcontractors or materialmen; (o) Breach of any provision of the Contract Documents. Owner’s failure to withhold any of these sums from a progress payment and/or retention shall not constitute a waiver of Owner’s right to such sums.

If the Owner accepts any work or makes any release of payment payments or retention under this Agreement after a default by reason of delays, the payment or payments shall in no respect constitute a waiver or modification of any Agreement provisions regarding time of completion and liquidated damages.

In accordance with Public Contract Code Section 22300, the Owner will permit the substitution of securities for any retention monies withheld by the Owner to ensure performance under the Agreement. At the request and expense of the Contractor, securities equivalent to the amount withheld shall be deposited with the Owner, or with a state or federally chartered bank as the escrow agent, who shall then pay such retention monies to the Contractor. Upon completion of the work, the securities shall be returned to the Contractor if Owner has no basis to withhold under the Contract Documents. Securities eligible for investment under this Section shall include those listed in Government Code Section 16430, bank or savings and loan certificates of deposit, interest-bearing, demand-deposit accounts, standby letters of credit, or any other security mutually agreed to by the Contractor and the Owner. The Contractor shall be the beneficial owner of any securities substituted for monies withheld and shall receive any interest thereon. The escrow agreement used for the purposes of this Section shall be substantially similar to the form set forth in Public Contract Code Section 22300.

**10. CHANGE ORDERS.** The Contractor and the Owner agree that changes in the Project to be done under this Agreement and any plans and specifications shall become effective only when written in the form of a change order approved and signed by the Owner and the Contractor. It is specifically agreed that the Owner shall have the right to request any alterations, deviations, reductions, or additions to the Project and the amount of the cost thereof shall be added to or deducted from the amount of the Contract Sum by



fair and reasonable valuations. Contractor also agrees to provide the Owner with all information requested to substantiate the cost of the change order and to inform the Owner whether the work will be done by the Contractor or by a subcontractor.

This Agreement shall be deemed to be completed when the Project is finished in accordance with this Agreement, and any original plans and specifications as amended by such changes.

The Contractor shall submit with the proposed change order its request for time extension (if any), and include sufficient information and dates to demonstrate whether and to what extent the change will delay the completion of the Project. The time extension shall be agreed to by the Parties and memorialized by a written change order prior to initiation of the work contemplated by the change order.

**11. DISPUTES.** If a dispute arises between the Owner and the Contractor as to an interpretation of any of the specifications or Contract Documents or as to the quality or sufficiency of materials or workmanship, the decision of the Owner shall for the time being prevail, and the Contractor, without delaying the job, shall proceed as directed by the Owner without prejudice to a final determination of the dispute.

**12. CLAIMS.** "Claim" for this purpose means a separate demand by the Contractor for a time extension, payment of money or damages arising from work done by or on behalf of the Contractor pursuant to this Agreement, for which payment is expressly provided, or the Contractor is otherwise entitled to, or an amount the payment of which is disputed by the Owner. Notwithstanding any other provision herein, Claims shall be handled pursuant to the procedures set forth in Public Contract Code Section 9204, including claim, written response, payments, meet and confer conference, statement of disputed and undisputed portions after the meet and confer conference and non-binding mediation, and Government Code claim provisions. Owner may request additional documentation from Contractor to be provided within applicable time periods, and Owner and Contractor shall reasonably cooperate to schedule and attend mediation as soon as reasonably possible.

As a precedent to initiation of any litigation against the Owner, Contractor must observe and comply with the Government Code claim procedures in Government Code Sections 901 et seq. after completion of the claim procedures above, including but not limited to timely presentation of a Government Code claim. The claim procedures described herein do not supersede or replace the requirement of a Government Code claim, and the two claim procedures shall be sequential. The requirement for mediation shall not toll or supersede the requirement for submission of a Government Code claim. If Contractor fails to timely notify the Owner in writing that it wishes to mediate pursuant to this paragraph, then Contractor will have waived all rights to further pursue the Claim. The parties shall reasonably cooperate to schedule and attend mediation as soon as reasonably possible.

**13. TERMINATION.** If the Contractor should be adjudged bankrupt, or if the Contractor should make a general assignment for the benefit of Contractor's creditors, or if a receiver should be appointed on account of Contractor's insolvency, or if Contractor or any of Contractor's subcontractors should violate any of the provisions of the Agreement, or if Contractor should refuse or fail to supply enough properly skilled workmen or proper materials, or if Contractor violates Labor Code Section 1771.1(a), subject to the provisions of Labor Code Section 1771.1(f), or should fail to make prompt payment to subcontractors or for material or labor, or disregard laws, ordinances or the instructions of the Owner, then the Owner may serve written notice upon the Contractor of its intention to terminate the Agreement. Unless, within five (5) days after the serving of such notice, such violations shall cease and satisfactory arrangements for corrections thereof be made, the Agreement shall, upon the expiration of said five (5) days, at the Owner's option, terminate.

The Owner may then take over the Project and prosecute the same to completion by any method it may deem advisable, for the account and at the expense of the Contractor, and the Contractor shall be liable to the Owner for any excess cost occasioned the Owner thereby. In such event, the Owner may without liability for so doing, take possession of and utilize in completing the Project, such materials, appliances and other property belonging to the Contractor as may be on the site of the Project and necessary therefore. In such case the Contractor shall not be entitled to receive payment until the Project is finished. If the Contract Sum exceeds the expense of finishing the Project, including compensation for additional managerial and administrative services, such excess shall be paid to the Contractor. If such expense shall exceed the Contract Sum, the Contractor shall pay the difference to the Owner.

The Owner may, at any time, terminate the Contract for the Owner's convenience and without cause. Upon receipt of written notice from the Owner of such termination for the Owner's convenience, the Contractor shall (1) cease operations as directed by the Owner in the notice; (2) take actions necessary, or that the Owner may direct, for the protection and preservation of the work; and (3) except for work directed to be performed prior to the effective date of termination stated in the notice, terminate all existing subcontracts and purchase orders and enter into no further subcontracts and purchase orders. In case of such termination for the Owner's convenience, the Contractor shall be entitled to receive payment for work executed, and costs incurred by reason of such termination.

**14. SUBCONTRACTORS.** If Contractor shall subcontract any part of the work, Contractor shall be fully responsible to Owner for acts or omissions of Contractor's subcontractors. Pursuant to Public Contract Code Section 6109, no contractor may perform work on a public works project with a subcontractor who is ineligible to perform work on the project pursuant to California Labor Code Sections 1777.1 or 1777.7.

**15. PREVAILING WAGES.** The Project is a public work, the Work shall be performed as a public work and under California Labor Section Code 1770 *et seq.*, the Director of Industrial Relations has determined the general prevailing rate of per diem wages and the general prevailing rate for holiday and overtime work in the locality in

which the work is to be performed, for each craft, classification or type of worker needed to execute this Contract. Per diem wages shall be deemed to include employer payments for health and welfare, pension, vacation, apprenticeship or other training programs, and similar purposes. Copies of the rates are on file at the Owner's principal office. The rate of prevailing wage for any craft, classification or type of workmanship to be employed on this Project is the rate established by the applicable collective bargaining agreement which rate so provided is hereby adopted by reference and shall be effective for the life of this Agreement or until the Director of the Department of Industrial Relations determines that another rate be adopted. It shall be mandatory upon the Contractor and on any subcontractor to pay not less than the said specified rates to all workers employed in the execution of this Agreement. Contractor shall post on site all required job site notices as prescribed by regulation.

The Contractor and any subcontractor under the Contractor as a penalty to the Owner shall forfeit not more than Two Hundred Dollars (\$200.00) for each calendar day or portion thereof for each worker paid less than the stipulated prevailing rates for such work or craft in which such worker is employed. The difference between such stipulated prevailing wage rates and the amount paid to each worker for each calendar day or portion thereof for which each worker was paid less than the stipulated prevailing wage rate shall be paid to each worker by the Contractor.

Pursuant to Labor Code Section 1776, the Contractor and each subcontractor shall keep or cause to be kept an accurate record for work on this Project showing the names, addresses, social security numbers, work classification, straight time and overtime hours worked and occupations of all laborers, workers and mechanics employed by them in connection with the performance of this Contract or any subcontract thereunder, and showing also the actual per diem wage paid to each of such workers, which records shall be open at all reasonable hours to inspection by the Owner, its officers and agents and to the representatives of the Division of Labor Standards Enforcement of the State Department of Industrial Relations. Contractor and subcontractors shall comply with Labor Code Section 1776.

**16. WORKING HOURS.** In accordance with the provisions of California Labor Code Sections 1810 to 1815, inclusive, the time of service of any worker employed by the Contractor or a subcontractor doing or contracting to do any part of the work contemplated by this Agreement is limited and restricted to eight hours during any one calendar day and forty hours during any one calendar week, provided, that work may be performed by such employee in excess of said eight hours per day or forty hours per week provided that compensation for all hours worked in excess of eight hours per day, and forty hours per week, is paid at a rate not less than one and one-half (1½) times the basic rate of pay. The Contractor and every subcontractor shall keep an accurate record showing the name of and the actual hours worked each calendar day and each calendar week by each worker employed by them in connection with the work. The records shall be kept open at all reasonable hours to inspection by representatives of the Owner and the Division of Labor Law Enforcement. The Contractor shall as a penalty to the Owner

forfeit Twenty-five Dollars (\$25.00) for each worker employed in the execution of this Agreement by the Contractor or by any subcontractor for each calendar day during which such worker is required or permitted to work more than eight hours in any one calendar day, and forty hours in any one calendar week, except as herein provided.

**17. APPRENTICES.** The Contractor agrees to comply with Chapter 1, Part 7, Division 2, Sections 1777.5 and 1777.6 of the California Labor Code, which are hereby incorporated and made a part hereof. These sections require that contractors and subcontractors employ apprentices in apprenticeable occupations in a ratio of not less than one hour of apprentice's work for each five hours of work performed by a journeyman (unless an exemption is granted in accordance with Section 1777.5) and that contractors and subcontractors shall not discriminate among otherwise qualified employees as indentured apprentices on any public works solely on the ground of sex, race, religious creed, national origin, ancestry or color. Only apprentices as defined in Labor Code Section 3077, who are in training under apprenticeship standards and who have signed written apprentice agreements, will be employed on public works in apprenticeable occupations. The responsibility for compliance with these provisions is fixed with the Contractor for all apprenticeable occupations.

**18. DSA OVERSIGHT PROCESS.** The Contractor must comply with the applicable requirements of the Division of State Architect ("DSA") Construction Oversight Process ("DSA Oversight Process"), including but not limited to (a) notifying the Owner's Inspector of Record/Project Inspector ("IOR") upon commencement and completion of each aspect of the work as required under DSA Form 156; (b) coordinating the work with the IOR's inspection duties and requirements; (c) submitting verified reports under DSA Form 6-C; and (d) coordinating with the Owner, Owner's Architect, any Construction Manager, any laboratories, and the IOR to meet the DSA Oversight Process requirements without delay or added costs to the Project.

Contractor shall be responsible for any additional DSA fees related to review of proposed changes to the DSA-approved construction documents, to the extent the proposed changes were caused by Contractor's wrongful act or omissions. If inspected work is found to be in non-compliance with the DSA-approved construction documents or the DSA-approved testing and inspection program, then it must be removed and corrected. Any construction that covers unapproved or uninspected work is subject to removal and correction, at Contractor's expense, in order to permit inspection and approval of the covered work in accordance with the DSA Oversight Process.

**19. FORCE MAJEURE.** The Parties shall be excused from performance thereunder during the time and to the extent that they are prevented from obtaining, delivering or performing by act of God, fire, strike, loss or shortage of transportation facilities, lockout, or commandeering of materials, products, plants, or facilities by the Government when satisfactory evidence thereof is presented to the other Party, provided that it is satisfactorily established that the nonperformance is not due to the fault or neglect of the Party not performing. A Contractor seeking an extension of time as a result of the above

enumerated acts, must present the request for an extension of time to the Owner within fifteen (15) calendar days of the commencement of the act causing the delay. A Contractor's failure to provide notice of a request for an extension of time may result in denial of the request.

**20. INDEMNIFICATION.** To the fullest extent permitted by law, the Contractor and its Subcontractors shall defend and indemnify the Owner, any construction manager, Architect, Architect's consultants, the Inspector of Record, the State of California, and their respective agents, employees, officers, volunteers, Governing Boards, members of the Governing Boards, and directors ("Indemnitees"), from and against claims, actions, liability, damages, losses, and expenses (including, but not limited to, attorneys' fees and costs including fees of consultants) alleged by third parties arising out of or resulting from performance of the work by Contractor or its subcontractors; or any act, omission, negligence, or willful misconduct of the Contractor or its subcontractors or their respective agents, employees, material or equipment suppliers, invitees, or licensees but only to the extent caused in whole or in part by the acts or omissions of the Contractor, its subcontractors, its suppliers, anyone directly or indirectly employed by any of them, or anyone for whose acts they may be liable, regardless of whether or not such claim, damage, loss, or expense is caused in part by a Party indemnified hereunder. Such obligation shall not be construed to negate, abridge, or reduce other rights or obligations of indemnity, which would otherwise exist as to a Party, person, or entity described in this paragraph. This obligation to defend and indemnify includes any claims or actions by third parties arising out of or resulting from Labor Code Section 2810. Contractor and its subcontractors shall have no obligation to defend or indemnify the Indemnitees against claims, actions, damages, liabilities, losses, and expenses caused by the active negligence, sole negligence or willful misconduct of Indemnitees. This indemnification shall apply to all liability, as provided for above, regardless of whether any insurance policies are applicable, and insurance policy limits do not act as a limitation upon the amount of the indemnification to be provided by the Contractor and its subcontractors. The scope of Consultant's duty to indemnify also includes losses arising from or otherwise related to exposure to COVID-19.

In the event Contractor brings hazardous materials on the Project site, the Contractor shall pay for all costs of testing and remediation, if any, and shall compensate the Owner for any additional costs incurred as a result of Contractor's generation of hazardous material on the Project site. In addition, the Contractor shall defend and indemnify the Indemnitees from and against any and all claims, damages, losses, costs and expenses incurred in connection with, arising out of, or relating to, the presence of hazardous material on the Project Site, except to the extent the claims, damages, losses, costs, or expenses were caused by Indemnitees' active negligence, sole negligence or willful misconduct.

**21. ASSUMPTION AND WAIVER.** In providing the Services, Consultant agrees to follow all local, state, and federal guidelines regarding human protection from COVID-19, including but not limited to social distancing, face coverings, and health screening.

Consultant assumes all risks, known and unknown, as a result of the Services, including risks from the Coronavirus. To the fullest extent permitted by law, Consultant releases District, its governing board, members of its governing board, agents, officers, and employees, from and against all claims and causes of action, for any injury or harm of any kind which may arise from the Services, including the risks from COVID-19

## 22. INSURANCE.

a. **Comprehensive General Liability and Automobile Insurance.** Without limiting Contractor's indemnification, it is agreed that Contractor shall maintain in force at all time during the performance of this Agreement the policies of insurance hereinafter described. Contractor shall secure and maintain in force during the term of this Agreement a comprehensive general liability and automobile policy utilizing an occurrence policy form, with combined single limits of One Million dollars (\$1,000,000) or One Million dollars (\$1,000,000) per person, One Million dollars (\$1,000,000) per accident. Property damage limits shall be One Million dollars (\$1,000,000) per loss. The Owner shall be named as an additional insured on the policies by endorsements that shall be attached to the Agreement as proof of insurance. Contractor shall produce the policy for Owner at Owner's request.

Written notification by the carrier to the Owner at least thirty (30) days prior to cancellation, failure to renew, or other termination, is required.

Certificates of insurance shall clearly state that the Owner is named as an additional insured under the policy described and that such insurance policy shall be primary to any insurance or self-insurance maintained by Owner and any other insurance carried by the Owner with respect to the matters covered by such policy be excess and non-contributing.

Contractor will, at its own expense, maintain coverage in conformance with above requirements. Certificates of insurance evidencing the existence of coverage shall be filed with the Owner prior to commencement of work.

b. **Workers' Compensation.** Contractor shall maintain a policy of workers' compensation insurance as required by Labor Code Section 3200 *et seq.* during the duration of this Agreement. Contractor shall waive all rights of subrogation against Owner for loss arising from work performed under this Agreement. A certificate evidencing this coverage shall be filed with the Owner prior to the commencement of work under this Agreement. Notification by the carrier to the Owner at least thirty (30) days prior to cancellation, failure to renew, or other termination, is required.

c. **Builder's Risk.** Unless provided by the Owner at Owner's sole discretion, Contractor, during the progress of the work and until final acceptance of the work by Owner upon completion of the entire Contract, shall maintain Builder's Risk/Course-of-Construction insurance satisfactory to the Owner, issued on a completed value basis on all insurable work included under the Contract Documents. This insurance shall insure

against all risks, including but not limited to the following perils: vandalism, theft, malicious mischief, fire, sprinkler leakage, civil authority, sonic boom, explosion, collapse, flood, earthquake (for projects not solely funded through revenue bonds, limited to earthquakes equivalent to or under 3.5 on the Richter Scale in magnitude), wind, hail, lightning, smoke, riot or civil commotion, debris removal (including demolition) and reasonable compensation for the Architect's services and expenses required as a result of such insured loss. This insurance shall provide coverage in an amount not less than the full cost to repair, replace or reconstruct the work. Such insurance shall include the Owner, the Architect, and any other person or entity with an insurable interest in the work as an additional named insured.

The Contractor shall submit to the Owner for its approval all items deemed to be uninsurable under the Builder's Risk/Course-of Construction insurance. The risk of the damage to the work due to the perils covered by the Builder's Risk/Course-of-Construction insurance, as well as any other hazard which might result in damage to the work, is that of the Contractor and the surety, and no claims for such loss or damage shall be recognized by the Owner, nor will such loss or damage excuse the complete and satisfactory performance of the Contract by the Contractor.

**23. WARRANTY PERIOD.** The Contractor shall promptly correct any work found not to be in conformance with the Contract Documents for one year after Owner's written acceptance of the work. Contractor shall correct the work promptly, and passage of the applicable warranty period shall not release Contractor from its obligation to correct the work if Owner provided the written notice within the applicable warranty period. Contractor's obligation to correct the warranty item continues until the correction is made. After the correction is made to Owner's satisfaction, a new warranty period of the same length as the original warranty period shall run on the corrected work. The obligations under this section shall survive acceptance of the work under the Contract and termination of the Contract.

**24. ASSIGNMENT OF ANTI-TRUST CLAIM.** Pursuant to Government Code Section 4552, in entering into a public works contract or a subcontract to supply goods, services, or materials pursuant to a public works contract, the Contractor or subcontractor offers and agrees to assign to the owner 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. § 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 the purchase of goods, services, or materials pursuant to the public works contract or the subcontract. This assignment shall be made and become effective at the time the awarding body tenders final payment to the Contractor, without further acknowledgment by the Parties. If the Owner receives, either through judgment or settlement, a monetary recovery for a cause of action assigned under Chapter 11 (commencing with section 4550) of Division 5 of Title 1 of the Government Code, the assignor may, upon demand, recover from the Owner any portion of the recovery, including treble damages, attributable to overcharges that were paid by the assignor but were not paid by the Owner as part of the bid price, less the expenses

incurred in obtaining that portion of the recovery.

**25. SUBSTITUTIONS.** No substitutions of materials from those specified in this Agreement or the specifications shall be made without prior written approval of the Owner.

**26. SUPERVISION AND OWNER ACCESS.** Contractor shall provide competent supervision of all persons on the job site. Contractor shall allow Owner access to the site at all times.

**27. CLEAN UP, PROTECTION OF WORK AND PROPERTY.** Contractor shall maintain site in a clean and safe condition, including the daily removal of flammable material. The Contractor shall erect and properly maintain at all times, as required by conditions and progress of work, all necessary safeguards, signs, barriers, lights, and watchmen for protection of workers and the public, and shall post danger signs warnings against hazards created by such features in the course of construction. In an emergency affecting life and safety of life or of work or of adjoining property, Contractor, without special instruction or authorization from Owner, is permitted to act at its discretion to prevent such threatened loss or injury. If at Project completion, the site is not clean, Owner may clean the site and deduct the cost from the Contract Sum.

**28. OCCUPANCY.** Owner reserves the right to occupy buildings at any time before formal acceptance of contract completion and such occupancy shall not constitute final acceptance or approval of any part of the work covered by this Agreement, nor shall such occupancy extend the date specified for substantial completion of work.

**29. ANTI-DISCRIMINATION.** It is the policy of the Owner that there shall be no discrimination against any of Contractor's prospective or active employees engaged in the Project because of race, color, ancestry, national origin, sex or religious creed. Therefore, the Contractor agrees to comply with applicable federal and California laws including, but not limited to, the California Fair Employment and Housing Act. In addition, the Contractor agrees to require like compliance by all subcontractors employed on the Project by Contractor.

**30. INDEPENDENT CONTRACTOR.** While engaged in carrying out the terms and conditions of the Contract Documents, the Contractor is an independent contractor, and not an officer, employee, agent, partner, or joint venturer of the Owner.

**31. TESTS AND INSPECTIONS.** Tests, inspections, and approvals of portions of the work required by the Contract Documents will comply with Title 24, and with all other laws, ordinances, rules, regulations, or orders of public authorities having jurisdiction.

**32. INDEPENDENT TESTING LABORATORY.** The Owner will select and pay an independent testing laboratory to conduct all tests and inspections, including shipping



or transportation costs or expenses (mileage and hours). Selection of the materials required to be tested shall be made by the laboratory or the Owner's representative and not by the Contractor. However, if Contractor requests that the Owner use a different testing laboratory and Owner chooses to approve such request, Contractor shall pay any additional shipping or transportation costs or expenses (mileage and hours). If Owner pays such additional costs or expenses instead of Contractor, then Owner may invoice such costs or expenses to the Contractor or withhold such costs or expenses from progress payments and/or retention.

**33. ADVANCE NOTICE TO INSPECTOR OF RECORD.** The Contractor shall notify the Inspector of Record a sufficient time in advance of its readiness for required observation or inspection so that the Inspector of Record may arrange for same. The Contractor shall notify the Inspector of Record a sufficient time in advance of the manufacture of material to be supplied under the Contract Documents which must, by terms of the Contract Documents, be tested in order that the Inspector of Record may arrange for the testing of the material at the source of supply.

**34. TESTING OFF-SITE.** Any material shipped by the Contractor from the source of supply, prior to having satisfactorily passed such testing and inspection or prior to the receipt of notice from said Inspector of Record that such testing and inspection will not be required, shall not be incorporated in the work.

**35. ADDITIONAL TESTING OR INSPECTION.** If the Inspector of Record, the Architect, the Owner, or public authority having jurisdiction determines that portions of the work require additional testing, inspection, or approval not included under Section 30, the Inspector of Record will, upon written authorization from the Owner, make arrangements for such additional testing, inspection, or approval. The Owner shall bear such costs except as provided in Section 43.

**36. COSTS FOR RETESTING.** If such procedures for testing, inspection, or approval under Sections 30, 31, 32, and 34 reveal failure of the portions of the work to comply with requirements established by the Contract Documents, the Contractor shall bear all costs arising from such failure, including those of re-testing, re-inspection, or re-approval, including, but not limited to, compensation for the Architect's services and expenses. Any such costs shall be paid by the Owner, invoiced to the Contractor, and, among other remedies, can be withheld from progress payments and/or retention.

**37. COSTS FOR PREMATURE TEST.** In the event the Contractor requests any test or inspection for the Project and is not completely ready for the inspection, the Contractor shall be invoiced by the Owner for all costs and expenses resulting from that testing or inspection, including, but not limited to, the Architect's fees and expenses, and the amount of the invoice can among other remedies, be withheld from progress payments and/or retention.

**38. TESTS OR INSPECTIONS NOT TO DELAY WORK.** Tests or inspections

conducted pursuant to the Contract Documents shall be made promptly to avoid unreasonable delay in the work.

**39. TRENCHES OR EXCAVATIONS GREATER THAN FOUR FEET BELOW THE SURFACE.** Pursuant to Public Contract Code Section 7104, when any excavation or trenching extends greater than four feet below the surface:

The Contractor shall promptly, and before the following conditions are disturbed, notify the public entity, in writing, if any:

(1) Material that the Contractor believes may be material that is hazardous waste, as defined in California Health and Safety Code Section 25117, which is required to be removed to a Class I, Class II, or Class III disposal site in accordance with the provisions of existing law.

(2) Subsurface or latent physical conditions at the site differing from those indicated by information about the site made available to bidders prior to the deadline for submitting bids.

(3) Unknown physical conditions at the site of any unusual nature, different materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract Documents.

The public entity shall promptly investigate the conditions, and if it finds that the conditions do materially so differ, or do involve hazardous waste, and cause a decrease or increase in the Contractor's cost of, or the time required for, performance of any part of the work shall issue a change order under the procedures described in the Contract Documents.

In the event that a dispute arises between the public entity and the Contractor whether the conditions materially differ, or involve hazardous waste, or cause a decrease or increase in the Contractor's cost of, or time required for, performance of any part of the work, the Contractor shall not be excused from the Completion Date provided for by the Contract Documents, but shall proceed with all work to be performed under the Contract Documents. The Contractor shall retain any and all rights provided either by the Contract Documents or by law which pertain to the resolution of disputes and protests between the contracting Parties.

**40. EXISTING UTILITY LINES; REMOVAL, RELOCATION.** Pursuant to Government Code Section 4215, the Owner assumes the responsibility for removal, relocation, and protection of utilities located on the site at the time of commencement of construction under this Agreement with respect to any such utility facilities which are not identified in this Agreement, the plans and specifications. The Contractor shall not be assessed for liquidated damages for delay in completion of the Project caused by failure of the Owner to provide for removal or relocation of such utility facilities. Owner shall

compensate the Contractor for the costs of locating, repairing damage not due to the failure of the Contractor to exercise reasonable care, removing or relocating such utility facilities, and for equipment necessarily idle during such work.

**41. STORM WATER DISCHARGE PERMIT.** If applicable, the Contractor shall file a Notice of Intent to comply with the terms of the general permit to discharge storm water associated with construction activity (WQ Order No. 920-08-DWQ). The Notice of Intent must be sent to the following address along with the appropriate payment (warrant to be furnished by the Owner upon request by the Contractor, allow warrant processing time.): California State Water Resource Control Board, Division of Water Quality, Storm Water Permit Unit, P.O. Box 1977, Sacramento, California 95812-1977. The Contractor may also call the State Water Board's Construction Activity Storm Water Hotline at (916) 657-1146. The Notice of Intent shall be filed prior to the start of any construction activity.

**42. DISCOVERY OF HAZARDOUS MATERIALS.** In the event the Contractor encounters or suspects the presence on the site of material reasonably believed to be asbestos, polychlorinated biphenyl (PCB), or any other material defined as being hazardous by California Health and Safety Code Section 25249.5, which has not been rendered harmless, the Contractor shall immediately stop work in the area affected and report the condition to the Owner in writing, whether or not such material was generated by the Contractor or the Owner. The work in the affected area shall not thereafter be resumed, except by written agreement of the Owner and the Contractor, if in fact the material is asbestos, polychlorinated biphenyl (PCB), or other hazardous material, and has not been rendered harmless. The work in the affected area shall be resumed only in the absence of asbestos, polychlorinated biphenyl (PCB), or other hazardous material, or when it has been rendered harmless by written agreement of the Owner and the Contractor.

**43. PROVISIONS REQUIRED BY LAW DEEMED INSERTED.** Each and every provision of law and clause required by law to be inserted in this Agreement shall be deemed to be inserted herein and this Agreement shall be read and enforced as though it were included therein.

**44. MISCELLANEOUS PROVISIONS.**

43.1 **Assignment.** The Contractor shall not assign or transfer by operation of law or otherwise any or all of its rights, burdens, duties or obligations without the prior written consent of the surety on any payment bond, the surety on any performance bond and the Owner.

43.2 **Binding Effect.** This Agreement shall inure to the benefit of and shall be binding upon the Contractor and Owner and their respective successors and assigns.

43.3 **Severability; Governing Law; Choice of Forum.** If any provision of

this Agreement shall be held invalid or unenforceable by a court of competent jurisdiction, such holding shall not invalidate or render unenforceable any other provision hereof. The Contract shall be governed by the laws of the State of California. Any action or proceeding seeking any relief under or with respect to this Agreement shall be brought solely in the Superior Court of the State of California for the County of Placer, subject to transfer of venue under applicable State law, provided that nothing in this Agreement shall constitute a waiver of immunity to suit by Owner.

**43.4 Amendments.** The terms of the Contract Documents shall not be waived, altered, modified, supplemented or amended in any manner whatsoever except by written agreement signed by both Parties and approved or ratified by the Governing Board.

**43.5 Governing Law.** This Agreement shall be governed by and construed in accordance with the laws of the State of California and venue shall be in the appropriate Superior Court in Placer County, California.

**43.6 Written Notice.** Written notice shall be deemed to have been duly served if delivered in person to the individual or member of the company or to an officer of the corporation for whom it was intended, or if delivered at or sent by registered or certified or overnight mail to the last business address known to the person who gives the notice. Owner shall, at Contractor's cost, timely notify Contractor of Owner's receipt of any third party claims relating to this Agreement pursuant to Public Contract Code Section 9201.

**43.7 Entire Agreement.** The Contract Documents constitute the entire agreement between the Parties relating to the Project, and supersedes any prior or contemporaneous agreement between the parties, oral or written, including the Owner's award of the Project to Contractor, unless such agreement is expressly incorporated herein. The Owner makes no representations or warranties, express or implied, not specified in the Contract. The Contract is intended as the complete and exclusive statement of the parties' agreement pursuant to Code of Civil Procedure Section 1856. Contractor, by the execution of this Agreement, acknowledges that Contractor has read this Agreement, understands it, and agrees to be bound by its terms and conditions.

**43.8 Execution of Other Documents.** The Parties to this Agreement shall cooperate fully in the execution of any and all other documents and in the completion of any additional actions that may be necessary or appropriate to give full force and effect to the terms and intent of this Agreement.

**43.9 Execution in Counterparts.** This Agreement may be executed in counterparts such that the signatures may appear on separate signature pages. A copy, or an original, with all signatures appended together, shall be deemed a fully executed agreement.

**Rocklin Unified School District,**

**Contractor**

a California Public School District

By: \_\_\_\_\_

By: \_\_\_\_\_

Barbara Patterson  
Name

\_\_\_\_\_  
Name

Its: Deputy Superintendent,  
Business & Operations

Its: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

\_\_\_\_\_  
CALIFORNIA CONTRACTOR'S  
LICENSE NO.

\_\_\_\_\_  
LICENSE EXPIRATION DATE

**NOTE:** Contractor must give the full business address of the Contractor and sign with Contractor's usual signature. Partnerships must furnish the full name of all partners and the Agreement must be signed in the partnership name by a general partner with authority to bind the partnership in such matters, followed by the signature and designation of the person signing. The name of the person signing shall also be typed or printed below the signature. Corporations must sign with the legal name of the corporation, followed by the name of the state of incorporation and by the signature and designation of the chairman of the board, president or any vice president, and then followed by a second signature by the secretary, assistant secretary, the chief financial officer or assistant treasurer. All persons signing must be authorized to bind the corporation in the matter. The name of each person signing shall also be typed or printed below the signature. Satisfactory evidence of the authority of the officer signing on behalf of a corporation shall be furnished.

**For Internal Use Only:**

Program/School/Department: \_\_\_\_\_

FUND	RESC	YEAR	OBJT	SO	GOAL	FUNC	SCH	BR	LO2	LO3

**ACKNOWLEDGMENT OF BIDDING PRACTICES**  
**REGARDING INDEMNITY FORM**

TO: Rocklin Unified School District

RE: Project Number \_\_\_\_\_

Construction Contract for \_\_\_\_\_

Please be advised that with respect to the above-referenced Project, the undersigned Contractor, on behalf of oneself and all subcontractors, hereby waives the benefits and protection of Labor Code section 3864, which provides:

“If an action as provided in this chapter is prosecuted by the employee, the employer, or both jointly against the third person results in judgment against such third person, the employer shall have no liability to reimburse or hold such third person harmless on such judgment or settlement in the absence of a written agreement to do so executed prior to the injury.”

This Agreement has been signed by an authorized representative of the contracting party and shall be binding upon its successors and assignees. The undersigned further agrees to promptly notify the District of any changes of ownership of the contracting party or any subcontractor while this Agreement is in force.

\_\_\_\_\_  
Contracting Party

\_\_\_\_\_  
Name of Agent/Title

**END OF SECTION 00 52 05**

**PERFORMANCE BOND**  
**(CALIFORNIA PUBLIC WORK)**

**KNOW ALL MEN BY THESE PRESENTS:**

- A. THAT WHEREAS, the Rocklin Unified School District (sometimes referred to hereinafter as "Obligee") has awarded to \_\_\_\_\_ (hereinafter designated as the "Principal" or "Contractor"), an agreement for the work described as follows: \_\_\_\_\_ (hereinafter referred to as the "Public Work"); and
- B. WHEREAS, the work to be performed by Contractor is more particularly set forth in that certain contract for said Public Work dated \_\_\_\_\_, (hereinafter referred to as the "Contract"), which Contract is incorporated herein by this reference; and
- C. WHEREAS, Contractor is required by said Contract to perform the terms thereof and to provide a bond, both for the performance and guaranty thereof.
- D. NOW, THEREFORE, we, \_\_\_\_\_, the undersigned Contractor, as Principal, and \_\_\_\_\_, a corporation organized and existing under the laws of the State of \_\_\_\_\_, and duly authorized to transact business under the laws of the State of California, as Surety, are held and firmly bound unto the Rocklin Unified School District in the sum of \_\_\_\_\_ dollars (\$ \_\_\_\_\_), said sum being not less than one hundred percent (100%) of the total amount payable by said Obligee under the terms of said Contract, for which amount well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents.
- E. THE CONDITION OF THIS OBLIGATION IS SUCH THAT, if the bounded Contractor, his or her heirs, executors, administrators, successors or assigns, shall in all things stand to and abide by, and well and truly keep and perform the covenants, conditions, and agreements in said Contract and any alteration thereof made as therein provided, on his or her part, to be kept and performed at the time and in the manner therein specified, and in all respects according to their intent and meaning, and shall faithfully fulfill guarantees of all materials and workmanship, and indemnify, defend, and save harmless the Obligee, its officers, and agents, as stipulated in said Contract, then this obligation shall become null and void; otherwise, it shall be and remain in full force and effect.
- F. The Surety, for value received, hereby stipulates and agrees that it shall not be exonerated or released from the obligation of this bond (either by total exoneration or pro tanto) by any change, extension of time, alteration in, or addition to, the terms of the Contract or to the work to be performed there under or the specifications accompanying the same, nor by any change or modification to any terms of payment or extension of time for any payment pertaining or relating to any scheme of work of improvement under the Contract. Surety also stipulates and agrees that it shall not be exonerated or released from the obligation of this bond (either by total exoneration or pro tanto) by any overpayment or underpayment by the Obligee that is based upon estimates approved by the Architect. The Surety stipulates and agrees that none of the aforementioned changes, modifications, alterations, additions, extension of time, or actions shall in any way affect its obligation on this bond, and it does hereby waive notice of any such changes, modifications, alterations, additions, or extension of time to the terms of the contract, or to the work, or the specifications as well notice of any other actions that result in the foregoing.

- G. Whenever Principal shall be, and is declared by the Oblige to be, in default under the Contract, the Surety shall promptly either remedy the default, or shall promptly take over and complete the Contract through its agents or independent contractors, subject to acceptance and approval of such agents or independent contractors by Oblige as hereinafter set forth, in accordance with its terms and conditions and to pay and perform all obligations of Principal under the Contract, including, without limitation, all obligations with respect to warranties, guarantees, and the payment of Liquidated Damages, or at Oblige's sole discretion and election, Surety shall obtain a bid or bids for completing the Contract in accordance with its terms and conditions, and upon determination by Oblige of the lowest responsible bidder, arrange for a Contract between such bidder and the Oblige and make available as Work progresses (even though there should be a default or succession of defaults under the Contract or Contracts of completion arranged under this paragraph) sufficient funds to pay the cost of completion less the "balance of the Contract Price" (as hereinafter defined), and to pay and perform all obligations of Principal under the Contract, including, without limitation, all obligations with respect to warranties, guarantees, and the payment of Liquidated Damages. The term "balance of the Contract Price," as used in this paragraph, shall mean the total amount payable to Principal by the Oblige under the Contract and any modifications thereto, less the amount previously paid by the Oblige to the Principal, less any withholdings by the Oblige allowed under the Contract. Oblige shall not be required or obligated to accept a tender of a completion contractor from the Surety.
- H. Surety expressly agrees that the Oblige may reject any agent or contractor that may be proposed by Surety in fulfillment of its obligations in the event of default by the Principal. Unless otherwise agreed by Oblige, in its sole discretion, Surety shall not utilize Principal in completing the Contract, nor shall Surety accept a bid from Principal for completion of the work in the event of default by the Principal.
- I. No final settlement between the Oblige and Contractor shall abridge the right of any beneficiary hereunder, whose claim may be unsatisfied.
- J. The Surety shall remain responsible and liable for all patent and latent defects that arise out of or relate to Contractor's failure and/or inability to properly complete the Public Work as required by the Contract and the Contract Documents. The obligation of the Surety hereunder shall continue so long as any obligation of Contractor remains.
- K. Contractor and Surety agree that if the Oblige is required to engage the services of an attorney in connection with enforcement of the bond, Contractor and Surety shall pay Oblige's reasonable attorneys' fees incurred, with or without suit, in addition to the above sum.
- L. In the event suit is brought upon this bond by the Oblige and judgment is recovered, the Surety shall pay all costs incurred by the Oblige in such suit, including reasonable attorneys' fees to be fixed by the Court.

**SECTION CONTINUES ON NEXT PAGE**



IN WITNESS WHEREOF, we have hereunto set our hands and seals this \_\_\_\_\_ day of \_\_\_\_\_,  
20\_\_\_\_.

PRINCIPAL/CONTRACTOR:

\_\_\_\_\_

By: \_\_\_\_\_

SURETY:

\_\_\_\_\_

By: \_\_\_\_\_  
Attorney-in-Fact

The rate of premium on this bond is \_\_\_\_\_ per thousand.

The total amount of premium charged: \$ \_\_\_\_\_ (this must be filled in by a corporate surety).

**SECTION CONTINUES ON NEXT PAGE**

**IMPORTANT: THIS IS A REQUIRED FORM**

Surety companies executing bonds must possess a certificate of authority from the California Insurance Commissioner authorizing them to write surety insurance defined in California Insurance Code section 105, and if the work or project is financed, in whole or in part, with federal, grant, or loan funds, Surety's name must also appear on the Treasury Department's most current list (Circular 570 as amended).

Any claims under this bond may be addressed to:

Name and Address of Surety:

Name and Address of Agent or Representative for  
Service for Service in Process in California:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Telephone: \_\_\_\_\_

Telephone: \_\_\_\_\_

STATE OF CALIFORNIA                    )  
  )  
COUNTY OF                                    )

On \_\_\_\_\_, before me, \_\_\_\_\_, a Notary Public in and for said State, personally appeared \_\_\_\_\_, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument as the Attorney-in-Fact of the \_\_\_\_\_ (Surety) and acknowledged to me that he/she/they subscribed the name of the \_\_\_\_\_ (Surety) thereto and his own name as Attorney-in-Fact on the executed instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

\_\_\_\_\_  
Notary Public in and for said State

(SEAL)

Commission expires: \_\_\_\_\_

NOTE: A copy of the power-of-attorney to local representatives of the bonding company must be Attached hereto.

**END OF SECTION 00 61 13.13**

**PAYMENT BOND**  
**(CALIFORNIA PUBLIC WORK)**

**KNOW ALL MEN BY THESE PRESENTS:**

- A. THAT WHEREAS, the Rocklin Unified School District (sometimes referred to hereinafter as "Obligee") has awarded to \_\_\_\_\_ (hereinafter designated as the "Principal" or "Contractor"), an agreement for the work described as follows:  
\_\_\_\_\_  
(hereinafter referred to as the "Public Work"); and
- B. WHEREAS said Contractor is required to furnish a bond in connection with said Contract, and pursuant to California Civil Code section 9550;
- C. NOW, THEREFORE, We, \_\_\_\_\_, the undersigned Contractor, as Principal, and \_\_\_\_\_, a corporation organized and existing under the laws of the State of \_\_\_\_\_, and duly authorized to transact business under the laws of the State of California, as Surety, are held and firmly bound unto the Rocklin Unified School District and to any and all persons, companies, or corporations entitled by law to file stop notices under California Civil Code section 9100, or any person, company, or corporation entitled to make a claim on this bond, in the sum of \_\_\_\_\_ dollars (\$ \_\_\_\_\_), such sum being not less than one hundred percent (100%) of the total amount payable by said Obligee under the terms of said Contract, for which payment will and truly to be made, we bind ourselves, our heirs, executors and administrators, successors and assigns, jointly and severally, firmly by these presents.
- D. The condition of this obligation is such that if said Principal, its heirs, executors, administrators, successors, assigns, or subcontractor shall fail to pay any person or persons named in Civil Code section 9100, or fail to pay for any materials, provisions, or other supplies, used in, upon, for, or about the performance of the work contracted to be done, or for any work or labor thereon of any kind, or for amounts due under the Unemployment Insurance Code, with respect to work or labor thereon of any kind, or shall fail to deduct, withhold, and pay over to the Employment Development Department any amounts required to be deducted, withheld, and paid over by Unemployment Insurance Code section 13020 with respect to work and labor thereon of any kind, then said Surety will pay for the same, in an amount not exceeding the amount herein above set forth, and in the event suit is brought upon this bond, also will pay such reasonable attorneys' fees as shall be fixed by the court, awarded, and taxed as provided in California Civil Code section 9550 et seq.
- E. This bond shall inure to the benefit of any person named in Civil Code section 9100 giving such person or his/her assigns a right of action in any suit brought upon this bond.
- F. It is further stipulated and agreed that the Surety of this bond shall not be exonerated or released from the obligation of the bond by any change, extension of time for performance, addition, alteration or modification in, to, or of any contract, Plans, or Specifications, or agreement pertaining or relating to any scheme or work of improvement herein above described, or pertaining or relating to the furnishing of labor, materials, or equipment therefor; nor by any change or modification of any terms of payment or extension of time for payment pertaining or relating to any scheme or work of improvement herein above described, nor by any rescission or attempted rescission of the contract, agreement, or

bond, nor by any conditions precedent or subsequent in the bond attempting to limit the right of recovery of claimants otherwise entitled to recover under any such contract or agreement or under the bond, nor by any fraud practiced by any person other than the claimant seeking to recover on the bond, and that this bond be construed most strongly against the Surety and in favor of all persons for whose benefit such bond is given, and under no circumstances shall the Surety be released from liability to those for whose benefit such bond has been given, by reason of any breach of contract between the Obligee and Contractor or on the part of any Obligee named in such bond, that the sole condition of recovery shall be that the claimant is a person described in California Civil Code section 9100, and who has not been paid the full amount of his or her claim, and that the Surety does hereby waive notice of any such change, extension of time, addition, alteration or modification herein mentioned.

---

IN WITNESS WHEREOF this instrument has been duly executed by the Principal and Surety above named, on the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_.

PRINCIPAL/CONTRACTOR:

\_\_\_\_\_

By: \_\_\_\_\_

SURETY:

\_\_\_\_\_

By: \_\_\_\_\_

Attorney-in-Fact

**SECTION CONTINUES ON NEXT PAGE**





**CONTRACTOR'S REQUEST FOR INFORMATION**

**RFI #**

From: \_\_\_\_\_ Project Number: \_\_\_\_\_ Date: \_\_\_\_\_

To: \_\_\_\_\_ Project: \_\_\_\_\_

Disciplines Impacted: Architectural  Structural  Mechanical  Electrical   
Civil  Landscape  Kitchen

Reference: \_\_\_\_\_ Drawing(s) \_\_\_\_\_ Spec. Section(s) \_\_\_\_\_

Other \_\_\_\_\_

Please clarify or provide the following information:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Contractor's Suggestions: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

Possible Cost Impact: Unknown  Increase  Decrease  No Change

Possible Time Impact: Unknown  Increase  Decrease  No Change

This information is required as soon as possible,  
but no later than \_\_\_\_\_

**PRIORITY ATTENTION  
REQUIRED**

Contractor's Representative: \_\_\_\_\_

**Architect's Response:**

Date: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

PBK Architects

Copies to: \_\_\_\_\_

**END OF SECTION 00 63 13**



## ARCHITECT'S SUPPLEMENTAL INSTRUCTIONS

---

**Project:**

**Instruction number: ASI 1**

**Date:**

**Contractor:**

**Architect's Project Number:**

**Contract Date:**

**REQUESTED BY:**

- OWNER     ARCHITECT     CONSULTANT     CONTRACTOR     FIELD  
 OTHER
- 

The Contractor shall carry out the Work in accordance with the following supplemental instruction without change in Contract Sum or Contract Time. Proceeding with the Work in accordance with these instructions indicates your acknowledgements that there will be no change in the Contract Sum or Contract Time

(Describe supplemental instruction.)

- 1.

This document becomes effective immediately upon receipt by the Contractor, when signed by the Architect. Upon receipt, the Contractor shall proceed with instruction described above.

---

Architect (Firm)

---

By (Signature)

Print Name

Date

**END OF SECTION 00 63 33**

**IMMEDIATE CONSTRUCTION CHANGE DIRECTIVE**

**Directive No.** \_\_\_\_\_

**Project:** \_\_\_\_\_

**To:** \_\_\_\_\_

You are hereby directed to provide the extra work necessary to comply with this ICD.

**Description of Change:** \_\_\_\_\_

\_\_\_\_\_

**Cost (this cost shall not be exceeded):** \_\_\_\_\_

**Time for Completion:** \_\_\_\_\_

**NOTE:**

Pursuant to Article 7.3.1.2 An Immediate Change Directive is a written order to the Contractor prepared by the Architect and signed by the District (and CM if there is a CM on the Project) and the Architect, directing a change in the Work and stating a proposed basis for adjustment, if any, in the Contract Sum or Contract Time, or both. The District may by ICD, without invalidating the Contract, direct immediate changes in the Work within the general scope of the Contract consisting of additions, deletions, or other revisions within. If applicable, the Contract Sum and Contract Time will be adjusted accordingly. CONTRACTOR SHALL PROCEED WITH WORK SET FORTH IN THIS ICD IMMEDIATELY UPON RECEIPT OR THE DISTRICT MAY EITHER HOLD THE CONTRACTOR IN EITHER PARTIAL DEFAULT PURSUANT TO ARTICLE 2.2 OR TOTAL DEFAULT PURSUANT TO ARTICLE 14.

\_\_\_\_\_  
Architect

\_\_\_\_\_  
District

**END OF SECTION 00 63 46**





Distribution List:

- Owner
- Architect
- Contractor
- Construction Manager
- Inspector
- Consultant
- Field
- Other:

**CHANGE ORDER**

---

**Project:** **CO No.:** **Date:**

**Owner:** **PBK No.:**

**Agency App. No.:** **Agency File No.:**

**Contractor:** **Contract Dated:**

**Contract For:**

**Architect: PBK**  
2520 Venture Oaks Way  
Suite 440  
Sacramento, CA 95833

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**The Contract is changed as follows:**

**Description:**

**Attachments:**

**SECTION CONTINUES ON NEXT PAGE**

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**THIS DOCUMENT IS NOT VALID UNTIL SIGNED BY OWNER, ARCHITECT, AND CONTRACTOR**

---

1. The original **(Contract Sum) (Guaranteed Maximum Price)** was: \$ 0.00
2. Net change by previous authorized Change Orders: \$ 0.00
3. The **(Contract Sum) (Guaranteed Maximum Price)** prior to this Change Order was: \$ 0.00
4. The **(Contract Sum) (Guaranteed Maximum Price)** will be **(Increased) (Decreased)** by this Change Order in the amount of: \$ 0.00
5. The new **(Contract Sum) (Guaranteed Maximum Price)** including this Change Order will be: \$ 0.00
6. The Contract Time will be **(Increased) (Decreased) (Unchanged)** by ( **X** ) days.
7. The date of Substantial Completion as of the date of this Change Order is therefore **(Increased) (Decreased) (Unchanged)**.

NOTE: This summary does not reflect changes in the Contract Sum, Contract Time, or Guaranteed Maximum Price, which have been authorized by Construction Change Directives (CCDs).

The undersigned Contractor approves the foregoing as to the changes, if any, and the cost, if any, specified for each item, and as to the extension of time allowed, if any, for completion of the entire Work as stated therein, and agrees to furnish all labor, materials, and services, and perform all work necessary to complete any additional work specified for the consideration stated therein.

This Change Order is subject to approval by the governing board of this District and must be signed by the District.

The compensation and time, if any, granted herein represent a full accord and satisfaction for any and all time and cost impacts of the items herein, and Contractor waives any and all further compensation or time extension based on the items herein. The value of the extra work or changes expressly include any and all of the Contractor's costs and expenses, both direct and indirect, resulting from additional time required on the Project or resulting from delay to the Project. Any costs, expenses, damages, or time extensions not included are deemed waived.

**Signatures:**

District: \_\_\_\_\_  
[Name] Date

Contractor: \_\_\_\_\_  
[Name] Date

Architect: \_\_\_\_\_  
[Name] Date

Project Inspector: \_\_\_\_\_  
[Name] Date

**SECTION CONTINUES ON NEXT PAGE**

**CHANGE ORDER ATTACHMENT "A"**

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**Project:** **PBK No.:**  
**Agency App. No.:** **Agency File No.:**  
**Owner:** **Contractor:**

---

**Item 1.1 Proposal Request No.:**

Description:  
Attachments:  
Reason:  
Initiator:  
Contract Adjustment: \$ 0.00  
Time Adjustment: (X) days

**Item 1.2 Proposal Request No.:**

Description:  
Attachments:  
Reason:  
Initiator:  
Contract Adjustment: \$ 0.00  
Time Adjustment: (X) days

**Item 1.3 Proposal Request No.:**

Description:  
Attachments:  
Reason:  
Initiator:  
Contract Adjustment: \$ 0.00  
Time Adjustment: (0) days

**TOTAL CHANGE ORDER CONTRACT ADJUSTMENT: \$0.00 to Contract  
(X) Days**

**END OF SECTION 00 63 57**

**GUARANTEE**

**Guarantee for \_\_\_\_\_:**

- A. We hereby guarantee that the \_\_\_\_\_, which we have installed in \_\_\_\_\_, has been done in accordance with the Contract Documents including, without limitation, the Drawings and Specifications, and that the work as installed will fulfill the requirements included in the bid documents. The undersigned and its surety agrees to repair or replace any or all such work, together with any other adjacent work, which may be displaced in connection with such replacement, that may prove to be defective in workmanship or material within a period of one (1) year from the date of the Notice of Completion of the above-mentioned structure by the Rocklin Unified School District, ordinary wear and tear and unusual abuse or neglect excepted.
  
- B. In the event the undersigned or its surety fails to comply with the above-mentioned conditions within a reasonable period of time, as determined by the District, but not later than ten (10) days after being notified in writing by the District or within 48 hours in the case of an emergency or urgent matter, the undersigned and its surety authorizes the District to proceed to have said defects repaired and made good at the expense of the undersigned and its surety, who will pay the costs and charges therefor upon demand. The undersigned and its surety shall be jointly and severally liable for any costs arising from the District's enforcement of this Guarantee.

Countersigned

\_\_\_\_\_  
(Proper Name)

\_\_\_\_\_  
(Proper Name)

By: \_\_\_\_\_

By: \_\_\_\_\_

\_\_\_\_\_  
(Signature of Subcontractor or Contractor)

\_\_\_\_\_  
(Signature of General Contractor if for Subcontractor)

Representatives to be contacted for service:

Name: \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_  
Phone Number: \_\_\_\_\_

**END OF SECTION 00 65 01**

**CERTIFICATE OF  
SUBSTANTIAL COMPLETION**

OWNER   
ARCHITECT   
CONTRACTOR   
FIELD   
OTHER

**Project: Replace Existing Fire Alarm System**

**Project No.:**

**Contract For:**

**Contract Date:**

**To Owner:**

**To Contractor:**

**Date of Issuance:**

**Project or Designated Portion Shall Include:**

The Work performed under this Contract has been reviewed and found to the Architect's best knowledge, information, and belief, to be substantially complete. Substantial Completion is the stage in the progress of the Work when the Work or designated portion thereof is sufficiently complete in accordance with the Contract Documents so the Owner can occupy or use the Work for its intended use. The date of Substantial Completion of the Project, or portion thereof designated above, is hereby established as **XXX (XXX)**, which is also the date of commencement of applicable warranties required by the Contract Documents, except as stated below:

A list of items to be completed or corrected is attached hereto. The failure to include any items on such list does not alter the responsibility of the Contractor to complete the Work in accordance with the Contract Documents.

As the Architect for the Project described above, the Project has reached Substantial Completion. Substantial Completion is not reached unless and until each of the following three (3) conditions have been met: (1) all contractually required items have been installed with the exception of only minor and Incomplete Punch Items (See Article 9.9 of the General Conditions), (2) All Fire/Life Safety Systems have been installed and are working and signed off on the DSA Form 152 Inspection Card, and all building systems including mechanical, electrical, and plumbing are all functioning, and (3) the Project is fit for occupancy and its intended use.

I certify that the Project has reached Substantial Completion as defined above.

XX

\_\_\_\_\_  
Architect

\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
Date

**SECTION CONTINUES ON NEXT PAGE**

The Contractor will complete or correct the Work on the list of items attached hereto within 30 days from the above date of Substantial Completion.

XX \_\_\_\_\_  
Contractor Printed Name Date

The Owner accepts the Work or designated portion thereof as Substantially Complete and will assume full possession thereof at **(time)** on **(date)**.

XX \_\_\_\_\_  
Owner Printed Name Date

\_\_\_\_\_

The responsibilities of the Owner and the Contractor for security, maintenance, heat, utilities, damage to the Work, and insurance shall be as follows:

**END OF SECTION 00 65 16**

**ARTICLE 1**  
**DEFINITIONS**

**1.1 BASIC DEFINITIONS**

NOTE: The following shall not be construed as a comprehensive list of all definitions in the Contract Documents, and there may be other definitions set forth in the Contract Documents. Additionally, any references to any DSA forms, documents, or requirements shall be construed to incorporate any updates, supplements, or additions. Contractor shall be required to meet the latest DSA requirements applicable to the Project.

- 1.1.1 *Action of the Governing Board* is a vote of a majority of the District's Governing Board.
- 1.1.2 *Approval* means written authorization through action of the Governing Board. The Governing board has delegated to the Executive Director the authority to approve certain modifications, Change Orders, or Immediate Change Directives (subject to the limits of the Delegation of Authority provided by the Board). In no case shall the Assistant Superintendent have authority to approve total Change Orders or modifications to the Project exceeding 10% of the Contract Sum.
- 1.1.3 *Architect* means the Architect, Engineer, or other design professional engaged by the District to design and perform general observation of the work of construction and interpret the Drawings and Specifications for the Project. See Article 4.
- 1.1.4 *As-Builts* are a set of Plans and Specifications maintained by Contractor clearly showing all changes, revisions, substitutions, field changes, final locations, and other significant features of the Project. The As-Builts shall be maintained continuously throughout the Work for the Project and is both a prerequisite to the issuance of Payment Application and a requirement for Contract Closeout. See Article 3.17.
- 1.1.5 *Beneficial occupancy* is the point in time when a building or buildings are fit for occupancy and its intended use. Basic requirements are that the building is safe, at or near Substantial Completion, and all fire/life safety items are approved and operational. The fact that a building is occupied does not mean that the building is ready for beneficial occupancy if there are elements that are unsafe or if fire/life safety items are not approved and operational. Taking occupancy on a structure that is under a fire watch is not considered beneficial occupancy. Further, taking of Beneficial Occupancy is not a point in time when retention is due unless the entire school has obtained a Certificate of Substantial Completion that meets the definition of 1.1.46.
- 1.1.6 *Claims* are requests for payments, supported by back-up documentation, which includes invoices time sheets or other documents substantiating legitimacy or entitlement that is submitted during the Project, or immediately following the Project, made prior to the Final Retention Payment Application and prior to Final Completion of the Project. A *claim* means a separate demand by Contractor for (1) time extension, (2) payment of money or damages arising from Work done by or on behalf of Contractor pursuant to the Contract and payment of which is not otherwise expressly provided for or the claimant is not otherwise entitled to, or (3) and amount of the payment, which is disputed by the District. See Article 4.6.



- 1.1.7 A *Change Order (CO)* is a written instrument prepared by the Architect and signed by the District (as authorized by the District's Governing Board), Contractor, and the Architect, stating their agreement upon (1) a description of a change in the Work, (2) the amount of the adjustment in the Contract Sum, if any, and (3) the extent of the adjustment in the Contract Time, if any. See Article 7.2.
- 1.1.8 A *Change Order Request (COR)* is a written request supported by backup documentation prepared by Contractor requesting that the District and the Architect issue a CO based upon a proposed change, or a change that results in an adjustment in cost, time, or both, or arising from an RFP, CCD, or ICD. See Article 7.6.
- 1.1.9 *Closeout* means the process for Final Completion of the Project, but also includes the requirements for the DSA Certification that the Project is Complete (see DSA Certification Guide). See Article 9.9.
- 1.1.10 A *Construction Change Document (CCD)* is a DSA term that is used to address changes to the DSA approved Plans and Specifications. There are two types of CCDs: (1) DSA approved CCD Category A (DSA Form 140) for work affecting structural, access, or fire/life safety of the Project, which will require DSA approval, and (2) CCD Category B (DSA Form 141) for work NOT affecting structural safety, access compliance, or fire/life safety that will not require DSA approval (except to confirm that no approval is required). See Article 7.3.
- 1.1.11 *Complete/Completion/Final Completion* means that all Work in the Contract Documents is finished, the requirements of the Contract Documents have been met, the Project has been closed out, and all Work has ceased on the Project. In most cases, the recording of a Notice of Completion shall represent Completion of the Project. Beneficial occupancy does not mean the Work is Complete.
- 1.1.12 *Completion date* is the date when all Work for the Project shall be Substantially Complete and is the date assigned at the end of the Contract Time for the Project. See Article 1.1.46.
- 1.1.13 The *Construction Manager (CM)* is a consultant to the District contracted to assist in Project planning, management, and construction of the Project. If there is a CM, he or she may assist in various aspects of the Project including, but not limited to, monitoring the progress of the construction, reviewing and monitoring the schedule and progress of work, monitoring pay requests, facilitating communications, advising the District and its Board of Education on various aspects of the construction process, and monitoring the RFI, COR, CCD, ICD, RFP, Claims, Disputes, and other Project related processes.
- 1.1.14 *Contract or Agreement*, when the terms are used in these General Conditions, shall be references to the Contract Documents as defined herein.
- 1.1.15 *Contract Documents* (sometimes referred to as Construction Documents) consist of the Agreement between District and Contractor (hereinafter the Agreement or Contract), conditions of the Contract (General, Supplementary and other conditions), Drawings, Specifications, Addenda issued prior to bid, instructions to bidders, notice to bidders, and the requirements contained in the

Bid Documents, other documents listed in the Agreement, and modifications issued after execution of the Contract. A modification is a written amendment to the Contract signed by parties, a CO, a CCD, or a written order for a minor change in the Work issued by the Architect. The Contract Documents collectively form the Contract. The Contract represents the entire and integrated Agreement between the parties hereto and supersedes prior negotiations, representations, or agreements, either written or oral. The Contract may be amended or modified only by a written modification. The Contract Documents shall not be construed to create a contractual relationship of any kind between the Architect and Contractor, between the District and any Subcontractor or sub-Subcontractor, or between any persons or entities other than the District and Contractor. The Architect shall, however, be entitled to performance and enforcement of obligations under the Contract intended to facilitate performance of the Architect's duties.

- 1.1.16 *Contract Time* is the time period specified in the Contract Documents in which the Project shall be completed. This is sometimes referred to a Contract Duration, or "time in which Contractor has to complete the Project". See Article 8.1.1.
- 1.1.17 *Contractor, District, and Architect* are those mentioned as such in the Agreement. They are treated throughout the Contract Documents as if they are of singular number and neuter gender. Any reference to "Owner" shall mean "District" or Rocklin Unified School District.
- 1.1.18 *Cure* is the act of remedying a material failure to perform under the terms of the Contract Documents during the time provided to correct Contractor's default. Specific time periods are provided to cure and correct Contractor's default under Article 14, and for a Partial Default under Article 2.2, as well as elsewhere in the Contract Documents.
- 1.1.19 *Days* mean calendar days, unless otherwise specifically stated.
- 1.1.20 *Default* is a material breach of Contract. A Termination for Cause under Article 14 is a declaration of default of the Contract and shall act as a demand upon the Surety to perform under the terms of the Performance Bond. Partial Defaults may also be tendered to the Surety at District's discretion. See Article 2.2.
- 1.1.21 A *dispute* is a disagreement on terms or conditions of the Project where Contractor's opinion of the Project, payment, CO or Request for Proposal differs from that of the District or Architect. A dispute only rises to the level of a claim once the dispute is assembled with back-up documentation and presented for evaluation. See Article 4.6.
- 1.1.22 *District Representative* is the person designated by the District to represent the District during the construction for the Project. This District Representative shall have the delegated authority as further defined in Article 1.1.2. This District Representative may be an employee of the District who may have the delegated authority as set forth in Article 1.1.3 and may also include CMs. In some cases, the District and its Board may be assisted by a CM. When a CM is assisting the District, Contractor, Architect, and Inspector shall have a primary contact with the District's CM who will advise the District.
- 1.1.23 *Drawings or Plans* are graphic and pictorial portions of the Contract Documents

prepared for the Project and approved changes thereto, wherever located and whenever issued, showing the design, location, and scope of the Work, generally including Plans, elevations, sections, details, schedules, and diagrams as drawn or approved by the Architect. Sometimes Drawings will also be included in Addenda, Change Orders, and Specifications.

- 1.1.24 *Division of the State Architect (DSA)* is the agency that provides design and construction oversight for K-12 Schools, Community Colleges, and State Funded Charter School Projects. DSA is the responsible agency for this Project, and Contractor has submitted a bid for the Project since Contractor is familiar with Contractor's responsibilities under the DSA requirements more thoroughly set forth at Title 24 of the California Code of Regulations. Contractor agrees to abide by the jurisdiction of DSA and shall construct the Project to conform to the approved Plans, Specifications, Addenda, and CO's (inclusive of approved CCD's and ICD's issued by the District pending CCD approval). See DSA website.
- 1.1.25 *Emergency* is defined as a sudden, unexpected occurrence, involving a clear and imminent threat to the continuation of school classes, a critical path delay that will result in not being able to occupy the school when students arrive to use the facility, danger from the facility or from outside the facility, Act of God, or other action that requires immediate action to prevent or mitigate loss of, or damage to, life, health, property, or essential public services.
- 1.1.26 *Float* refers to the total number of days an activity may be extended or delayed without delaying the Completion Date shown in the schedule. Float will fall into three categories: (1) Rain Days, (2) Governmental Delays, and, (3) Project Float. See Article 8.1.4.
- 1.1.27 An *Immediate Change Directive (ICD)* is a written order prepared by the Architect and signed by the District and the Architect, directing a change in the Work where the Work must proceed immediately, and stating a proposed basis for adjustment, if any, in the Contract Sum or Contract Time, or both. See Article 7.3.
- 1.1.28 The *Inspector of Record (IR)* or *Project Inspector (PI)* is the individual retained by the District, in accordance with Title 24 of the California Code of Regulations, who will be assigned to the Project.
- 1.1.29 *Notice of Noncompliance (DSA Form 154)* is a document issued by the Inspector if there is a deviation from the DSA approved Plans, Specifications, and COs. See Article 7.1.2.
- 1.1.30 *Payment Application* or *Certificate of Payment* is Contractor's certified representation of the actual level of Work performed on the Project. Payment Applications are sometimes also called *Request for Payment*, or similar terms, and shall follow the Schedule of Values that are approved by the Architect, Inspector, and District. See Article 9.3.
- 1.1.31 *Project* is the complete construction of the Work performed in accordance with the Contract Documents.
- 1.1.32 *Project Manual* is the volume assembled for the Work, which may include, without limitation, the bidding requirements, sample forms, Conditions of the

Contract, and Specifications.

- 1.1.33 *Provide* shall include *provide complete in place*, that is *furnish and install complete*.
- 1.1.34 *Punch List/Punch Item/Incomplete Punch Item* is a list of minor repair items, prepared after the issuance of a Certificate of Substantial Completion, by the Inspector and Architect of Work required in order to complete the Contract Documents and ensure compliance with the DSA Approved Plans so the Project may be closed out. Issuance of the Retention Payment is dependent on the proper completion of the Punch List. See Article 9.9.
- 1.1.34.1 *Contractor's List of Punch Items* is a list of minor repair items Contractor submits when Contractor considers the Work Substantially Complete. Submission of this List of Incomplete Punch Items is Contractor's representation that the Project is Substantially Complete. See Article 9.9.1.
- 1.1.35 *Request for Information (RFI)* is a written request prepared by Contractor requesting the Architect to provide additional information necessary to clarify or amplify an item that Contractor believes is not clearly shown or called for in the Drawings or Specifications, or to address problems that have arisen under field conditions. See Article 7.4.
- 1.1.36 *Request for Proposal (RFP)* is a written request prepared by the Architect and/or CM requesting Contractor to submit to an estimate of the effect of a proposed change on the Contract Price and, if applicable, the Contract Time. See Article 7.5.
- 1.1.37 *Safety Orders* are those issued by any city, county, state, or federal agency having jurisdiction over the Project.
- 1.1.38 *Schedule* is Contractor's view of the practical way in which the Work will be accomplished. In this Agreement, there is a requirement for a Baseline Schedule, and regular Schedule Updates, that show all Work to be completed during the Contract Time and shall include all items listed under Article 8.3.2.9.1. See Article 8 of the General Conditions.
- 1.1.39 *Schedule of Values* is a detailed breakdown of the Contract Price for each Project, building, phase of Work, or site as determined by the District. This Schedule of Values shall adequately detail the price for the Work so Progress Payment Applications can be meaningfully reviewed by the Inspector, Architect of Record, Engineer of Record, and District. See Article 9.2.
- 1.1.40 *Separate Contracts* are contracts that the District may have with other contractors, vendors, suppliers, or entities to perform Work on the Project. This may include, but is not limited to Multi-Prime Trade Contractors, furniture installers, testing agencies, clean-up contractors, or network or low voltage contractors. Contractor shall plan for certain other contractors that may also be working on the Project site and address these other contractors in Contractor's Schedule. See Article 6.
- 1.1.41 *Site* refers to the grounds of the Project as defined in the Contract Documents and such adjacent lands as may be directly affected by the performance of the Work.

- 1.1.42 *Specifications* are that portion of the Contract Documents consisting of the written requirements for material, equipment, construction systems, instructions, quality assurance standards, workmanship, and performance of related services.
- 1.1.43 *Standards, Rules, and Regulations* that are referred to are recognized printed standards and shall be considered as a part of the Specifications, within limits specified. Federal, state, and local regulations are incorporated into the Contract Documents by reference.
- 1.1.44 *Stop Work Order*, or an *Order to Comply*, is issued when either (1) the Work proceeds without DSA approval, (2) the Work proceeds without a DSA Inspector of Record, or (3) where DSA determines that the Work is not being performed in accordance with applicable rules and regulations and would compromise the structural integrity of the Project or would endanger lives. If a Stop Work Order is issued, the Work in the affected area shall cease until DSA withdraws the Stop Work Order. Pursuant to Education Code section 17307.5(b), the District shall not be held liable in any action filed against the District for any delays caused by compliance with the Stop Work Order.
- 1.1.45 *Subcontractor*, as used herein, includes those having direct or indirect contracts with Contractor, and ones who furnished labor, material, or services for a special design according to Plans, Drawings, and Specifications of this Work.
- 1.1.46 *Substantial Completion/Substantially Complete(d)* is not reached unless and until each of the following three (3) conditions have been met: (1) all contractually required items have been installed with the exception of only minor and Incomplete Punch List Items (see Article 9.9.1.1 ), (2) all Fire/Life Safety Systems have been installed and are working and signed off on the DSA Form 152 Inspection Card, and all building systems including mechanical, electrical, and plumbing are all functioning, and (3) the Project is fit for occupancy and its intended use. For the purposes of this Contract, any references to Completion Date means Substantial Completion Date.
- 1.1.47 *Substitution* is a change in product, material, equipment, or method of construction from those required by the Construction Documents proposed by Contractor. For this Project, a substitution is subject to the filing of a Construction Substitution Request Form at the time of bid and meeting the requirements of Article 3.10.
- 1.1.48 *Supplementary Conditions/Supplementary General Conditions/Special Conditions* are terms that are sometimes used interchangeably and refer to any additional requirements or changes to the General Conditions as noted.
- 1.1.49 *Surety* is the person, firm, or corporation that executes as a Bid Bond, Payment Bond, or Performance Bond guarantor on Contractor's Bid, Contractor's Performance on the Contract, and Payment of Contractor's Subcontractors, material suppliers, vendors, and labor on the Project. The Surety is bound to the same extent as Contractor is bound once a default occurs. A default includes a Termination for Substantial Failure to Perform under Article 14, but also includes any breach of Contract and is subject to the requirements and responsibilities as set forth in the Performance Bond.

1.1.50 *Work* shall include all labor, materials, services, and equipment necessary for Contractor to fulfill all of his or her obligations, pursuant to the Contract Documents. It shall include the initial obligation of any Contractor or Subcontractor who performs any portion of the Work, to visit the site of the proposed Work (a continuing obligation after the commencement of the Work), to fully acquaint and familiarize oneself with the conditions as they exist and the character of the operations to be carried out under the Contract Documents, and make such investigation as he or she may see fit so that one shall fully understand the facilities, physical conditions, and restrictions attending the Work under the Contract Documents. Each such Contractor or Subcontractor shall also thoroughly examine and become familiar with the Drawings, Specifications, and associated Contract Documents and bid documents before preparing and submitting any bid.

1.1.51 *Workers* include laborers, workers, and mechanics.

## 1.2 EXECUTION, CORRELATION, AND INTENT

### 1.2.1 Correlation and Intent

1.2.1.1 *Documents Complementary and Inclusive.* The Contract Documents are complementary and are intended to include all items required for the proper execution and completion of the Work. All Contract Documents form Contractor's Contract with the District. Any item of Work mentioned in the Specifications and not shown on the Drawings, or shown on the Drawings and not mentioned in the Specifications, shall be provided by Contractor as if shown or mentioned in both. Contractor is bound to provide the Work complete and is under a legal duty to carefully study Plans and schedule operations well ahead of time, and identify inconsistencies with the Plans and Specifications, and call such inconsistencies to the attention of the Architect or Registered Engineer through the Inspector under Section 4-343(b) of Title 24.

1.2.1.2 *Work to be Complete.* Contractor has thoroughly studied the Contract Documents and understands that the District contracted with Contractor to provide a complete Project, which means complete systems and buildings. The entire set of Contract Documents shows a complete Project, and Contractor agrees that there are multiple disciplines putting together a set of Contract Documents. Thus, if portions of a system are shown on some Drawings and not others, this does not mean Contractor is to only provide part of a system. For example, if an air conditioning unit is shown on the mechanical Drawings, the plumbing for the air conditioning is shown on another drawing, and the electrical shown on the electrical Drawings, Contractor is to provide a complete and working air conditioning system. The only time when an item is supplied incomplete is if the system is shown specifically as incomplete since others will be completing the system. Work includes, but is not limited to, materials, workmanship, and manufacture of fabrication of components for the Project.

1.2.1.3 *Coverage of the Drawings and Specifications.* The Drawings and Specifications generally describe the Work to be performed by Contractor. Generally, the Specifications describe Work that cannot be readily indicated on the Drawings and indicate types, qualities, and methods of installation of the various materials and equipment required for the Work. It is not intended to mention every item of Work in the Specifications, which can be adequately shown on the Drawings, or to show on the Drawings all items of Work described or required by the Specifications, even if they are of such nature that they could

have been shown. All materials or labor for Work, which is shown on either the Drawings or the Specifications (or is reasonably inferable therefrom as being necessary to complete the Work), shall be provided by Contractor. Contractor is responsible for the whole Project as contractually set forth as the Contract Documents. It is intended that the Work be of sound, quality construction, and Contractor shall be responsible for the inclusion of adequate amounts to cover installation of all items indicated, described, or implied in the portion of the Work to be performed by them.

1.2.1.4 *Conflicts*. In the event there is a discrepancy between the various Contract Documents, it is intended that the more stringent, higher quality, and greater quantity of Work shall apply.

1.2.1.5 *Conformance with Laws*. Each and every provision of law required by law to be inserted in this Contract shall be deemed to be inserted herein, and the Contract shall be read and enforced as though it were included herein, even if through mistake or otherwise any such provision is not inserted, or is not correctly inserted.

Before commencing any portion of the Work, Contractor shall check and review the Drawings and Specifications for such portion for conformance and compliance with all laws, ordinances, codes, rules, and regulations of all governmental authorities and public and municipal utilities affecting the construction and operation of the physical plant of the Project, all quasi-governmental and other regulations affecting the construction and operation of the physical plant of the Project, and other special requirements, if any, designated in the Contract Documents. Such checking shall include review of Title 24 of the California Code of Regulations, California Building Code, local utility, local water connection, local grading, and all other applicable agencies. In the event Contractor observes any violation of any law, ordinance, code, rule, regulation, or inconsistency with the Contract Documents, Contractor shall, within five (5) days, notify the Inspector, Architect, and District in writing of same and shall ensure that any such violation or inconsistency shall be corrected in the manner provided hereunder prior to the construction of that portion of the Project. See Title 24 Section 4-343.

Contractor shall bear all expenses of correcting Work done contrary to said laws, ordinances, rules, and regulations if Contractor performed same (1) without first consulting the Architect for further instructions regarding said Work, or (2) disregarded the Architect's instructions regarding said Work.

1.2.1.6 *Ambiguity and Inconsistency*. Before commencing any portion of the Work, Contractor shall carefully examine all Drawings and Specifications and other information given to Contractor as to materials and methods of construction and other Project requirements. Prior to commencing any portion of the Work, Contractor shall notify Architect and District in writing of any perceived or alleged error, inconsistency, conflict, ambiguity, or lack of detail or explanation in the Drawings and Specifications in the manner provided herein. If Contractor or its Subcontractors, material or equipment suppliers, or any of their officers, agents, and employees performs, permits, or causes the performance of any Work under the Contract Documents, which it knows or should have known to be in error, inconsistent, ambiguous, or not sufficiently detailed or explained, Contractor shall bear any and all costs arising therefrom including, without limitation, the cost of correction thereof without increase or adjustment to the Contract Price or the time for performance. Contractor shall

maintain an adequate inspection system and perform personal observations and review work and pre-plan the project to ensure the Work performed under the Contract conforms to Contract requirements. Contractor shall maintain records of such review and observation to ensure strict compliance with the terms of the Contract.

1.2.1.7 *Typical Parts and Sections.* Whenever typical parts or sections of the Work are completely detailed on the Drawings, and other parts or sections which are of the same construction are shown in outline only, the complete or more detailed shall apply to the Work, which is shown in outline.

1.2.1.8 *Dimensions.* Dimensions of Work shall not be determined by scale or rule. Figured dimensions shall be followed at all times. If figured dimensions are lacking on Drawings, Architect shall supply them on request. The Architect's decisions on matters relating to aesthetic effect will be final.

## 1.2.2 Addenda and Deferred Approvals

1.2.2.1 *Addenda* are the changes in Specifications, Drawings, Contract Documents, and Plans that have been authorized in writing by the District or Architect, and which alter, explain, or clarify the Contract Documents. Addenda shall govern over all other Contract Documents. Subsequent Addenda issued shall govern over prior Addenda, unless otherwise specified in the Addenda.

1.2.2.2 *Deferred Approvals.* Deferred Approvals are Submittals that are reviewed by the Architect (or Engineer of Record) and submitted to DSA for approval based on thorough detailing of manufacturer and Project specific design. See Articles 3.9.1 and 3.9.3. The Deferred Approval item cannot be fully detailed on the originally approved Drawings or Specifications because of variations in product design and manufacture. Contract Documents that require Deferred Approval items are meant to be for illustration purposes only. Approval of Plans for such a portion of the Work may be deferred until the material suppliers and Subcontractors are selected. All Deferred Approvals are noted in the Plans and Specifications. Contractor is responsible for all Deferred Approval requirements set forth in the Contract Documents. Contractor is responsible to comply with all laws, building codes, Title 24, and regulations necessary to obtain all necessary approvals, including those required from the DSA and the State Fire Marshall. Contractor shall not be granted an extension of time for failure to plan, schedule for, and obtain necessary approvals. Contractor shall schedule all Deferred Approval items in the Baseline Schedule and Schedule Updates under Article 3.9.6.

## 1.2.3 Specification Interpretation

1.2.3.1 *Titles.* The Specifications are separated into titled sections for convenience only and not to dictate or determine the trade or craft involved.

1.2.3.2 *As Shown, etc.* Where "as shown," "as indicated," "as detailed," or words of similar import are used, reference is made to the Drawings accompanying the Specifications unless otherwise stated. Where "as directed," "as required," "as permitted," "as authorized," "as accepted," "as selected," or words of similar import are used, the direction, requirement, permission, authorization, approval, acceptance, or selection by Architect is intended unless otherwise stated.



1.2.3.3 *General Conditions.* The General Conditions and Supplementary General Conditions are a part of the Contract Documents, which further defines and refines the Contract entered between Contractor and District.

1.2.3.4 *Abbreviations.* In the interest of brevity, the Specifications are written in an abbreviated form and may not include complete sentences. Omission of words or phrases such as "Contractor shall," "shall be," etc., are intentional. Nevertheless, the requirements of the Specifications are mandatory. Omitted words or phrases shall be supplied by inference in the same manner as they are when a "note" occurs on the Drawings. In the interest of brevity, the Contract Documents frequently omit modifying words such as "all" and "any" and articles such as "the" and "an," but the fact that a modifier or an article is absent from one statement and appears in another is not intended to affect the interpretation of either statement.

1.2.3.5 *Plural.* Words in the singular shall include the plural whenever applicable or the context so indicates.

1.2.3.6 *Metric.* The Specifications may indicate metric units of measurement as a supplement to U.S. customary units. When indicated thus: 1" (25 mm), the U. S. customary unit is specific, and the metric unit is nonspecific. When not shown with parentheses, the unit is specific. The metric units correspond to the "International System of Units" (SI) and generally follow ASTM E380, "Standard for Metric Practice."

1.2.3.7 *Standard Specifications.* Any reference to standard Specifications of any society, institute, association, or governmental authority is a reference to the organization's standard Specifications, which are in effect at the date of Contractor's proposal unless directed otherwise. If applicable Specifications are revised prior to completion of any part of the Work, Contractor may, if acceptable to Architect, perform such Work in accordance with the revised Specifications. The standard Specifications, except as modified in the Specifications for the Project, shall have full force and effect as though printed in the Specifications. Architect will furnish, upon request, information as to how copies of the standard Specifications referred to may be obtained.

#### 1.2.4 **Rules of Document Interpretation**

1.2.4.1 In the event of conflict within the Drawings, the following rules shall apply:

- a. General Notes, when identified as such, shall be incorporated into other portions of Drawings.
- b. Schedules, when identified as such, are complementary with other notes and other portions of Drawings including those identified as General Notes.
- c. Larger scale Drawings shall take precedence over smaller scale Drawings.
- d. At no time shall Contractor base construction on scaled Drawings.

1.2.4.2 Specifications shall govern as to materials, workmanship, and installation procedures.

1.2.4.3 If Contractor observes that Drawings and Specifications are in conflict,

Contractor shall, prior to commencing work, notify the Architect in writing for the purposes of obtaining an interpretation of the Contract Documents.

1.2.4.4 In the case of conflict or inconsistencies, the order of precedence shall be as follows:

- a. General Conditions take precedence over Drawings and Specifications.
- b. Supplemental Conditions take precedence over General Conditions.
- c. The Agreement Form shall take precedence over the Supplemental Conditions.
- d. In the case of disagreement or conflict between or within Specifications and Drawings, the more stringent, higher quality, and greater quantity of Work shall apply.
- e. Addenda shall take precedence over Drawings and Specifications.
- f. General Conditions shall take precedence over Addenda.
- g. Drawings and Specifications take precedence over the Soils Report.

### 1.3 **OWNERSHIP AND USE OF ARCHITECT'S DRAWINGS, SPECIFICATIONS, AND OTHER DOCUMENTS**

1.3.1 The Drawings, Specifications, and other Contract Documents for the Project are the property of the District and/or Architect pursuant to Contract requirements between the District and Architect. Contractor may retain one (1) Contract record set. Neither Contractor nor any Subcontractor or material or equipment supplier shall own or claim a Copyright in the Drawings, Specifications, and other documents prepared by the Architect. All copies, except Contractor's record set, shall be returned or properly accounted for upon completion of the Work. The Drawings, Specifications, and other documents prepared by the Architect, and copies thereof furnished to Contractor, are not to be used by Contractor or any Subcontractor, sub-Subcontractor, or material or equipment supplier on other projects, or for additions to this Project outside the scope of the Work. The District and/or Architect hereby grants Contractor, Subcontractors, sub-Subcontractors, and material or equipment suppliers a limited license to use applicable portions of the Drawings, Specifications, and other documents prepared for the Project in the execution of their Work under the Contract Documents. Submittal or distribution to meet official regulatory requirements or for other purposes in connection with this Project is not to be construed as publication in derogation of the District's property interest or other reserved right.

**END OF SECTION 00 72 01**

**ARTICLE 2**  
**DISTRICT**

**2.1 INFORMATION AND SERVICES REQUIRED OF THE DISTRICT**

**2.1.1 Site Survey**

2.1.1.1 The District will furnish, at its expense, a legal description of the Site and a land survey showing the boundaries of the Site. Contractor shall be responsible for all surveys regarding location of construction, grading, and site work.

**2.1.2 Soils**

2.1.2.1 When required by the scope of the Project, the District will furnish, at its expense, the services of geotechnical engineers or consultants when reasonably required and deemed necessary by the Architect, or as required by local or state codes. Such services, with written reports and appropriate written professional recommendations, may include test boring, test pits, soil bearing values, percolation tests, air and water pollution tests, and ground corrosion and resistivity tests, including necessary operations for determining subsoil, air, and water conditions.

**2.1.3 Soils Report Part of the Contract Documents: Contractor Reliance**

2.1.3.1 A soils investigation report has been obtained from test holes at the Site, and such report is incorporated into this Contract and made available for Contractor's use in preparing its bid and Work under this Contract. Where the Plans and Specifications are more specific and provide more significant structure, systems, reinforcing, thicknesses, or construction methods, the Drawings shall control over the soils report. The soils report is available at the Architect's office for review and it is Contractor's responsibility to ensure that Contractor has reviewed the soils investigation report. Any information obtained from such report, or any other information given on Drawings as to subsurface soil condition, or to elevations of existing grades, or elevations of underlying rock, is approximate only. If, during the course of Work under this Contract, Contractor encounters subsurface conditions that differ materially from those indicated in the soils report, then Contractor shall notify the District within five (5) calendar days of discovery of the condition, and changes to the Contract Price may be made in accordance with Article 7 "Changes in the Work." Contractor agrees that no claim against District will be made by Contractor for damages, and hereby waives any rights to damages in the event Contractor fails to notify District within the five (5) day period mentioned above.

**WARNING: DISTRICT DOES NOT WARRANT THE SOILS AT THE PROJECT SITE. CONTRACTOR HAS REVIEWED AND IS FAMILIAR WITH THE REQUIREMENTS OF THE SOILS INVESTIGATION REPORT. CONTRACTOR UNDERSTANDS THAT PLANS, DRAWINGS, AND SPECIFICATIONS SUPERSEDE THE SOILS REPORT IF THERE ARE CONFLICTS. FURTHER, IN ADDITION TO THE INFORMATION IN THE SOILS REPORT, CONTRACTOR HAS CONDUCTED AN INDEPENDENT INVESTIGATION OF THE PROJECT SITE AND THE SOILS CONDITIONS OF THE SITE. DISTRICT DOES NOT WARRANT THE SOILS CONDITIONS OF THE SITE AND CONTRACTOR IS FULLY RESPONSIBLE TO ASCERTAIN SITE**

**CONDITIONS FOR THE PURPOSES OF DETERMINING  
CONSTRUCTION MEANS AND METHODS PRIOR TO COMMENCING  
CONSTRUCTION.**

2.1.4 Utilities

2.1.4.1 *Location of Point of Connection.* The locations shown for the point of connection are approximate. It shall be the responsibility of Contractor to determine the exact location of all service connections.

2.1.4.2 *Regional Notification Center.* Contractor, except in an emergency, shall contact the appropriate regional notification center at least two (2) business days prior to commencing any excavation if the excavation will be conducted in an area or in a private easement that is known, or reasonably should be known, to contain subsurface installations other than the underground facilities owned or operated by the District, and obtain an inquiry identification number from that notification center (see Government Code section 4216.3). No excavation shall be commenced and carried out by Contractor unless such an inquiry identification number has been assigned to Contractor or any Subcontractor of Contractor and the District has been given the identification number by Contractor. Any damages arising from failure to make appropriate regional notification shall be at the sole risk of Contractor. Contractor shall solely be responsible for any fines, penalties, or damages for violation of this Article and Government Code section 4216.6 or 4216.7. Any delays caused by failure to make appropriate regional notification shall be at the sole risk of Contractor and shall not be considered for extension of time pursuant to Article 8.4.

2.1.4.3 *Utilities - Removal and Restoration.* The District has endeavored to determine the existence of utilities at the Site of the Work from the records of the District of known utilities in the vicinity of the Work. The positions of these utilities as derived from such records are shown in the Contract Documents. Thus, the locations of the main or trunklines located on the Drawings are approximate locations and not exact.

No excavations were made to verify the locations shown for underground utilities. Other than the main or trunkline, which the District has endeavored to locate on the Plans, service connections or laterals to these utilities may not be shown on the Plans. It shall be the responsibility of Contractor to determine the exact location of all service connections. Contractor shall make its own investigations, including exploratory excavations, to determine the locations and type of service connections, prior to commencing work that could result in damage to such utilities. Contractor shall immediately notify the District's representative as to any utility main or trunkline discovered by Contractor in a different position than provided by the Regional Notification Center. With respect to main or trunklines, Contractor is to immediately notify District if the location is substantially different than as shown in the Contract Documents.

Contractor shall coordinate its Work with all utilities, including, but not limited to electricity, water, gas, and telephone, and meet with said utilities prior to the start of any work. Contractor shall show timing of all utility coordination activities under the Scheduling requirements of Article 8.

2.1.4.4 *Other Utilities.* In case it should be necessary to remove, relocate, or temporarily maintain a utility because of interference with the Work, the work on

the utility shall be performed and paid for as follows:

2.1.4.5 When it is necessary to remove, relocate, or temporarily maintain a service connection, the cost of which is not required to be borne by the owner of the service connection, Contractor shall bear all expenses incidental to the work on the service connection. The work on the service connection shall be done in a manner satisfactory to the owner thereof; it being understood that the owner of the service connection has the option of doing such work with his own forces or permitting the work to be done by Contractor.

2.1.4.6 When it is necessary to remove, relocate, or temporarily maintain a utility that is in the position shown on the Plans, the cost of which is not required to be borne by the owner thereof, Contractor shall bear all expenses incidental to the work on the utility. The work on the utility shall be done in a manner satisfactory to the owner thereof; it being understood that the owner of the utility has the option of doing such work with his own forces or permitting the work to be done by Contractor.

2.1.4.7 When it is necessary to remove, relocate, or temporarily maintain a utility not shown on the Plans, or is in a position different from that shown on the Plans, and were it in the position shown on the Plans would not need to be removed, relocated, or temporarily maintained, and the cost of which is not required to be borne by the owner thereof, the District will make arrangements with the owner of the utility for such work to be done at no cost to Contractor, or will require Contractor to do such work in accordance with Article 7 or will make changes in the alignment and grade of the Work to obviate the necessity to remove, relocate, or temporarily maintain the utility. Changes in alignment and grade will be ordered in accordance with Article 7 herein.

2.1.4.8 No representations are made that the obligations to move or temporarily maintain any utility, and to pay the cost thereof is or is not required to be borne by the owner of such utility, and it shall be the responsibility of Contractor to investigate to find out whether said cost is required to be borne by the owner of the utility.

2.1.4.9 The right is reserved to governmental agencies and to owners of utilities to enter at any time upon any street, alley, right-of-way, or easement for the purpose of making changes in their property made necessary by the Work and for the purpose of maintaining and making repairs to their property.

## 2.1.5 Existing Utility Lines: Removal, Relocation

2.1.5.1 *Main or Trunkline Facilities.* If Contractor, while performing the Contract, discovers utility facilities not identified in the Contract Documents, Contractor shall notify the District and utility in writing prior to commencing work.

2.1.5.2 The owner of the public utility shall have the sole discretion to perform repairs or relocation work or permit Contractor to do such repairs or relocation work at a reasonable price.

2.1.5.3 Contractor shall exercise reasonable care and shall be compensated by the District for the actual verified field costs of locating, removing, relocating, protecting, or temporarily maintaining such main or trunkline utility facilities located in a substantially different location than in the Plans and Specifications,

and for equipment in use on the project necessarily idled during such work. This Work shall be performed in accordance with Article 7 of these General Conditions.

2.1.5.4 *Assessment.* Nothing in these subparagraphs shall be deemed to require the District to indicate the presence of existing service laterals or appurtenances whenever the presence of such utilities on the Site can be inferred from the presence of other visible facilities, such as buildings, or meter junction boxes on or adjacent to the Site, and could be inferred from the Main or Trunkline shown on the Drawings.

2.1.5.5 *Notification.* If Contractor, while performing Work under this Contract, discovers utility facilities not identified by the District in the Contract Documents, Contractor shall, within five (5) days, notify the District and the utility in writing. If Contractor fails to notify the District within 48 hours after discovery of any utility facilities not identified by District in the Contract Documents, Contractor waives all rights to be compensated for any extra Work or damages resulting from such discovered utilities.

#### 2.1.6 Easements

2.1.6.1 District shall secure and pay for easements for permanent structures or permanent changes in existing facilities, if any, unless otherwise specified in the Contract Documents.

### 2.2 **DISTRICT'S RIGHT TO CARRY OUT THE WORK DUE TO PARTIAL DEFAULT IN A SPECIFIC SEGREGATED AREA OF WORK (48-HOUR NOTICE TO CURE AND CORRECT)**

2.2.1 If Contractor defaults or neglects to carry out the Work in accordance with the Contract Documents, the District may provide 48-hour written notice to cure (a shorter period of time in the case of Emergency or a critical path delay as defined in Article 2.2.1) Contractor's Partial Default in a specific segregated area of work. The District's right to issue a Partial Default of Contractor's Work and take over that segregated area of Work includes, but is not limited to:

2.2.1.1 Failure to supply adequate workers on the entire Project or any part thereof,

2.2.1.2 Failure to supply a sufficient quantity of materials,

2.2.1.3 Failure to perform any provision of this Contract,

2.2.1.4 Failure to comply with safety requirements, or due to Contractor's creation of an unsafe condition,

2.2.1.5 Cases of bona fide emergency,

2.2.1.6 Failure to order materials in a timely manner,

2.2.1.7 Failure to prepare Deferred Approval items or Shop Drawings in a timely manner,

2.2.1.8 Failure to comply with Contractor's Baseline or updated Schedule, meet critical milestones that would result in a delay to the critical path, or delay the Contract Time,

- 2.2.1.9 Failure to comply with the Subletting and Subcontracting Fair Practices, Public Contract Code section 4100, et seq.,
  - 2.2.1.10 Failure to meet the requirements of the Americans with Disabilities Act,
  - 2.2.1.11 Failure to complete Punch List work,
  - 2.2.1.12 Failure to proceed on an Immediate Change Directive, or
  - 2.2.1.13 Failure to correct a Notice of Deviation.
- 2.2.2 If during the 48-hour period Contractor fails to cure and correct the deficiency noted in the 48-hour notice of Partial Default with diligence and promptness, the District may correct such deficiencies without prejudice to other remedies the District may have, including a Termination for Cause as set forth in Article 14. If there are inadequate funds remaining in the Project balance or in the Retention Escrow to address at least 150% of the costs set forth in the Article 2.2 notice, the District may copy the Surety on the written notice of Partial Default. If a notice to the Surety is provided, except in the cases of emergency or critical path delay, the Surety has the option to take over and complete the Work described in the written notice if Surety personally delivers notice to District that it intends to perform such work. In the case where written notice has been provided, the District shall allow Surety seven (7) days to perform the Work.
- 2.2.3 Service of Notice of Partial Default with Right to Cure
- 2.2.3.1 A written notice of Partial Default and right to cure under Article 2.2 ("Article 2.2 Notice" or "Notice of Partial Default") shall be served by e-mail (with a copy provided by regular mail) to the e-mail address provided on the Bid submitted and copied to the Project Superintendent.
- 2.2.4 Shortened Time for Partial Default in the Case of Emergencies.
- 2.2.4.1 In an Emergency situation, the District may correct any of the deficiencies described in Article 2.2 without prejudice to other remedies by providing service of written notice of Emergency requiring a shortened time for Partial Default specifying the time given to cure, if any.
- 2.2.5 Shortened Time for Partial Default in the Case of Critical Path Delay
- 2.2.5.1 In the case of critical path delay, the District may correct any of the deficiencies described in Article 2.2 without prejudice to other remedies providing service of written notice of critical path delay to Contractor with a specific description of the critical path delay items noting the line item or area of Work that is on the critical path and prescribe the length of shortened time to cure, if any.
- 2.2.6 Written Notice of Partial Default to be Deducted by Deductive Change Order
- 2.2.6.1 The District shall have the right to determine the reasonable value of Article 2.2 Partial Default Work, or if there is an actual value for the Work, shall use that value and issue a Deductive Change Order under Article 7.7.4.

**END OF SECTION 00 72 02**

**ARTICLE 3**  
**CONTRACTOR**

**3.1 SUPERVISION AND CONSTRUCTION PROCEDURES**

**3.1.1 Contractor**

3.1.1.1 Contractor shall continually supervise and direct the Work using Contractor's best skill and attention. Contractor shall be solely responsible for and have control over construction means, methods, techniques, sequences, and procedures, and shall coordinate all portions of the Work under the Contract, unless the Contract Documents give other specific instructions concerning these matters. Contractor shall not perform the Work without utilizing the Contract Documents or, where required, approved Submittals, Shop Drawings, or samples for any such portion of the Work. If any of the Work is performed by contractors retained directly by the District, Contractor shall be responsible for the coordination and sequencing of the work of those other contractors so as to avoid any impact on the Project Schedule pursuant to the requirements of Article 6 and Article 8. Specific duties of Contractor shall include those set out in Section 43 of Title 21 of the California Code of Regulations and Section 4-343 of Title 24 of the California Code of Regulations. These duties include, but are not limited to, the following:

3.1.1.2 *Responsibilities.* It is the duty of Contractor to complete the Work covered by his or her Contract in accordance with the approved Plans and Specifications. Contractor in no way is relieved of any responsibility by the activities of the Architect, Engineer, Inspector, or DSA in the performance of Contractor's duties.

3.1.1.3 *Performance of the Work.* Contractor shall carefully study the approved Plans and Specifications and shall plan the schedule of operations well ahead of time. If at any time it is discovered that work is being done not in accordance with the approved Plans and Specifications, Contractor shall correct the Work immediately.

**3.1.2 Contractor Responsibility to Study the Plans and Specifications**

3.1.2.1 All inconsistencies or timing or sequences appearing to be in error in the Plans and Specifications shall promptly be called to the attention of the Architect or Engineer for interpretation or correction. Local conditions that may affect the structure shall be brought to the Architect's attention at once. In no case shall the instruction of the Architect be construed to cause work to be done that is not in conformity with the approved Plans, Specifications, change orders, construction change documents, and as required by law. See Title 24, Section 4-343.

**3.1.3 All Work Under the Direction of Inspector**

3.1.3.1 Pursuant to Title 24 requirements, Contractor shall not carry on Work except with the knowledge of the Inspector (see Title 24 generally).

**3.1.4 Contractor to Establish Timing and Protocol with Inspector**



3.1.4.1 Contractor shall establish a protocol for requesting inspection with Inspector so as to not delay the Work and to provide adequate time for the Inspector to perform inspection. If such a protocol is not established ahead of time, Inspector may utilize the time criteria set by Title 24 of 48 hours in advance of submitting form DSA 156 for each new area. DSA requirements under PR 13-01 specifically gives the Special Inspector 14 days to post to the DSA website. Contractor is responsible for delays and for failure to plan.

3.1.4.2 For some projects, there may be a need to incrementally install certain assemblies. It is up to Contractor to identify areas and assemblies that may be constructed incrementally. Contractor must identify and establish incremental areas of construction and establish protocols with Inspector for DSA 152 approvals so they may be presented to DSA. See PR-13 item 1.17 for further discussion.

3.1.5 Verified Reports

3.1.5.1 Contractor shall make and submit to the office from time to time, verified reports as required in Title 24 Section 4-366. As part of the closeout of the Project (see Article 9.9), Contractor shall be required to execute a Form 6-C as required under Title 24 Sections 4-343.

3.1.5.2 Contractor shall fully comply with any and all reporting requirements of Education Code sections 17315, et seq., in the manner prescribed by Title 24, as applicable.

3.1.6 Contractor Responsibility

3.1.6.1 Contractor shall be responsible to the District for acts and omissions of Contractor's employees, Subcontractors, material and equipment suppliers, and their agents, employees, invitees, and other persons performing portions of the Work under direct or indirect contract with Contractor or any Subcontractors.

3.1.7 Obligations not Changed by Architect's Actions

3.1.7.1 Contractor shall not be relieved of obligations to perform the Work in accordance with the Contract Documents either by activities or duties of the Architect in the Architect's administration of the Contract or by tests, inspections, or approvals required or performed by persons other than Contractor.

3.1.8 Acceptance/Approval of Work

3.1.8.1 Contractor shall be responsible to determine when any completed portions of the Work already performed under this Contract or provided pursuant to Article 6 are suitable to receive subsequent Work thereon.

3.2 **SUPERVISION**

3.2.1 Full Time Supervision

3.2.1.1 Unless personally present on the Project site where the Work is being performed, Contractor shall keep on the Work at all times during its progress a competent, English-speaking construction Superintendent satisfactory to the District. The Superintendent shall be present on a full-time basis, shall be

dedicated exclusively to the Project, and shall not share superintendency duties with another project or job. The Superintendent shall not be replaced except with written consent of the District. The Superintendent shall represent Contractor in his or her absence and shall be fully authorized to receive and fulfill any instruction from the Architect, the Inspector, the District, or any other District Representative (including the Construction Manager (CM) in the cases where the District has a CM representative). All Requests for Information shall be originated by the Superintendent and responses thereto shall be given to the Superintendent. No Work shall begin on any day by any Subcontractor or other person on the Project site until the Superintendent has arrived, nor shall any Work continue after the Superintendent has departed from the Project site. The Superintendent shall have authority to bind Contractor through the Superintendent's acts. The Superintendent shall represent Contractor, and communications given to the Superintendent shall be binding on Contractor. Before commencing the Work, Contractor shall give written notice to District (and CM representative) and Architect of the name and a Statement of Qualifications of such Superintendent. Superintendent shall not be changed except with written consent of District, unless a Superintendent proves to be unsatisfactory to Contractor and ceases to be in his or her employ, in which case Contractor shall notify District and Architect in writing. Contractor shall provide a replacement Superintendent approved by the District prior to performing additional work.

3.2.2 Staff

3.2.2.1 Notwithstanding other requirements of the Contract Documents, Contractor and each Subcontractor shall: (1) furnish a competent and adequate staff as necessary for the proper administration, coordination, supervision, and superintendence of his or her portion of the Work, (2) organize the procurement of all materials and equipment so that the materials and equipment will be available at the time they are needed for the Work, and (3) keep an adequate force of skilled and fit workers on the job to complete the Work in accordance with all requirements of the Contract Documents.

3.2.3 Right to Remove

3.2.3.1 District shall have the right, but not the obligation, to require the removal from the Project of any Superintendent, staff member, agent, or employee of any Contractor, Subcontractor, and material or equipment supplier.

**3.3 LABOR AND MATERIALS**

3.3.1 Contractor to Provide

3.3.1.1 Unless otherwise provided in the Contract Documents, Contractor shall provide and pay for labor, material, equipment, tools, construction equipment and machinery, water, heat, air conditioning, utilities, transportation, and other facilities, services, and permits necessary for proper execution and completion of the Work, whether temporary or permanent and whether or not incorporated, or to be incorporated, in the Work.

3.3.2 Quality

3.3.2.1 Unless otherwise specified, all materials and equipment to be

permanently installed in the Project shall be new and of the highest quality, or as specifically stated in the Contract Documents. Contractor shall, if requested, furnish satisfactory evidence as to kind and quality of all materials and equipment within ten (10) days of a written request by the District, including furnishing the District with bona fide copies of invoices for materials or services provided on the Project. All labor shall be performed by workers skilled in their respective trades and shall be of the same or higher quality as with the standards of other school construction.

3.3.3 Replacement

3.3.3.1 Any work, materials, or equipment, which do not conform to these requirements or the standards set forth in the Contract Documents, may be disapproved by the District, in which case, they shall be removed and replaced by Contractor at no additional cost or extension of time to the District.

3.3.4 Discipline

3.3.4.1 Contractor shall enforce strict discipline and good order among Contractor's and Subcontractor's employees, and other persons carrying out the Contract. Contractor shall not permit employment of unfit persons, or persons not skilled in tasks assigned to them. As used in this subsection, "unfit" includes any person who the District concludes is improperly skilled for the task assigned to that person, who fails to comply with the requirements of this article, or who creates safety hazards that jeopardize other persons and/or property.

3.3.5 Fingerprinting (applicable at the time Project is occupied, and on all projects where workers will come in contact with pupils, such as modernization projects).

3.3.5.1 If applicable, Contractor shall comply with the applicable provisions of Education Code section 45125.1 in a method as determined by the District. Pursuant to Education Code section 45125.1, Contractor shall either conduct criminal background checks of all employees of Contractor assigned to the Project site, and shall certify that no employees who have been convicted of serious or violent felonies, as specified in Education Code section 45125.1, will have contact with pupils, utilizing the Certification Regarding Background Checks and the corresponding Attachment "A" as found in the Contract Documents, or shall be separated by a physical barrier from students.

3.3.5.2 If it is determined that Contractor must provide certification of employees, as part of such certification, Contractor must provide the District with a list of all employees providing services pursuant to this Agreement and designate which sites such employees will be assigned. In performing the services set forth in this Agreement, Contractor shall not utilize any employees who are not included on the above-referenced list.

3.3.5.3 At District's sole discretion, District may make a finding, as authorized under Education Code section 45125.1, that Contractor's employees will have only "limited contact" with pupils. Contractor's failure to comply with this law shall be considered a material breach of this Agreement upon where this Agreement may be terminated, at District's sole discretion, without any further compensation to Contractor.

3.3.5.4 In the case of a new construction Project where there are no students, if the Project Schedule provides for Beneficial Occupancy or portions of the Project, or if the Project should be delayed, then Contractor, at no additional costs, shall meet the requirements of either fingerprinting or providing a physical barrier as required by the District.

3.3.6 Noise, Drugs, Tobacco, and Alcohol

3.3.6.1 Contractor shall take all steps necessary to ensure that employees of Contractor, or any Subcontractors' employees, do not use, consume, or work under the influence of any alcohol, tobacco, or illegal drugs while on the Project. Contractor shall further prevent any of its employees or its Subcontractor's employees from playing any recorded music devices or radios or wearing any radio headphone devices for entertainment while working on the Project. Likewise, Contractor shall prevent its employees or Subcontractor's employees from bringing any animal onto the Project. Contractors shall not violate any written school policies.

3.3.7 Delivery of Material

3.3.7.1 Contractor shall place orders for materials or equipment so that the Work may be completed in accordance with the Construction schedule for the Work as set forth in Article 8 of this Agreement. Contractor shall, upon demand from the Architect, furnish to the Architect documentary evidence including, but not limited to, purchase orders, invoices, bills of materials, work orders, and bills of lading, showing that orders have been placed. Contractor shall have a system to receive materials and to ensure that the proper materials are being delivered, including in the case of critical materials to the Project, checking the delivery against Shop Drawings and ensuring that the materials meet the requirements of not only the Plans and Specifications, but also the approved Shop Drawings and Submittals and in conformance with Contractor's plan for delivery of materials (including but not limited to Contractor's representations in the Schedules for the Project and Contractor's equipment and materials schedule under Article 3.7.2.2). Contractor shall be responsible for all costs of accepting non-conforming materials delivered to the Project given Contractor's responsibilities and system for acceptance of deliveries. Contractor shall notify Inspector and District Representative (including CM) as early as possible, in writing, of the delivery of materials for the Project. The deliveries shall include documentation identifying the shipment sufficiently so that the Inspector, Architect, or District Representative (including CM) may review the materials that are received. Under no circumstances shall materials be delivered to the Project site that are meant for another Project.

3.3.8 Liens and Other Security Interests of Subcontractors and Material Suppliers

3.3.8.1 No material, supplies, or equipment for the Work shall be purchased subject to any chattel mortgage or under a conditional sale or other agreement by which an interest therein or in any part thereof is retained by seller or supplier. Contractor warrants good title to all material, supplies, and equipment installed or incorporated in Work and agrees upon completion of all Work to deliver premises, together with all improvements and appurtenances constructed or placed thereon by it, to District free from any claims, security interests, liens, or charges. Contractor further agrees that neither Contractor nor any person, firm, or corporation furnishing any materials or labor for any Work covered by this

Contract, shall have any right to place a lien upon the premises or any improvement or appurtenance thereof, except that Contractor may install metering devices or other equipment of a utility company or political subdivision, title to which is commonly retained by the utility company or political subdivision. In event of installation of any such metering device or equipment, Contractor shall advise District as to its owner within five (5) days of such installation, in writing, prior to making the installation.

3.3.8.2 Contractor agrees to indemnify, defend, and hold the District harmless from any liens, stop notices, or assertion of security interests, including judgments and levies. If after written notice Contractor fails to address the lien, stop notice, or other security interest, the District may proceed to address the lien, stop notice, or claim and seek reimbursement from Contractor.

3.3.9 Title to Materials

3.3.9.1 The title to new materials or equipment for the Work of this Contract shall remain with Contractor until incorporated in the Work of this Contract until final acceptance of the Project. No part of said materials shall be removed from its place of storage, and Contractor shall keep an accurate inventory of all said materials and equipment in a manner satisfactory to the District or its authorized representative. Responsibility for materials remains with Contractor and Contractor shall replace materials in case of loss. District similarly may pay for materials stored off site, but Contractor shall remain responsible for the materials that are stored off site.

3.3.10 Assemblies

3.3.10.1 For all materials and equipment specified or indicated in the Drawings, Contractor shall provide all labor, materials, equipment, and services necessary (including engineering as specifically required with Shop Drawings or Deferred Approvals) for complete assemblies and complete working systems. Incidental items not indicated on the Drawings, nor mentioned in the Specifications, that can legitimately and reasonably be inferred to belong to the Work described, or be necessary in good practice to provide a complete assembly or system, shall be furnished as though itemized in the Contract Documents in every detail. In all instances, material and equipment shall be installed in strict accordance with each manufacturer's most recent published recommendations and Specifications.

3.3.11 Noise Control

3.3.11.1 Contractor shall be responsible for the installation of noise reducing devices on construction equipment. Contractor shall comply with the requirements of the city and county having jurisdiction with regard to noise ordinances governing construction sites and activities. Construction equipment noise is subject to the control of the Environmental Protection Agency's Noise Control Program (Part 204 of Title 40, Code of Federal Regulations). If school is in session at any point during the progress of the Project, and, in the District's reasonable discretion, the noise from such Work disrupts or disturbs the students, faculty, or the normal operation of the school, at the District's request, Contractor shall schedule the performance of all such Work around normal school hours, or make other arrangements so that the Work does not cause such disruption or disturbance. There are specific periods of testing at

operational schools and it is critical that Contractor control noise during periods of testing. In no event shall Contractor have a right to receive additional compensation or an extension to the Contract time as a result of any such rescheduling or the making of such arrangements. These controls shall be implemented during site preparation and construction. All noise related issues, including school operations, and noise during testing should be detailed in the Schedule provided pursuant to Article 8.

### 3.4 **WARRANTY**

3.4.1 Contractor warrants to the District and Architect that material and equipment furnished under the Contract will be of the highest quality and new, unless otherwise required or permitted by the Contract Documents, that the Work will be free from defects not inherent in the quality required or permitted, and that the Work will conform with the requirements of the Contract Documents. Work not conforming to these requirements, including substitutions not properly approved and authorized, may be considered defective. Contractor's warranty to District includes, but is not limited to, the following representations:

3.4.1.1 In addition to any other warranties provided elsewhere, Contractor shall, and hereby does, warrant all Work after the date of Notice of Completion of Work by District and shall repair or replace any or all such Work, together with any other Work, which may be displaced in so doing that may prove defective in workmanship or materials within a one (1) year period from date of Final Completion, which shall be no later than the final date of Punch List as noted at Article 9.11, without expense whatsoever to District, ordinary wear and tear, unusual abuse, or neglect excepted. District will give notice of observed defects with reasonable promptness. Contractor shall notify District upon completion of repairs.

3.4.1.2 In the event of failure of Contractor to comply with above mentioned conditions within one (1) week of being notified in writing, District is hereby authorized to proceed to have defects repaired and made good at expense of Contractor who hereby agrees to pay costs and charges therefore immediately on demand.

3.4.1.3 If, in the opinion of the District, defective Work creates a dangerous condition or requires immediate correction or attention to prevent further loss to the District, the District will attempt to give the notice required by this Article. If Contractor cannot be contacted or does not comply with the District's requirements for correction within a reasonable time as determined by the District, the District may, notwithstanding the provisions of this article, proceed to make such correction or attention, which shall be charged against Contractor. Such action by the District will not relieve Contractor of the guarantee provided in this Article or elsewhere in this Contract.

3.4.2 This Article does not in any way limit the guarantee on any items for which a longer warranty is specified or on any items for which a manufacturer gives a guarantee for a longer period. Contractor shall furnish District all appropriate guarantee or warranty certificates upon completion of the project.

### 3.5 **TAXES**

3.5.1 Contractor will pay all applicable federal, state, and local taxes on all materials,

labor, or services furnished by it, and all taxes arising out of its operations under the Contract Documents. District is exempt from Federal Excise Tax, and a Certificate of Exemption shall be provided upon request.

### 3.6 PERMITS, FEES, AND NOTICES

#### 3.6.1 Payment

3.6.1.1 Contractor shall secure and pay for all permits and governmental fees, licenses, and inspections necessary for proper execution and completion of the Work that are necessary after execution of the Contract and are legally required by any authority having jurisdiction over the Project, except those required by the Division of the State Architect (DSA). District shall be responsible for all testing and inspections as required by the DSA on site or within the distance limitations set forth in Article 13.5, unless a different mileage range is specified in the Supplemental Conditions.

3.6.1.2 *DSA Fees.* DSA policy is to charge CCD review fees for processing and approval of changes in the Plans and Specifications through the CCD process. Contractor is specifically directed to the current DSA IR A-30 that provides fee structure and charges that will be incurred for proceeding with respect to the CCD process, a process that must be followed for each change in the Plans and Specifications.

#### 3.6.2 Compliance

3.6.2.1 Contractor shall comply with and give notices required by any law, ordinance, rule, regulation, and lawful order of public authorities bearing on performance of the Work. Specifically, the DSA provides state oversight of the Project and enforcement of Title 24 rules and regulations. Contractor is directed to the DSA website. There will be local governmental oversight from city, county, or both. Finally, Regional Water Quality Control Board, State Fire Marshall, local fire marshal, Department of Industrial Relations, Department of Labor Standards Enforcement, and Air Quality Management District (local and state) are some of the agencies that provide oversight and may require specific permits, fees, or provide oversight over the Project. Contractor represents understanding and specialized knowledge of the rules governing school districts, and Contractor shall maintain compliance over the applicable rules and will file all documents required in order to ensure compliance with state, local, and other rules that apply to the Project.

#### 3.6.3 Responsibility

3.6.3.1 Contractor shall perform all Work in conformance with every law, statute, ordinance, building code, rule, or regulation. Contractor shall assume full responsibility for such Work and shall bear the attributable cost of correction or project delay.

3.6.3.2 Pursuant to Title 24 Section 4-343(b): "Contractor shall carefully study the approved Plans and Specifications and shall plan a schedule of operations well ahead of time.... All inconsistencies or items which appear to be in error in the Plans and Specifications shall be promptly called to the attention of the architect or registered engineer, through the inspector, for interpretation or correction."

3.6.3.3 To help Contractor plan operations, Contractor is directed to study the current version of the DSA 152 Inspection Card Manual identifying the exact steps the Inspector is to follow in the review and sign off process for DSA 152. The DSA 152 manual provides specific detail as to the order of operations, review items, and compliance items beyond the Specifications and Plans that are reviewed for DSA compliance. The most current version of this manual is located on DSA's website.

3.6.3.4 Contractor is also specifically directed to the time periods for posting of Special Inspection Reports and Inspector Notifications under DSA PR 13-01 since the timing of Inspection is not a Governmental Entity related delay.

### 3.7 SUBMITTALS REQUIRED AT THE COMMENCEMENT OF THE PROJECT

3.7.1 Within ten (10) calendar days after Notice to Proceed, Contractor shall submit the following:

3.7.1.1 Detailed Schedule of Values (see Article 9.2),

3.7.1.2 Submittal Listing and Schedule for Submittals, and

3.7.1.3 Critical Path Baseline Schedule (see Article 8).

3.7.2 Within 35 calendar days after Notice to Proceed, Contractor shall submit the following:

3.7.2.1 *All Submittals for the Project*, except those specifically agreed upon by District and Architect, in writing, shall be specifically incorporated into the Submittal section of the Schedule so as to not delay the Work. The agreement to allow a later Submittal does not mean that Article 3.3.7 is waived. Contractor shall order materials and ensure prices are honored and secured for the Project.

a. Structural Steel may be included as a Submittal later than 35 days if Structural Steel is a significant portion of the Work, at least one or some of the Project is a structural steel structural system, or as specifically agreed upon by the Architect or District.

b. It is specifically agreed that submissions of structural steel Submittals shall not be piecemeal (unless some portion is requested separately by the District or Architect), shall provide complete designs, shall be stamped by the structural steel Subcontractor, Contractor, and structural steel Subcontractor's structural Engineer at time of submission and as further addressed in Article 3.9.

c. In no case shall the submission of structural steel Drawings delay the critical path for the schedule. If a Milestone is provided for submission of complete structural steel Shop Drawings, then the date shall be no later than as set forth in the Milestone

3.7.2.2 *Exceptions to Submittal Within 35 Days by Written Agreement*. A written request detailing the specific reasons for a submission later than 35 days due to complexity of design or non-critical path status of the Submittal shall be submitted at the time the Baseline Schedule is submitted. The Baseline Schedule shall not include a delayed Submittal until written agreement is provided. In addition to the request for providing a Submittal after the 35-day period, a copy of the Contract with the Subcontractor who shall be performing the Submittal, a written statement from the Subcontractor verifying that work



has commenced on the Submittal and providing Subcontractor's own schedule of Milestones and completion dates, and a corresponding Submittal designation in the Schedule as required under Article 8. Approval of a delayed Submittal shall not result in any increase in the Contract Price or result in an extension of time for the completion of the Project.

**3.7.2.3 Piecemeal Submissions of Submittals.** Piecemeal Submittals mean providing portions of Shop Drawings or Submittals as they are being completed. The submission of piecemeal Submittals results in the appearance of a submission when there is inadequate information for the Architect or Engineer to adequately review a submission. Piecemeal differs from submission of complete buildings or phases of buildings or complete assemblies. The Architect may agree to allow submission of single buildings or areas as long as the Submittals are complete.

### **3.8 DOCUMENTS, SAMPLES, AND COMPUTER AT THE SITE**

- 3.8.1 Contractor shall maintain at the Site for the District one (1) current copy of the California Building Code, Titles 19 and 24 of the California Code of Regulations, any other document required by DSA, and one record copy of the Drawings, Specifications, Addenda, Change Orders, and other Modifications, in good order and marked currently to record changes and selections made during construction. In addition, Contractor shall maintain at the site approved Shop Drawings, Product Data, Samples, and similar required Submittals. These documents shall be available to the Architect and shall be delivered to the Architect for delivery to the District upon completion of the Work.
- 3.8.2 Contractor shall have an operational computer with internet access so Contractor can review and post documents as required for the Project, including but not limited to the filing and posting of DSA required documents for the Project.
- 3.8.3 Contractor shall be prepared to review documents posted to the DSA Project website.

### **3.9 SUBMITTALS INCLUDING SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES**

#### **3.9.1 Definitions**

**3.9.1.1 Deferred Approvals.** Approval of certain aspects of the construction may be deferred until the construction Contract has been awarded. To facilitate the design process, DSA grants Deferred Approval to the design and detailing of certain elements of the Project at the request of the Architect or Engineer of Record. Design elements that may be deferred may include, but are not limited to access floors, bleachers, elevator guide rails and related elevator systems, exterior wall systems - precast concrete, glass fiber reinforced concrete, etc., skylights, window wall systems, storefronts, stage rigging, and other systems as noted in the Contract Documents (also see Articles 1.2.2 and 3.9.3).

**3.9.1.2 Shop Drawings.** The term "Shop Drawings" as used herein means Drawings, diagrams, equipment or product schedules, and other data, which are prepared by Contractor, Subcontractors, manufacturers, suppliers, or distributors illustrating some portion of the Work, and includes illustrations, fabrication, erection, layout and setting Drawings, manufacturer's standard

Drawings, schedules, descriptive literature, instructions, catalogs and brochures, performance and test data including charts, wiring and control diagrams, and all other Drawings and descriptive data pertaining to materials, equipment, piping, duct and conduit systems, and methods of construction as may be required to show that the materials, equipment, or systems and their position conform to the requirements of the Contract Documents.

3.9.1.3 *Manufactured* applies to standard units usually mass-produced, and “fabricated” means items specifically assembled or made out of selected materials to meet individual design requirements. Shop Drawings shall establish the actual detail of all manufactured or fabricated items, indicate proper relation to adjoining work, amplify design details of mechanical and electrical systems and equipment in proper relation to physical spaces in the structure, and incorporate minor changes of design or construction to suit actual conditions.

3.9.1.4 *Submittals* is a term used interchangeably and sometimes refers to Shop Drawings, Product Data, and samples since all Subcontractor submissions are tracked in a Submittal Log and may include any of the noted items. Generally, however, a Submittal is a manufacturer’s product information and Product Data including description, characteristics, size, physical characteristics, and requirements to prepare the jobsite for receiving of the particular manufactured item.

3.9.1.5 *Samples*. The term “samples” as used herein are physical examples furnished by Contractor to illustrate materials, equipment, or quality and includes natural materials, fabricated items, equipment, devices, appliances, or parts thereof as called for in the Specifications, and any other samples as may be required by the Architect to determine whether the kind, quality, construction, finish, color, and other characteristics of the materials, etc., proposed by Contractor conform to the required characteristics of the various parts of the Work. All Work shall be in accordance with the approved samples.

### 3.9.2 Shop Drawings.

3.9.2.1 *When Shop Drawings Are Required*. Shop Drawings are required for prefabricated components and for installation and coordination of these prefabricated components into the Project. In addition, Shop Drawings are prepared to address the actual size and installation of components from various Subcontractors and provides an opportunity for Contractor to coordinate and address conflicts between the subcontracting trades. In some cases, each Subcontractor or trade will provide Shop Drawings in a BIM format or other format as agreed by District.

3.9.2.2 *Purpose for Shop Drawings*. Shop Drawings are Contractor’s manufacturer, Subcontractor, supplier, vendor, or Contractor’s detailed drawings showing particularized method for assembly, specifics to a manufacturer, manufacturer component installation requirements, specifics of a manufactured item, alterations to a manufactured item, a custom created item, or drawn version of more detailed information expanding on the Architect’s design shown in the Contract Documents. The Shop Drawings address the appearance, performance, size, weight, characteristics, and prescriptive descriptions associated with Contractor or Contractor’s Subcontractor’s plan for installation or assembly based on the design in the Specifications and Contract Documents. The Shop Drawing often is more detailed than the information

shown in the Contract Documents to give the Architect and Engineer the opportunity to review the fabricator's version of the product (along with particulars specific to that particular product), prior to fabrication. References to the Contract Documents, Construction Documents, Drawings, Plans, and Specifications assist the Architect and Engineer in their review of the Shop Drawings. Attachment of manufacturer's material Specifications, "catalog cut sheets," and other manufacturer's information may be provided to accompany Shop Drawings. Because Shop Drawings facilitate the Architect's and Engineer's approval of the system, they should be as clear and complete as possible so they may be reviewed by Architect or Engineer for the Project.

**3.9.2.3 Shop Drawing Requirements.** Contractor shall obtain and submit with Shop Drawings all seismic and other calculations and all Product Data from equipment manufacturers. "Product Data" as used herein are illustrations, standard schedules, performance charts, instructions, brochures, diagrams, and other information furnished by Contractor to illustrate a material, product, or system for some portion of the Work.

**3.9.2.4 Not a Reproduction of Architectural or Engineering Drawings.** The Shop Drawings are not a reproduction of the architectural or engineering Drawings. Instead, they must show more detail than the Construction Documents, and detail the fabrication and/or installation of the items to the manufacturer's production crew or Contractor's installation crews.

**3.9.2.5 Shop Drawings Engineering Requirements:** Some Shop Drawings require an engineer stamp to be affixed on the Drawings and calculations. In such cases, a current and valid engineering stamp shall be affixed by a California registered engineer. No out of state engineers shall stamp Shop Drawings (see DSA IR A-18). In most cases, an engineer means California registered mechanical, structural, electrical, or plumbing engineer. California Registered Civil Engineers will not be accepted for structural details unless specifically approved by DSA.

**3.9.2.6 DSA Approvals Required Prior to Work.** No work on a Shop Drawing that requires DSA approval may proceed until DSA approval is received. Contractor has provided DSA approval time and allowed adequate time for corrections in Contractor's Schedule as required pursuant to Article 8.

**3.9.2.7 Shop Drawing Identification.** All Shop Drawings must be properly identified with the name of the Project, dated, and accompanied by a letter of transmittal referring to the name of the Project and to the Specification Section number for identification of each item clearly stating in narrative form, as well as "clouding" all qualifications, departures, or deviations from the Contract Documents. Shop Drawings, for each section of the Work shall be numbered consecutively and the numbering system shall be retained throughout all revisions. All Subcontractor submissions shall be made through Contractor. Each drawing shall have a clear space for the stamps of Architect and Contractor.

### 3.9.3 Deferred Approvals

**3.9.3.1** Deferred approvals shall be submitted and processed to ensure all DSA and other governmental approvals are secured so as to not delay the Project. There may be additional requirements for Deferred Approvals at Division 01 of

the Specifications. All Deferred Approvals shall be prepared by Contractor or Contractor's agent early enough so as to not delay the Project. Contractor is aware that Title 24 California Code of Regulations Section 4-317 have specific requirements for Deferred Approval as to governing agencies and as to the Architect and Engineer for the Project. As a result, any delay associated with the time for approval by applicable agencies or by the Architect or Architect's consultants shall be Contractor's. Contractor is required to comply with inclusion of Deferred Approvals in the Schedule as required under Article 3.9.6.

3.9.3.2 *DSA Approvals Required Prior to Work.* No work on a Deferred Approval item may proceed on the components until DSA approval is received. Contractor has provided DSA approval time and allowed adequate time for any DSA revisions in Contractor's Schedule as required pursuant to Article 8.

#### 3.9.4 Submittals and Samples

3.9.4.1 *Information Required with Submittals.* Include manufacturer, trade name, model or type number, and quantities. Information provided must be of sufficient detail to allow Architect and Engineer to compare the submitted item with the specified products, and acceptable products listed, in the Specifications and Addenda.

3.9.4.2 *Description of Use and Performance Characteristics.* Information should be furnished describing the normal use and expected performance of the product. The Architect and Contractor review this information to confirm that the product is appropriate for the intended use.

3.9.4.3 *Size and Physical Characteristics.* The size and physical characteristics, such as adjustment capabilities, are reviewed by both Contractor and Architect. Contractor has the most available information for comparing adjoining materials and equipment. Contractor also needs to know the size and weight of the equipment for lifting and handling considerations.

3.9.4.4 *Finish Characteristics.* The Architect reviews the available finishes and selects the appropriate finish, if the finish was not previously specified in the documents. Contractor should confirm that finish requirements in the Specifications are being met by the product.

3.9.4.5 *Contractor Responsible for Jobsite Dimensions.* Some material is custom fabricated to job conditions, requiring dimensions from the jobsite. These jobsite dimensions are provided by Contractor as part of Contractor's responsibilities for the Project and shall be provided prior to release of the product for manufacture. Contractor shall not rely on Architect or Engineers to provide jobsite dimensions.

3.9.4.6 *Full Range of Samples Required (When Specific Items Not Specified).* Except in cases where the exact color and type of item is specified since the District is utilizing items standardized or pre-selected by District, the full range of color, graining, texture, or other characteristics are anticipated for review in finished products, a sufficient number of samples of the specified materials shall be furnished by Contractor to indicate the full range of characteristics that will be present in the finished products. Products delivered or erected without Submittal and approval without providing a full range of samples shall be subject to rejection. Except for range samples, and unless otherwise called for in the

various sections of the Specifications or Specification Division 01, samples shall be submitted in duplicate.

3.9.4.7 *Labeling of Samples.* All samples shall be marked, tagged, or otherwise properly identified with the name of the submitting party, the name of the Project, the purpose for which the samples are submitted, and the date.

3.9.4.8 *Transmittal Letter.* All samples shall be accompanied by a letter of transmittal containing similar information, together with the Specification Section number.

3.9.4.9 *Labels and Instructions.* All samples of materials shall be supplied with the manufacturer's descriptive labels and application instructions. Each tag or sticker shall have clear space for the review stamps of Contractor and Architect.

3.9.4.10 *Architect's Review.* The Architect will review and, if appropriate, approve submissions and will return them to Contractor with the Architect's stamp and signature applied thereto, indicating the timing for review and appropriate action in compliance with the Architect's (or District's) standard procedures. In the cases where a CM is hired by the District, CM may be the party that receives, performance logs, and initially processes the Samples. CM may, in some cases, reject samples that are not in conformance with Contract requirements.

### 3.9.5 Submittal Submission Procedure

3.9.5.1 *Transmittal Letter and Other Requirements.* All Submittals must be properly identified with the name of the Project and dated, and each lot submitted must be accompanied by a letter of transmittal referring to the name of the Project and to the Specification Section number for identification of each item clearly stating in narrative form, as well as "clouding" on the submissions, all qualifications, departures, or deviations from the Contract Documents. Shop Drawings, for each section of the Work shall be numbered consecutively and the numbering system shall be retained throughout all revisions. All Subcontractor submissions shall be made through Contractor. Each drawing shall have a clear space for the stamps of Architect and Contractor. Refer to Division 01. In the case where a CM is hired on the Project, the CM may be designated to receive the Submittals for the Project, log the Submittals, and in some cases reject Submittals that do not conform to Contract requirements. See Submittal Procedures for further information.

3.9.5.2 *Copies Required.* Each Submittal shall include one (1) legible, reproducible (if electronic is available, electronic copies shall also be provided) and five (5) legible prints of each drawing or schedule, table, cut sheet, etc., including fabrication, erection, layout and setting drawings, and such other drawings as required under the various sections of the Specifications, until final acceptance thereof is obtained. Subcontractor shall submit copies, in an amount as requested by Contractor, of (1) manufacturers' descriptive data for materials, equipment, and fixtures, including catalog sheets showing dimensions, performance, characteristics, and capacities, (2) wiring diagrams and controls, (3) schedules, (4) all seismic calculations and other calculations, and (5) other pertinent information as required by the District or Architect. See also Division 01.

3.9.5.3 *Corrections.* Contractor shall make all corrections required by Architect, District, or CM and shall resubmit, as required by Architect or CM, corrected copies of Shop Drawings or new samples until approved. Contractor shall direct specific attention in writing or on resubmitted Shop Drawings to revisions other than the corrections required by the Architect on previous submissions. Professional services required for more than one (1) re-review of required Submittals of Shop Drawings, Product Data, or samples are subject to charge to Contractor, pursuant to Article 4.5.

3.9.5.4 *Approval Prior to Commencement of Work.* No portion of the Work requiring a Shop Drawing, sample submission, or other Submittal shall be commenced until the submission has been reviewed by Contractor and Architect (and CM, if applicable) and approved by Architect (and CM where applicable) unless specifically directed in writing by the Architect. All such portions of the Work shall be in accordance with approved Shop Drawings and samples.

3.9.5.5 *District's Property.* All Submittals, Shop Drawings, computer disks or flash drives, BIM or Revit modeling information, clash checks, schedules, annotated Specifications, samples, and other Submittals shall become the District's property upon receipt by the District or Architect.

### 3.9.6 Schedule Requirements for Submittals

3.9.6.1 Contractor shall obtain and shall submit all required Submittals (i.e. Shop Drawings, Deferred Approvals, Samples, etc.), in accordance with Contractor's "Schedule for Submission of Shop Drawings and Samples" as required in the scheduling portion of the General Conditions at Article 8 and the Specifications, as long as the Specifications do not conflict with General Conditions. In the case of conflict, the conflicting provision shall be controlled by the General Conditions and the remaining Specification Sections shall be interpreted as if the General Conditions language is inserted with such promptness as to cause no delay in its own Work or in that of any other contractor or subcontractor, but in no event later than 35 days after the Notice to Proceed is issued except in the specific cases noted as an exception under Article 3.7.2.1. No extensions of time will be granted to Contractor or any Subcontractor because of its failure to have Shop Drawings and samples submitted in accordance with Division 01 and the Schedule. Each Subcontractor shall submit all Shop Drawings, samples, and manufacturer's descriptive data for the review of the District, Contractor, and the Architect through Contractor.

3.9.6.2 *Consideration of Schedule.* Contractor has considered lead times, DSA or other governmental agency review times, Architect or Engineer review times, manufacturing seasons, and specific long lead procurement concerns for all submittals for the Project.

### 3.9.7 General Submittal Requirements

3.9.7.1 *Contractor Submittal Representations and Coordination.* By submitting Shop Drawings, Product Data, samples, etc., Contractor represents that it has determined and verified all materials, field measurements, catalog numbers, related field construction criteria, and other relevant data in connection with each such submission, and that it has checked, verified, and coordinated the information contained within such Submittals with the requirements of the Work

and of the Contract Documents, including the construction schedule.

**3.9.7.2 Contractor Coordination.** Contractor shall stamp, sign, and date each Submittal indicating its representation that the Submittal meets all of the requirements of the Contract Documents and evidence of Contractor's review through execution of the following stamp to be placed on each Shop Drawings:

"[Contractor] has reviewed and approved the field dimensions and the construction criteria and has also made written notation regarding any information in the Shop Drawings and Submittals that does not conform to the Contract Documents. This Shop Drawing or Submittal has been coordinated with all other Shop Drawings and Submittals received to date by me as Contractor and this duty of coordination has not been delegated to Subcontractors, material suppliers, the Architect, or the Engineers on this Project.

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Signature of Contractor and Date"

**3.9.7.3 No Deviation from Contract Documents.** The submission of the Shop Drawings, Product Data, samples, etc., shall not deviate from the requirements of the Contract Documents, including detailing and design intent, which is specifically outlined in Contract Documents, except as specifically authorized by the Architect or through an accepted substitution pursuant to Article 3.10. All deviations from the Contract Documents shall be narratively described in a transmittal accompanying the Shop Drawings. However, Shop Drawings shall not be used as a means of requesting a substitution, the procedure for which is defined in Article 3.10, "Substitutions."

**3.9.7.4 Contractor Responsibility for Shop Drawings Conformance to Contract Documents.** Review by District and Architect shall not relieve Contractor or any Subcontractor from its responsibility in preparing and submitting proper Shop Drawings in accordance with the Contract Documents.

**3.9.7.5 Incomplete Submittals.** Any submission, which in Architect's opinion is incomplete, contains errors, or has been checked superficially, will be returned not reviewed by the Architect for resubmission by Contractor. Refer to Submittal Procedures of the Specifications for additional information. Contractor shall be responsible for any related delays and shall not be the basis for any Claim.

**3.9.7.6 Shop Drawings and Submittals Shall Not Be Used as a Method to Make a Substitution.** Shop Drawings and Submittals shall not be used as a means of requesting a substitution or to make changes in the Contract Documents. If changes are made to the Contract Documents through the Shop Drawings, the Architect shall have the right to reject the Submittal. If the Architect does not note the deviation from the approved Plans and Specifications, Contractor is still responsible for the change and the Architect or the District may require the Shop Drawings be revised to properly reflect the approved Contract Documents. The Architect or District may also require that Contractor bear all costs under Article 4.5 and consequential damages associated with a CCD to revise Plans and Specifications to accommodate the deviation from approved Plans and Specifications.

**3.9.7.7 Extent of Review.** In reviewing Shop Drawings, the Architect will not

verify dimensions and field conditions. The Architect will review and approve Shop Drawings, Product Data, samples, etc., for aesthetics and for conformance with the design concept of the Work and the information in the Contract Documents. The Architect's review shall neither be construed as a complete check that relieves Contractor, Subcontractor, manufacturer, fabricator, or supplier from responsibility for any deficiency that may exist, or from any departures or deviations from the requirements of the Contract Documents unless Contractor has, in writing, called the Architect's attention to the deviations at the time of submission. The Architect's review shall not relieve Contractor or Subcontractors from responsibility for errors of any sort in Shop Drawings or schedules, for proper fitting of the Work, coordination of the differing Subcontractor trades and Shop Drawings and Work that is not indicated on the Shop Drawings at the time of submission of Shop Drawings. Contractor and Subcontractors shall be solely responsible for any quantities that may be shown on the Submittals or Contract Documents.

### 3.10 SUBSTITUTIONS

#### 3.10.1 Definition

3.10.1.1 A Substitution is a change in product, material, equipment, or method of construction from those required by the Construction Documents proposed by Contractor. For this Project, a Substitution is subject to the filing of a Construction Substitution Request Form at the time of bid and meeting the requirements of this Article.

#### 3.10.2 One Product Specified

3.10.2.1 Unless the Specifications state that no substitution is permitted, whenever the Contract Documents indicate any specific article, device, equipment, product, material, fixture, patented process, form, method, or type of construction, or any specific name, make, trade name, or catalog number, with or without the words "or equal," such specification shall be deemed to be used for the purpose of facilitating description of the material, process, or article desired and shall be deemed to be followed by the words "or equal." Subject to the requirements of properly submitting a Substitution Request for as addressed in Article 3.10.4, Contractor may, unless otherwise stated, offer any material, process, article, etc., which shall be materially equal or better in every respect to that so indicated or specified (Specified Item) and will completely accomplish the purpose of the Contract Documents.

#### 3.10.3 Products Specified That Are Commercially Unavailable

3.10.3.1 If Contractor fails to make a request for substitutions for products prior to the submission of its bid, and such products subsequently become commercially unavailable, Contractor may request a substitution for such commercially unavailable item. The decision to grant this request is solely at the District's discretion. The written approval of the District, consistent with the procedure for Change Orders, shall be required for the use of a proposed substitute material. The District may condition its approval of the substitution upon the delivery to District of an extended warranty or other assurances of adequate performance of the substitution as well as an equitable deduction in the Contract Price should the substituted item cost less than the Specified Item. All risks of delay due the approval of a requested substitution by the DSA, or



any other governmental agency having jurisdiction, shall be on the requesting party. All additional costs, DSA review costs, all procurement and construction delays, and all costs for review by the Architect or its consultants shall be the responsibility of Contractor and will be deducted from Contractor's pay request.

#### 3.10.4 Substitution Request Form

3.10.4.1 Requests for substitutions of products, materials, or processes in place of a Specified Item must be in writing on the District's Substitution Request Form (Request Form) at the time of submitting bids to the District, except as provided for in Article 3.10.3.

3.10.4.2 The Request Form must be accompanied by evidence as to whether the proposed substitution:

- a. Is equal in quality/service/ability to the Specified Item,
- b. Will entail no changes in detail, construction, and scheduling of related work,
- c. Will be acceptable in consideration of the required design and artistic effect,
- d. Will provide no cost disadvantage to the District,
- e. Will require no excessive or more expensive maintenance, including adequacy and availability of replacement parts, and
- f. Will required no change of the construction schedule.

3.10.4.3 In completing the Request Form, the bidder must state, with respect to each requested substitution, whether the bidder will agree to provide the Specified Item in the event that the District denies the bidder's request for such requested substitution. In the event that the bidder has agreed in the Request Form to provide the Specified Item and the District denies the bidder's requested substitution for a Specified Item, the bidder shall provide the Specified Item without any additional cost or charge to the District.

3.10.4.4 After bids are opened, the apparent lowest bidder shall provide, within five (5) days of opening such bids, any and all Drawings, Specifications, samples, performance data, calculations, and other information, as may be required to assist the Architect, CM, and the District in determining whether the proposed substitution is acceptable. The burden of establishing these facts shall be upon the bidder.

3.10.4.5 After the District's receipt of such evidence by the bidder, the District will make its final decision as to whether the bidder's request for substitution for any Specified Items will be granted. The decision as to whether a proposed request for substitution is equal to a Specified Item shall be at the sole discretion of the District. Any request for substitution that is granted by the District shall be documented and processed through a Change Order. Contractor must submit a complete Submittal of the requested substitution and a Shop Drawing showing configuration, dimensions, and other critical information associated with the substitution that meets the requirements of Article 3.9. The District may condition its approval of any substitution upon delivery to the District of an extended warranty or other assurances of adequate performance of the substitution. Any and all risks of delay due to approval by the DSA or any other governmental agency having jurisdiction shall be on the bidder.

3.10.4.6 If the Architect and District accept a proposed substitution, Contractor agrees to pay for all DSA review costs, engineering, and design services, including, without limitation to, compensation to the Architect and affected engineers for their required time to process such substitution through the Division of the State Architect, if required, and to make all changes and adjustments in materials or the work of all trades directly or indirectly affected by the substituted item or items at no cost to the District.

3.10.5 Substitution Requests After Bid

3.10.5.1 The District, in its sole discretion, may accept a request for substitution by Contractor or may request Contractor substitute a specified item. Any substitutions requested after bids are opened shall be subject to the same conditions and requirements set forth in Article 3.10.4 above. If any substitutions, that in the District or Architect's determination, results in a credit to the District, the credit amount shall be agreed upon in writing, otherwise, the request for substitution shall be deemed denied.

3.11 **INTEGRATION OF WORK**

3.11.1 Scope

3.11.1.1 Contractor shall be responsible for cutting, fitting, or patching to complete the Work and to make all parts fit together properly. Contractor shall be responsible for ensuring that all trades are coordinated and scheduled so as to ensure the timely and proper execution of the work. When modifying existing work or installing new Work adjacent to existing work, Contractor shall match, as closely as conditions of Site and materials will allow, the finishes, textures, and colors of the original work, refinishing existing work at no additional cost to District. All cost caused by defective or ill-timed work shall be borne by Contractor. Contractor shall be solely responsible for protecting existing work on adjacent properties and shall obtain all required permits for shoring and excavations near property lines.

3.11.2 Structural Members

3.11.2.1 New or existing structural members and elements, including reinforcing bars and seismic bracing, shall not be cut, bored, or drilled except by written authority of the Architect. Work done contrary to such authority is at Contractor's risk and subject to replacement at Contractor's own expense without reimbursement under the Contract. Schedule delays resulting from Agency approvals for unauthorized work shall be Contractor's responsibility.

3.11.3 Subsequent Removal

3.11.3.1 Permission to patch any areas or items of the Work shall not constitute a waiver of the District's or the Architect's right to require complete removal and replacement of the areas or items of the Work if, in the opinion of the Architect or the District, the patching does not satisfactorily restore quality and appearance of the Work, or does not otherwise conform to the Contract Documents.

3.12 **CLEANING UP**

3.12.1 Contractor's Responsibility to Clean Up

3.12.1.1 At all times, Contractor shall keep premises free from debris such as waste, dust, excess water, storm water runoffs, rubbish, and excess materials and equipment. Contractor shall not leave debris under, in, or about the premises, but shall promptly remove same from the premises and dispose of it in a lawful manner. Disposal receipts or dump tickets shall be furnished to the Architect within five (5) days of request.

3.12.1.2 Contractor shall remove rubbish and debris resulting from the Work on a daily basis. Contractor shall maintain the structures and Site in a clean and orderly condition at all times until acceptance of the Project by the District. Contractor shall keep its access driveways and adjacent streets, sidewalks, gutters and drains free of rubbish, debris, and excess water by cleaning and removal each day. All concrete, sidewalks, and paths of travel shall be broom-cleaned daily.

3.12.2 General Final Clean-Up

3.12.2.1 Upon completion of Work, Contractor shall employ experience workers or professional cleaners for final cleaning. Clean each surface to the condition expected in a normal, commercial building cleaning and maintenance program:

- a. Clean interior and exterior of buildings, including fixtures, equipment, walls, floors, ceilings, roofs, window sills and ledges, horizontal projections, and any areas where debris has collected, so surfaces are free from foreign material or discoloration.
- b. Clean the Project site. The grounds should be cleared of any Contractor equipment, raked clean of debris, and trash removed. Sweep paved areas broom clean.
- c. Repair or replace any damaged materials. Replace any chipped or broken glass.
- d. Remove any and all stains.
- e. Remove labels that are not permanent labels.
- f. Clean and polish all glass, plumbing fixtures, equipment, finish hardware and similar finish surfaces. Remove any glazing compounds.
- g. Remove temporary utilities, fencing, barricades, planking, sanitary facilities, and similar temporary facilities from Site.
- h. Remove temporary film that remains on any hardware, doors, or other surfaces.
- i. Seal the bottom and tops of all doors.

3.12.3 Special Clean-Up.

3.12.3.1 In addition to the general cleaning, the following special cleaning shall be done at the completion of the Work, in accordance with the Specifications including, but not limited to:

- a. Remove putty stains from glazing, then wash and polish glazing.
- b. Remove marks, stains, fingerprints, and other soiling or dirt from painted,

stained, or decorated work.

- c. Remove temporary protection and clean and polish floors and waxed surfaces.
- d. Clean and polish hardware and plumbing trim; remove stains, dust, dirt, plaster and paint.
- e. Wipe surfaces of mechanical and electrical equipment.
- f. Remove spots, soil, plaster, and paint from tile work, and wash tile.
- g. Clean all fixtures and equipment, remove excess lubrication, clean light fixtures and lamps, and polish metal surfaces.
- h. Vacuum-clean carpeted surfaces.
- i. Remove debris from roofs, down spout, and drainage system.

3.12.4 Failure to Cleanup

3.12.4.1 If Contractor fails to clean up as provided in the Contract Documents, the District may do so, and the cost thereof shall be the responsibility of Contractor, pursuant to Article 2.2, and seek a Deductive Change Order.

3.13 **ACCESS TO WORK**

3.13.1 Contractor shall provide the District, the Architect, Engineers, and the Inspector of Record access to the Work in preparation and progress wherever located. Contractor shall provide safe and proper facilities for such access so that District's representatives may perform their functions. **Contractor is aware that this contract may be split into several phases as addressed in Article 6.**

3.13.2 Special Inspection, Inspections or Tests Out of State, Out of Country, or Remote from Project

3.13.2.1 If Contractor has a Subcontractor or supplier that requires in-plant or special inspections, or inspections or tests that are out of the country, out of the state, or a distance of more than 200 miles from the Project site, the Special Inspector or Inspector shall be provided access so the special inspection or inspections may occur in the remote location. In some cases, the DSA Inspector may also require access in addition to Special Inspectors and individuals performing tests. Inspections/tests shall occur during normal work hours. See also Article 4.3.6.

3.14 **ROYALTIES AND PATENTS**

3.14.1 Payment and Indemnity for Infringement

3.14.1.1 Contractor shall hold and save the District and its officers, agents, and employees, the CM, the Architect, and the Architect's consultants harmless from liability of any nature or kind, including cost and expense, for or on account of any patented or unpatented invention, process, article, or appliance manufactured or used in the performance of the Contract, including its use by the District, unless otherwise specifically provided in the Contract Documents, and unless such liability arises from the sole negligence, or active negligence, or willful misconduct of the District, the Architect, or the Architect's

consultants.

3.14.2 Review

3.14.2.1 The review by the Architect of any method of construction, invention, appliance, process, article, device, or material of any kind shall be for its adequacy for the Work and shall not be an approval for the use by Contractor in violation of any patent or other rights of any person or entity.

3.15 **INDEMNIFICATION**

3.15.1 Contractor

3.15.1.1 See Agreement Form. Contractor shall ensure that the contracts with each Subcontractor contains provisions requiring the Subcontractors to defend, indemnify, and hold harmless the District, Architect, Inspector, and the State of California to a minimum level as set forth in this Article and consistent with the indemnity and hold harmless language in the Agreement Form.

3.15.1.2 Contractor's and Subcontractors' obligations to defend, indemnify, and hold harmless the District, Architect, Inspector, the State of California and their officers, employees, agents, and independent contractors hereunder shall include, without limitation, any and all claims, damages, and costs for the following: (1) any damages or injury to or death of any person, and damage or injury to, or loss (including theft), or loss of use of, any property, (2) breach of any warranty, express or implied, (3) failure of Contractor or Subcontractors to comply with any applicable governmental law, rule, regulation, or other requirement, (4) products installed in or used in connection with the Work, and (5) any claims of violation of the Americans with Disabilities Act (ADA).

3.16 **SUBMISSION OF DAILY REPORTS**

3.16.1 General

3.16.1.1 By 10:00am on the following business day, Contractor shall submit a Daily Report to the Inspector and copy the Architect for the previous day's Work. If there is a CM, the original Daily Report is to be provided to the CM and copies sent to the Architect and the Inspector. Daily Reports shall be prepared on forms approved by the District, together with applicable delivery tickets, listing all labor, materials, and equipment involved for that day. The District reserves the right to note inconsistencies or inaccuracies in the Daily Reports. In such cases, pertinent notes shall be entered by each party to explain points that cannot be resolved that day. Each party shall retain a signed copy of the report. Daily Reports by Subcontractors or others shall be submitted through Contractor.

3.16.2 Labor

3.16.2.1 The Daily Report shall show names of workers, classifications, hours worked and hourly rate. The locations where work occurred shall also be identified in the Daily Report. Project Superintendent expenses are not allowed.

3.16.3 Materials

3.16.3.1 The Daily Report required shall describe and list quantities of materials used and unit costs.

3.16.4 Equipment

3.16.4.1 The Daily Report required shall show type of equipment, size, identification number, and hours of operation, including loading and transportation, if applicable, and hourly/daily cost. Move-on and move-off fees shall be noted.

3.16.5 Other Services and Expenditures

3.16.5.1 Other services and expenditures shall be described in the Daily Report in detail as the District requires.

3.16.6 Failure to Submit Daily Report

3.16.6.1 If Contractor does not submit its Daily Report by 10:00am the next business day, the Inspector of Record shall prepare a Daily Report addressing each of the above items. The cost for the Inspector's services to prepare the Daily Report shall be addressed through a Deductive Change Order under Article 7.7.4.

**3.17 AS-BUILT DRAWINGS AND ANNOTATED SPECIFICATIONS**

3.17.1 Throughout the duration of the Project, Contractor shall maintain on a current basis an accurate and complete set of As-Built Drawings (and annotated Specifications) clearly showing all changes, revisions to Specifications, and substitutions during construction, including, without limitation to, field changes and the final location of all electrical and mechanical equipment, utility lines, ducts, outlets, structural members, walls, partitions, and other significant features. In case a Specification allows Contractor to elect one of several brands, makes, or types of material or equipment, the annotations shall show which of the allowable items Contractor has furnished. Contractor will update the As-Built Drawings and annotated Specifications as often as necessary to keep them current, but no less often than weekly.

3.17.2 Contractor shall update As-Built Drawings with complete information on an area of Work at or near the time when the Work is being performed, prior to any DSA 152 sign off, and prior to any Work being covered.

3.17.3 The As-Built Drawings and Annotated Specifications shall be kept at the Site and available for review and inspection by the District and the Architect. Failure to maintain and update the As-Built Drawings is a basis to withhold Progress Payments pursuant to Article 9.6.

3.17.4 Upon Beneficial Occupancy

3.17.4.1 Contractor shall obtain and pay for reproducible Plans upon Beneficial Occupancy. Contractor shall deliver Plans to District Representative (CM if one is hired for the Project).

3.17.5 As-Builts at Completion of Work

3.17.5.1 Upon completion of the Work, and as a condition precedent to Application for Retention Payment, Contractor will provide one (1) neatly prepared and complete set of As-Built Drawings and annotated Specifications to the District. Contractor shall certify the As-Builts as a complete and accurate reflection of the actual construction conditions of the Work by affixing a stamp indicating the Drawings are As-Builts and certifying accuracy on the final set of As-Builts. Failure to deliver a complete As-Built set of Drawings may result in significant withholdings to ensure Work is properly documented. See Article 9.9.1.

3.17.6 Log of Control and Survey Documentation

3.17.6.1 Contractor shall complete and maintain an accurate log for all control and survey documentation for the Project as the Work progresses. All reference and control points shall be recorded on the As-Built Drawings. The basis of elevations shall be one of the established benchmarks that must be maintained on the As-Builts.

3.17.7 Record Coordinates for Key Items

3.17.7.1 Contractor shall record, by coordinates, all utilities onsite with top of pipe elevations, major grade and alignment changes, rim, grate or top of curb and flow line elevations of all drainage structures and sewer manholes. Contractor shall update record information at or near the time when work is occurring in an area and prior to DSA 152 sign off on any category of Work and prior to covering the Work.

3.17.8 BIM As-Built Drawings

3.17.8.1 If BIM is utilized for the Project, then an electronic version of such As-Built Drawings and annotated Specifications will be delivered to District (in an acceptable format to District).

3.18 **EQUIPMENT MANUALS**

3.18.1 Contractor shall obtain and furnish three (3) complete sets of manuals containing the manufacturers' instructions for maintenance and operation of each item of equipment and apparatus furnished under the Contract Documents and any additional data specifically requested under the various Specification Sections for each division of the Work. The manuals shall be arranged in logical, sequential order, labeled, indexed, and placed in three-ring binders. At the completion of Work, Contractor shall certify, by endorsement thereon, that each manual is complete, accurate, and covers all Work. Prior to submittal of Contractor's Application for Retention Payment, and as a further condition to approval by the Architect, each Subcontractor shall deliver the manuals, arranged in logical, sequential order, labeled, indexed, endorsed, and placed in three-ring binders, to Contractor who shall assemble these manuals for all divisions of the Work, review them for completeness, and submit them to the District through the Architect.

3.19 **DIR REGISTRATION**

3.19.1 Strict compliance with all DIR registration requirements in accordance with

Labor Code sections 1725.5 and 1771.1 is a material obligation of Contractor and all of its Subcontractors (of any tier) under the Contract Documents. The foregoing includes, without limitation, compliance with DIR registration requirements at all times during performance of the Work by Contractor and all Subcontractors of any tier. The failure of Contractor and all Subcontractors of any tier to be properly registered with DIR at all times during performance of the Work is a material breach of the Contract and subject to termination for cause.

3.19.2

An affirmative and ongoing obligation of Contractor under the Contract Documents is the verification that all Subcontractors of any tier are at all times, during performance of the Work, in full and strict compliance with the DIR registration requirements. Contractor shall not permit or allow any Subcontractor of any tier to perform any Work without Contractor's verification that all Subcontractors are in full and strict compliance with the DIR registration requirements. Any Subcontractors of any tier not properly registered with DIR shall be substituted in accordance with Labor Code section 1771.1. Contractor or Subcontractors of any tier shall not be entitled to any additional costs or time arising from, or in any way related to, compliance with the DIR registration requirements.

**END OF SECTION 00 72 03**



**ARTICLE 4**

**ADMINISTRATION OF THE CONTRACT AND CLAIMS**

**4.1 ARCHITECT**

**4.1.1 Replacement of Architect**

4.1.1.1 In the case of the termination of the Architect, the District may appoint an Architect or another construction professional, or may perform such functions with its own licensed professional personnel. The status of the replacement Architect under the Contract Documents shall be the same as that of the former Architect.

**4.2 ARCHITECT'S ADMINISTRATION OF THE CONTRACT**

**4.2.1 Status**

4.2.1.1 Pursuant to Title 2 of the California Code of Regulations and as required pursuant to the Field Act, Education Code 17280 et seq., the Architect will provide administration of the Contract Documents and the Work, and will be the District's representative during construction, as well as during the one (1) year period following the commencement of any warranties. The Architect will have authority to act on behalf of the District only to the extent provided in the Contract Documents.

**4.2.2 Site Visits**

4.2.2.1 The Architect will visit the Site at intervals necessary in the judgment of the Architect to become generally familiar with the progress and quality of the Work and to determine in general if the Work is being performed in accordance with the Contract Documents and as otherwise required by DSA.

**4.2.3 Limitations of Construction Responsibility**

4.2.3.1 The Architect, District, and CM shall not have control over, charge of, or be responsible for construction means, methods, techniques, schedules, sequences or procedures, fabrication, procurement, shipment, delivery, receipt, installation, or for safety precautions and programs in connection with the Work, since these are solely Contractor's responsibility under the Contract Documents. The Architect, District, and CM shall not be responsible for Contractor's, Subcontractors', material or equipment suppliers', or any other person's schedules or failure to carry out the Work in accordance with the Contract Documents. The Architect, District, and CM shall not have control over, or charge of acts or omissions of Contractor, Subcontractors, their agents or employees, or any other persons or entities performing or supplying portions of the Work. Contractor shall not be relieved of obligations to perform the Work in accordance with the Contract Documents either by activities or duties of the Architect, District, or CM in the Architect's, District's, or CM's administration of the Contract Documents, or by tests, inspections, or approvals required or performed by persons other than Contractor.

**4.2.4 Communications Facilitating Contract Administration**

4.2.4.1 Except where a CM is on the Project, or as otherwise provided in the

Contract Documents, or when direct communications are warranted by special circumstances, the District and Contractor shall communicate through the Architect. In the cases where a CM is hired for the Project, all communication shall be through the CM (unless otherwise directed) with copies to the District, Architect, and Inspector. Where direct communication is necessary between the District and Contractor, the District's communication shall be through the District's authorized designated person. The Architect and CM shall be promptly informed, and shall receive copies of all written communications. Contractor shall not rely upon any communications from the District that is not from the District's Representative. Communications by and with the Architect's consultants shall be through the Architect. Communications by and with Subcontractors and material or equipment suppliers shall be through Contractor. In the case where a CM is hired for the Project, the CM shall be the main point of contact for communication of information. Copies should be sent to the Architect, District Representative, and Inspector.

#### 4.2.5 Payment Applications

4.2.5.1 The Architect will review and make recommendations to the District regarding the amounts due Contractor on the Certificates for Payment pursuant to Article 9.3.4 and subject to the Inspector's review, CM review (if applicable), and Architect's observation. This review of Payment Applications is sometimes called a "Pencil Draft." Return of a Pencil Draft shall constitute the District's dispute of the Payment Application that has been submitted. Contractor shall promptly respond to Pencil Drafts, or else Contractor's Payment Applications may be delayed. Contractor's failure to promptly respond to a Pencil Draft shall qualify as a delay in the Prompt Payment of a Request for Payment or Request for Retention.

#### 4.2.6 Rejection of Work

4.2.6.1 In addition to the rights, duties, and obligations of the Inspector under this Article, the Architect may recommend to the District that the District reject Work that does not conform to the Contract Documents. Whenever the Architect considers it necessary or advisable to achieve the intent of the Contract Documents, the Architect (and/or CM) may recommend to the District that the District require additional inspection or testing of the Work in accordance with Article 13.5, whether or not such Work is fabricated, installed, or completed. District may have nonconforming Work removed and replaced pursuant to Article 9.7. However, neither this authority of the Architect (or CM), nor a decision made in good faith either to exercise or not to exercise such authority, shall give rise to a duty or responsibility of the Architect (or CM) to Contractor, Subcontractors, material and equipment suppliers, their agents or employees, or other persons performing portions of the Work.

4.2.6.2 Contractor shall, without charge, replace or correct Work found by the District to not be in conformance to Contract requirements. Contractor shall promptly segregate and remove rejected materials from the Project site.

4.2.6.3 This section is does not address a notice of noncompliance and the remedies associated with a notice of noncompliance, which are addressed at Article 7.1.2.

#### 4.2.7 Warranties upon Completion

4.2.7.1 The Architect (and where applicable CM), in conjunction with the Inspector will conduct field reviews of the Work to determine the date of Substantial Completion and of Final Completion, shall receive and forward to the District for the District's review written warranties and related documents required by the Contract and assembled by Contractor, and will issue a final Certificate for Payment when the Architect believes the Work has been completed in compliance with the requirements of the Contract Documents (see Article 9.11 for closeout). The handling by the Architect (or CM, as applicable) of such warranties, maintenance manuals, or similar documents shall not diminish or transfer to the Architect any responsibilities or liabilities required by the Contract Documents of Contractor or other entities, parties, or persons performing or supplying the Work.

4.2.7.2 On some Projects, the District will take a phased occupancy of the Project. In those cases, the District may commence the running of warranties on the buildings, or phases that are accepted after Punch List is completed and the District has accepted completion of the separate phase. A separate Notice of Completion may be filed for the separate building or phase of work and warranties shall commence for the separate phase only to the extent that warranties do not require coordination or connection to other buildings or other parts of the site, and only if the warranted item is completed to its entirety in the segregated building or phased area.

4.2.7.3 If written warranties are not provided at the time the Punch List is nearing completion, Architect (with recommendations from the CM and Inspector) shall determine the dollar value of the warranties and shall make recommendations for withholds necessary to transfer such Warranty to the District for future use as part of the Punch List for the Project, pursuant to Article 9.6.

4.2.7.4 Warranties are not commenced through utilizing of equipment for testing and operation as necessary to acclimate buildings, or where necessary, to test systems.

4.2.8 Interpretation

4.2.8.1 The Architect will interpret and decide matters concerning performance and requirements of the Contract Documents. Architect shall make clarifications as necessary to interpret the Contract Documents.

4.3 **PROJECT INSPECTOR**

4.3.1 General

4.3.1.1 One or more Project Inspectors employed by the District and approved by the Division of the State Architect (DSA) will be assigned to the Work in accordance with the requirements of Title 24 of the California Code of Regulations. The Inspector(s) duties are specifically defined in Title 24 Sections 4-333 and 4-342, and in DSA IR A-8.

4.3.2 Inspector's Duties and DSA Noted Timelines for Inspection

4.3.2.1 All Work shall be under the observation of the Inspector. Contractor shall establish a protocol for requesting inspection with Inspector so as not to delay the Work, but provide adequate time for the Inspector to perform

inspection. If such a protocol is not established ahead of time, Inspector may utilize the time criteria set by Title 24 of 48 hours in advance of submitting form DSA 156 for each new area. The Inspector shall have free access to any or all parts of the Work at any time. Contractor shall furnish the Inspector such information as may be necessary to keep the Inspector fully informed regarding progress and manner of Work and character of materials. Such observations shall not, in any way, relieve Contractor from responsibility for full compliance with all terms and conditions of the Contract, or be construed to lessen to any degree Contractor's responsibility for providing efficient and capable superintendence. The Inspector is not authorized to make changes in the Drawings or Specifications, nor shall the Inspector's approval of the Work and methods relieve Contractor of responsibility for the correction of subsequently discovered defects, or from his or her obligation to comply with the Contract Documents.

4.3.2.2 Inspector shall electronically post DSA required documents on the DSA electronic posting website. It is Contractor's responsibility to determine the status of posting and determine if all the criteria for sign-off of a category of Work on the Project Inspection Card (Form DSA 152), as defined more thoroughly in the most current version of the DSA 152 manual posted on the DSA website.

4.3.2.3 Inspector may collaborate with Contractor about approval of areas that may be constructed and approved incrementally under the DSA 152 card pursuant to the guidelines of PR-13 at Article 1.17. Inspector shall work with Contractor to present incremental approval proposals to DSA.

#### 4.3.3 Inspector's Authority to Reject or Stop Work

4.3.3.1 The Inspector shall have the authority to reject Work whenever provisions of the Contract Documents are not being complied with, and Contractor shall instruct Subcontractors and employees accordingly. In addition, the Inspector may stop any Work that poses a probable risk of harm to persons or property. Contractor shall instruct employees, Subcontractors, material and equipment suppliers, etc., accordingly. The absence of any Stop Work Order, or rejection of any portion of the Work, shall not relieve Contractor from any obligations pursuant to the Contract Documents.

#### 4.3.4 Inspector's Facilities

4.3.4.1 Within seven (7) days after the notice to proceed, Contractor shall provide the Inspector with the temporary facilities as required. More specific requirements for the Inspector's facilities may be further described under Division 01 of the Specifications.

#### 4.3.5 Testing Times

4.3.5.1 The District will provide inspection and testing at its cost during the normal eight (8) hour day, Monday through Friday (except holidays). Work by Contractor outside of the normal eight-hour day shall constitute an authorization from Contractor to the District to provide inspection and testing as required outside of the normal eight-hour day. Contractor shall provide adequate time for inspections so as not to delay the Work. An advanced timing protocol may be established pursuant to Article 4.3.2. If Contractor is behind Schedule, then it is incumbent on Contractor to provide advanced forecast through look-ahead of

the anticipated date for inspection so the Inspector may plan his or her activities so as not to delay the Project. Contractor shall reimburse District for any additional costs associated with inspection and testing (including re-inspection and re-testing) outside the normal eight-hour day, and for any retests caused by Contractor.

4.3.5.2 It is Contractor's responsibility to request special inspections with sufficient time so all testing may be completed timely and posted so Work may proceed, and the Inspector's signature is attached to the Project Inspection Card (Form 152). Specifically, timely request for special inspection under the DSA Verified Report Forms 291 (laboratory), DSA Verified Report Form 292 (Special Inspection), and DSA Verified Report 293 (geotechnical) since DSA requirements under PR 13-01 specifically gives the Special Inspections 14 days to post to the DSA website. Failure to plan and pay (if applicable) for quicker delivery of Special Inspections may be counted as Float, but is not considered Governmental Delay Float under Article 8.1.4.

4.3.6 Special Inspections, Inspections, or Tests Out of State, Out of Country, or Remote from Project

4.3.6.1 If Contractor has a Subcontractor or supplier that requires in-plant or special inspections, inspections or tests that are out of the country, out of the state, or a distance of more than 200 miles from the Project Site, the District shall provide the Special Inspector or individual performing the tests time for inspection and testing during normal work hours. Contractor, however, is responsible for the cost of travel, housing, food, out of area premiums that may be in the Inspector/Testing Agreement with District, or other expenses necessary to ensure proper inspection, special inspection, or testing as provided by a DSA Certified Inspector, Special Inspector, or individual performing tests. In some cases all three - DSA Inspector, Special Inspector, and Tester - may be required. In addition, if the DSA Certified Inspector, Special Inspector, or individual performing test has contractual travel clauses or special rates for out of town inspection, Contractor is responsible for all costs associated with the contractual travel costs in addition to all other costs. Arrangements for inspection and/or testing shall be made far enough in advance so as not to delay the Work.

4.4 **STOP WORK ORDER**

4.4.1 DSA may issue a Stop Work Order, or an Order to Comply, when either (1) the Work proceeds without DSA approval, (2) the Work proceeds without a DSA Inspector of Record, or (3) where DSA determines that the Work is not being performed in accordance with applicable rules and regulations, and would compromise the structural integrity of the Project, or would endanger lives. If a Stop Work Order is issued, the Work in the affected area shall cease until DSA withdraws the Stop Work Order. Pursuant to Education Code section 17307.5(b), the District shall not be held liable in any action filed against the District for any delays caused by compliance with the Stop Work Order, except to the extent that an error or omission by the District is the basis for the issuance of the Stop Work Order.

4.4.2 Examples of Stop Work Orders that may be issued by DSA include DSA Bulletin 07-04 and Policy 10-01, the installation of automatic fire sprinkler systems without approved Plans, covering Work that has not been approved by Inspector on DSA Project Inspection Card (Form 152).

**4.5 RESPONSIBILITY FOR ADDITIONAL CHARGES INCURRED BY THE DISTRICT FOR PROFESSIONAL SERVICES**

4.5.1 If at any time prior to the completion of the requirements under the Contract Documents, the District is required to provide or secure additional professional services (including CM, Inspection, Architect, Engineering, and Special Consultant Services) for any reason by any act of Contractor, the District may seek a Deductive Change Order for any costs incurred for any such additional services, and such costs shall be deducted from the next progress payment. A Deductive Change Order shall be independent from any other District remedies and shall not be considered a waiver of any District rights or remedies. If payments then or thereafter due to Contractor are not sufficient to cover such amounts, Contractor shall pay the difference to the District. Additional services shall include, but shall not be limited to, the following:

4.5.1.1 Services made necessary by the default of Contractor (Article 14 or Article 2.2),

4.5.1.2 Services made necessary due to the defects or deficiencies in the Work of Contractor (Article 2.2 and Article 9.6),

4.5.1.3 Spurious or frivolous RFI's issued that do not conform to the requirements of Article 7.4. issuance of the same RFI after receiving an answer from the Architect or Engineer,

4.5.1.4 Review of Schedules that are provided by Contractor that do not conform with the requirements of Article 8,

4.5.1.5 Preparation of a CCD or ICD to correct a Contractor Deficiency, or Contractor caused notice of noncompliance (Article 7.3),

4.5.1.6 Review of Incomplete Shop Drawings or Submittals, including the submission of Piecemeal Shop Drawings or Submittals, unless piecemeal Submittals are specifically agreed upon by District (Article 3.9),

4.5.1.7 Services required by failure of Contractor to perform according to any provision of the Contract Documents,

4.5.1.8 Services in connection with evaluating substitutions of products, materials, equipment, Subcontractors proposed by Contractor, and making subsequent revisions to Drawings and/or Specifications, obtaining DSA approvals, DSA costs for review of CCD's, other governmental agency review costs, and providing other documentation required, except for the situation where the specified item is no longer manufactured or available (see Article 3.10),

4.5.1.9 Services for evaluating and processing Claims or Disputes submitted by Contractor in connection with the Work outside the established Change Order process,

4.5.1.10 Services required by the failure of Contractor to prosecute the Work in a timely manner in compliance within the specified time of completion,

4.5.1.11 Services in conjunction with the testing, adjusting, balancing, and

start-up of equipment other than the normal amount customarily associated for the type of Work involved, and

4.5.1.12 Services in conjunction with more than one (1) re-review of Submittals of Shop Drawings, Product Data, samples, RFI's, etc.

#### 4.6 **DISPUTES AND CLAIMS**

##### 4.6.1 Decision of Architect

4.6.1.1 Disputes between District and Contractor involving money or time, including those alleging an error or omission by the Architect, shall be referred initially to the Architect for action as provided in Article 4.6.2 within ten (10) days after Contractor's Article 7 request for Change is denied. If there is a CM, the CM shall receive the Dispute and may review and assemble opinions and documents to assist the Architect. A decision by the Architect, as provided in Article 4.6.5, shall be required as a condition precedent to proceeding with remedies set forth in Article 4.6.9 as to all such matters arising prior to the date Retention Payment Application is due, regardless of whether such matters relate to execution and progress of the Work, or the extent to which the Work has reached Final Completion.

4.6.1.2 The condition precedent of an Architect decision shall be waived if (1) the position of Architect is vacant, (2) the Architect has not received evidence or has failed to render a decision within agreed time limit, (3) the Architect has failed to take action required under Article 4.6.5 within 30 days after the Claim is made or 45 days have passed after the Claim has been referred to the Architect, or (4) the Claim relates to a stop notice Claim not arising from any extra Change Order or Immediate Change Directive for which approval has not been provided.

##### 4.6.2 Architect's Review

4.6.2.1 The Architect (and CM) will review Disputes and take one or more of the following preliminary actions upon receipt of a Dispute: (1) request additional supporting data from the claimant, (2) submit a schedule to the parties indicating when the Architect expects to take action, (3) reject the Dispute in whole or in part, stating reasons for rejection, (4) recommend approval of the Claim, or (5) suggest a compromise. The Architect may also, but is not obligated to, notify the Surety, if any, of the nature and amount of the Claim.

4.6.2.2 *Architectural Immunity.* Architect review of Claims shall be impartial and meant to resolve Disputes. Pursuant to the case, *Huber, Hunt & Nichols, Inc. v. Moore (1977) 67 Cal.App.3d 278*, the Architect is provided a quasi-judicial immunity for interpreting and deciding Disputes between the District and Contractor.

##### 4.6.3 Documentation if Resolved

4.6.3.1 If a Dispute has been resolved, the Architect (and/or CM) will prepare a Change Order or obtain appropriate documentation to document the terms for Board approval.

##### 4.6.4 Actions if Not Resolved

4.6.4.1 If a Dispute has not been resolved and all documentation requested pursuant to Article 4.6.2 has been provided, Contractor shall, within ten (10) days after the Architect's preliminary response, assemble all the documents involved in the Dispute, including copies of all back-up documentation of costs and the basis for the Dispute, and take one or more of the following actions: (1) modify the initial Dispute, (2) notify the Architect that the initial Dispute stands, or (3) supplement with additional supporting data and resubmit to the Architect under Article 4.6.2.

#### 4.6.5 Architect's Written Decision

4.6.5.1 If a Dispute has not been resolved after consideration of the foregoing, and of other evidence presented by the parties or requested by the Architect, the Architect (or Architect through CM) shall provide a written decision within 20 days after compliance with Article 4.6.4. Upon expiration of such time period, the Architect (or Architect through CM) will render to the parties a written decision relative to the Dispute, including any change in the Contract Sum, Contract Time, or both.

4.6.5.2 The Architect may also request reasonable additional time to complete Architect's written decision.

4.6.5.3 If the resolution of the Dispute by the Architect is not satisfactory to Contractor and copies of all back-up documentation of costs and the basis for the Dispute is fully articulated in a package of material that is complete, Contractor may then submit a Claim to the District under Article 4.6.9.

#### 4.6.6 Continuing Contract Performance

4.6.6.1 Pending final resolution of a Dispute or Claim, including negotiation, mediation, arbitration, or litigation, Contractor shall proceed diligently with performance of the Contract, and the District shall continue to make any undisputed payments in accordance with the Contract (less any withholdings or offsets). If the Dispute or Claim is not resolved, Contractor agrees he or she will neither rescind the Contract nor stop the progress of the work, but Contractor's sole remedy shall be to submit such controversy to determination by a court of competent jurisdiction in the county where the Project is located, after the Project has been completed, and not before.

4.6.6.2 *District's Option to Submit Individual Disputes to Arbitration during Claims and Disputes Process.* At the District's sole option, in order to more efficiently resolve Claims during the Project, and prior to the completion of the Claims Process, pursuant to Government Code section 9201, the District may submit individual Disputes or Claims for binding arbitration, and Contractor agrees to the resolution of for each individual Dispute or Claim by an Arbitrator, including resolution of time and delays. If binding arbitration is utilized for individual disputes, such resolution is full and final as to that particular Dispute or Claim. THIS INDIVIDUAL DISPUTE ARBITRATION PROCESS IS NOT AN ARBITRATION CLAUSE AND SHALL NOT BE CONSTRUED AS AN AGREEMENT TO ARBITRATE. THE INDIVIDUAL DISPUTES ARBITRATION PROCESS IS FOR THE SOLE PURPOSE OF STREAMLINING AND RESOLVING CLAIMS DURING CONSTRUCTION AND SHALL BE REQUESTED ON SPECIFIC INDIVIDUAL ITEMS BY THE DISTRICT PRIOR TO RETENTION PAYMENT (EVEN IF THERE ARE DEDUCTIONS MADE FROM RETENTION PAYMENT), WHICH REPRESENTS THE FINAL



COMPLETION OF THE PROJECT.

a. If there is no Retention remaining on the Project, individual Disputes initiated prior to Project Final Completion shall continue until a final disposition of the Arbitration or resolution of the individual Claim or Dispute.

b. No Tolling. The Arbitration process shall not toll the Disputes, Claims, or Appeals process under Article 4.6, or the requirement to submit Claims to Court under Article 4.6.9.4.

4.6.7 Claims for Concealed Trenches or Excavations Greater Than Four Feet (4') Below the Surface

4.6.7.1 When any excavation or trenching extends more than four feet (4') below the surface, or if any condition involving hazardous substances are encountered:

a. Immediately upon discovery, Contractor shall promptly, and before the following conditions are disturbed, notify the District, by telephone and in writing, of the condition except:

1. If such condition is a hazardous waste condition, Contractor's bid includes removal or disposal of hazardous substances. Material that Contractor believes may be a material that is hazardous waste, as defined in Section 25117 of the Health and Safety Code, is required to be removed to a Class I, Class II, or Class III disposal site in accordance with the provisions of existing law. In such case, the notice bulletin procedures of Article 7 apply.

2. Subsurface or latent physical conditions at the Site differ from those indicated in the Drawings, Specifications, Soils Report, and from Contractor's own investigation under Article 2.1,

3. There are unknown physical conditions at the Site of any unusual nature, different materially from those ordinarily encountered and generally recognized as inherent in Work of the character provided for in the Contract:

a. The District shall investigate the conditions, and if District finds that the conditions do materially differ, do involve hazardous waste, and cause a decrease or increase in Contractor's cost of, or the time required for, performance of any part of the Work, shall issue a Change Order or Construction Change Document under the procedures described in the Contract.

b. In the event that a dispute arises between the public entity or District and Contractor, whether the conditions materially differ, involve hazardous waste, or cause a decrease or increase in Contractor's cost of, or time required for, performance of any part of the Work, Contractor shall not be excused from any scheduled Completion Date provided for by the Contract, but shall proceed with all Work to be performed under the Contract. Contractor shall retain any and all rights provided either by Contract or by law, which pertain to the resolution of disputes and protests between the contracting parties.

4.6.8 Dispute Concerning Extension of Time.

4.6.8.1 If Contractor and District cannot agree upon an extension of time, whether compensable or not, then Contractor must have first completed the procedures set forth in Article 8.4. Upon completion of the procedures set forth under Article 8.4, Contractor must then comply with the requirements in this

Article including those set forth under Article 4.6.9.

4.6.9 Claims Procedures

4.6.9.1 Pursuant to the remedies under Public Contract Code section 9201 and Government Code section 930.2, Contractor, through execution of this Agreement, also agrees to comply with the Claims requirements of Article 4.6 to quickly and efficiently resolve disputes. Further, to provide a level of accuracy to the records submitted, the District shall have the right to audit books and records pursuant to Article 13.11 based on the actual costs incurred, and to reduce the uncertainty in resolving disputes with limited information.

4.6.9.2 Procedure Applicable to All Claims

a. *Definition of Claim.* A "Claim" is where a Dispute between the parties rises to the level where backup documentation is assembled and provided to the District as a separate demand by Contractor for (1) time extension, (2) payment of money or damages arising from Work done by or on behalf of Contractor pursuant to the Contract, and payment of which is not otherwise expressly provided for, or the claimant is not otherwise entitled to, or (3) amount of payment of which is disputed by the District (if the Claim is for damages associated with a DSA Stop Work Order, Contractor shall not be entitled to a request for Compensation, but shall be entitled to utilize Governmental Delay Float [see Article 8.1.5.1.]).

b. *Filing Claim Is Not Basis to Discontinue Work.* Contractor shall promptly comply with Work under the Contract or Work requested by the District even though a written Claim has been filed. Contractor and the District shall make good faith efforts to resolve any and all Claims that may arise during the performance of the Work covered by this Contract.

c. *Claim Notification.* Contractor shall, within seven (7) calendar days after the written decision of the Architect, or if the time period for Architect's decision has passed under Article 4.6.1, submit a notification, in writing, with the District (and the District's CM) stating clearly the basis for the Claim. If the notification is not submitted within seven (7) days after the written decision of the Architect or the passage of time under Article 4.6.1, Contractor shall be deemed to have waived all rights to assert the Claim, and the Claim shall be denied. Claims submitted after the Retention Payment date shall also be considered null and void by the District. All Claims shall be reviewed pursuant to Articles 4.6.1 through 4.6.5.

The Formal Notification of Claim must be presented as follows:

- (1) The term "Claim" must be at the top of the page in no smaller than 20 point writing,
- (2) All documentation submitted pursuant to Article 4.6 to the Architect shall be submitted with the Claim,
- (3) A stack of documents, copy of all Project documents, or the submission of random documents shall not constitute an adequate reference to supporting documentation, and
- (4) Any additional or supporting documentation that Contractor believes is relevant should be submitted at this time.

d. *Formal Claim Appeal Submission.* If Contractor does not concur with the

District's decision regarding the Claim Notification, Contractor will issue a formal Claim Appeal within 14 days of receipt of the District's decision and all detailed information in support of the Claim Appeal within 30 days. All appeals shall be submitted before Retention Payment. If the Claim Appeal is not submitted within 14 calendar days, and detailed information within 30 days, Contractor shall be deemed to have waived the right to assert the Claim, and the Claim shall be denied. Contractor's failure to submit any detailed information that is in the possession of Contractor shall render such information inadmissible by Contractor at trial, arbitration, or other legal proceeding.

e. *Appeal Claim Format.* Contractor shall provide all written detailed documentation that supports the Claim, including, but not limited to, arguments, justifications, cost, estimates, schedule analysis, and detailed documentation. The format of the Claim Appeal shall be as follows:

1. Cover letter,
  2. Summary of factual basis of Claim and amount of Claim,
  3. Summary of the basis of the Claim, including the specific clause and section under the Contract under which the Claim is made,
  4. Documents relating to the Claim, including:
    - a) Specifications sections in question,
    - b) Relevant portions of the Drawings,
    - c) Applicable Clarifications (RFI's),
    - d) Other relevant information, including responses that were received, and
    - e) Contractor Analysis of Claim merit.
  5. Contractor's analysis of any Subcontractor vendor Claims that are being passed through,
  6. Any analysis performed by outside consultants, and
  7. Any legal analysis that Contractor deems relevant.
- f. Break down of all costs associated with the Claim.
- g. For Claims relating to time extensions, an analysis and supporting documentation evidencing any effect upon the critical path in conformance with the requirements of Article 8.4 chronology of events and related correspondence.
- h. Applicable Daily Reports and Logs:
  1. If the Daily Reports or Logs are not available, lost, or destroyed, there shall be a presumption that the lost documentation was unfavorable to Contractor (see California Civil Jury Instruction 204).
- i. For Claims involving overhead, cost escalation, acceleration, disruption, or increased costs, a full version of job cost reports organized by category of work

or Schedule of Values with budget information tracked against actual costs. Any and all supporting back-up data, including the original bid (and associated original unaltered metadata):

1. The metadata and bid information shall be provided confidentially and subject to a protective order to prevent dissemination to other contractors or to the public. However, the bid documentation should remain intact and available for review and inspection in case of this type of increased cost Claim.
2. This data on the bid shall be made available to any District attorneys or experts, and shall also be utilized as evidence for any legal proceedings.
3. If the bid documentation is not available, lost, or destroyed, there shall be a presumption that the lost bid documentation was unfavorable to Contractor (see California Civil Jury Instruction 204).

j. *Certification*. Contractor (and Subcontractors, if applicable) shall submit with the Claim a certification under penalty of perjury:

1. That Contractor has reviewed the Claim and that such Claim is made in good faith,
2. Supporting data are accurate and complete to the best of Contractor's knowledge and belief,
3. The amount requested accurately reflects the amount of compensation for which Contractor believes the District is liable, and
4. That Contractor is familiar with Government Code section 12650 et seq. and Penal Code section 72, and that false claims can lead to substantial fines and/or imprisonment.

k. *Signature of Certification*. If Contractor is not an individual, the certification shall be executed by an officer or general partner of Contractor having overall responsibility for the conduct of Contractor's affairs.

l. *Mandatory Claim Appeal Procedure*. Contractor's Claim Appeal shall be denied if it fails to follow the requirements of this Article.

4.6.9.3 District (through CM or District's Agent or Attorney) may request additional information. Within 30 days of receipt of the Claim Appeal and the information under this Article, the District may request in writing any additional documentation supporting the Claim or documentation relating to defenses to the Claim that the District may assert. If additional documents are required, the time in which the Claim is evaluated may be extended by a reasonable time so the Claim and additional documents may be reviewed. *Claims Procedures in Addition to Government Code Claim*. Nothing in the Claims procedures set forth in Article 4 of the General Conditions shall act to waive or relieve Contractor from meeting the requirements set forth in Government Code section 900 et seq.

4.6.9.4 *Binding Arbitration of Individual Claim Issues*. To expedite resolution of Claims pursuant to Public Contract Code section 9201, at the District's sole option, the District may submit individual Claims to Arbitration prior to Retention Payment consistent with the requirements of Article 4.6.6.1.

4.6.9.5 *Resolution of Claims in Court of Competent Jurisdiction.* If Claims are not resolved under the procedure set forth and pursuant to Article 4.6.9, such Claim or controversy shall be submitted to a court in the County of the location of the Project after the Project has been completed, and not before.

4.6.9.6 *Warranties, Guarantees, and Obligations.* The duties and obligations imposed by these General Conditions, and the rights and remedies available hereunder to the parties hereto, and, in particular but without limitation, the warranties, guarantees, and obligations imposed upon Contractor by the General Conditions and amendments thereto, and all of the rights and remedies available to District and Architect thereunder, are in addition to, and are not to be construed in any way as a limitation of any rights and remedies available to any or all of them that are otherwise imposed or available by laws or regulations by special warranty or guarantee, or by other provisions of the Contract Documents, and the provisions of this Article will be as effective as if repeated specifically in the Contract Documents in connection with each particular duty, obligation, right, and remedy to which they apply.

**END OF SECTION 00 72 04**

**ARTICLE 5**  
**SUBCONTRACTORS**

**5.1 DEFINITIONS**

**5.1.1 Subcontractual Relations Bound to Same Contract Terms as General Contractor**

5.1.1.1 By appropriate agreement, written where legally required for validity, the Contractor shall require each Subcontractor, to the extent of the Work to be performed by the Subcontractor, to be bound to the Contractor by terms of the Contract Documents, and to assume toward the Contractor all the same obligations and responsibilities assumed by Contractor, pursuant to the Contract Documents. Each subcontract agreement shall preserve and protect the rights of the District and the Architect under the Contract Documents with respect to the Work to be performed by the Subcontractor, so that subcontracting thereof will not prejudice such rights. Where appropriate, Contractor shall require each Subcontractor to enter into similar agreements with Sub-subcontractors. Contractor shall make available to each proposed Subcontractor, prior to the execution of the subcontract agreement, copies of the Contract Documents to which the Subcontractor will be bound. Upon written request of the Subcontractor, Contractor shall identify to the Subcontractor the terms and conditions of the proposed subcontract agreement, which may be at variance with the Contract Documents. Subcontractors shall similarly make copies of applicable portions of such documents available to their respective proposed Sub-subcontractors.

**5.1.2 Subcontractor Licenses and DIR Registration**

5.1.2.1 All Subcontractors shall be properly licensed by the California State Licensing Board. All Subcontractors (of any tier) performing any portion of the Work must comply with the Labor Code sections 1725.5 and 1771.1, and must be properly and currently registered with the California Department of Industrial Relations (DIR) and qualified to perform public works pursuant to Labor Code section 1725.5 throughout the duration of the Project. No portion of the Work is permitted to be performed by a Subcontractor of any tier unless the Subcontractor is properly registered with DIR. Any Subcontractors of any tier not properly registered with DIR shall be substituted in accordance with Labor Code section 1771.1.

**5.1.3 Substitution of Subcontractor**

5.1.3.1 Substitution of Subcontractors shall be permitted only as authorized under Public Contract Code §§ 4107 et seq. Any substitutions of Subcontractors shall not result in any increase in the Contract Price or result in the granting of any extension of time for the completion of the Project.

**5.1.4 Contingent Assignment of Subcontracts and Other Contracts**

5.1.4.1 Each subcontract, purchase order, vendor contract, or agreement for any portion of the Work is hereby assigned by the Contractor to the District provided that:

a. Such assignment is effective only after Termination of this Contract with the Contractor by the District, as provided under Article 14, and only for those

subcontracts and other contracts and agreements that the District accepts by notifying the Subcontractor or materialman (as may be applicable) in writing,

b. Such assignment is subject to the prior rights of the Surety(ies) obligated under the Payment Bond and Performance Bond, and

c. Contractor shall include adequate provisions for this contingent assignment of subcontracts and other contracts and agreements in each such document.

**END OF SECTION 00 72 05**

**ARTICLE 6**  
**CONSTRUCTION BY DISTRICT OR BY SEPARATE CONTRACTORS**

**6.1 DISTRICT'S RIGHT TO PERFORM CONSTRUCTION AND TO AWARD SEPARATE CONTRACTS**

**6.1.1 Separate Contracts.**

6.1.1.1 District reserves the right to let other contracts in connection with this Work. Contractor shall afford other contractors reasonable opportunity for (1) introduction and storage of their materials, (2) access to the Work, and (3) execution of their work. Contractor shall properly connect and coordinate Contractor's work with that of other contractors.

6.1.1.2 If any part of Contractor's Work depends on proper execution or results of any other contractor, Contractor shall inspect and within seven (7) days, report to Architect, in writing, any defects in such work that render it unsuitable for proper execution of Contractor's Work. Contractor will be held accountable for damages to District for that Work that it failed to inspect or should have inspected. Contractor's failure to inspect and report shall constitute Contractor's acceptance of other contractors' Work as fit and proper for reception of Work, except as to defects which may develop in other contractors' work after execution of Contractor's work.

6.1.1.3 To ensure proper execution of its subsequent Work, Contractor shall measure and inspect Work already in place, and shall immediately report to the Architect, in writing, any discrepancy between executed Work as built and the Contract Documents.

6.1.1.4 Contractor shall ascertain to its own satisfaction the scope of the Project and nature of any other contracts that have been or may be awarded by District in prosecution of the Project and the potential impact of such Work on the Baseline Schedule or Schedule updates.

6.1.1.5 Nothing herein contained shall be interpreted as granting to Contractor the exclusive occupancy at the site of Project. Contractor shall not cause any unnecessary hindrance or delay to any other contractor working on the Project Site. If execution of any contract by the District is likely to cause interference with Contractor's performance of this Contract, once Contractor provides District timely written notice and identifies the Schedule Conflict, District shall decide which contractor shall cease work temporarily and which contractor shall continue, or whether Work can be coordinated so that contractors may proceed simultaneously.

6.1.1.6 District shall not be responsible for any damages suffered, or extra costs incurred by Contractor resulting directly or indirectly from award or performance or attempted performance of any other contract or contracts at the Project necessary for the performance of the Project (examples include Electrical Utility Contractor, separate offsite contractor, a separate grading contractor, furniture installation etc.).

**CONTRACTOR IS AWARE THAT THIS CONTRACT MAY BE SPLIT  
INTO SEVERAL PHASES BASED ON DOCUMENTATION**



**PROVIDED WITH THIS BID OR DISCUSSED AT THE JOB WALK. CONTRACTOR HAS MADE ALLOWANCE FOR ANY DELAYS OR DAMAGES THAT MAY ARISE FROM COORDINATION WITH CONTRACTORS REQUIRED FOR OTHER PHASES. IF ANY DELAYS SHOULD ARISE FROM ANOTHER CONTRACTOR WORKING ON A DIFFERENT PHASE, CONTRACTOR'S SOLE REMEDY FOR DAMAGES, INCLUDING DELAY DAMAGES, SHALL BE AGAINST THE CONTRACTOR WHO CAUSED SUCH DAMAGE AND NOT THE DISTRICT. CONTRACTOR SHALL PROVIDE ACCESS TO OTHER CONTRACTORS FOR OTHER PHASES AS NECESSARY TO PREVENT DELAYS AND DAMAGES TO OTHER CONTRACTORS WORKING ON OTHER PHASES OF CONSTRUCTION.**

6.1.2 District's Right to Carry Out the Work. See Article 2.2.

6.1.3 Designation as Contractor

6.1.3.1 When separate contracts are awarded to contractors on the Project site, the term "Contractor" in the Contract Documents in each case shall mean the Contractor who executes each separate District/Contractor Agreement.

6.1.4 District Notice to Contractor of Other Contractors

6.1.4.1 Contractor shall have overall responsibility to reasonably coordinate and schedule Contractor's activities with the activities of the District's forces and of each separate contractor with the Work of Contractor, who shall cooperate with them. Contractor shall participate with other separate contractors and the District in reviewing their construction schedules when:

- a. Notice is provided in the Contract Documents of other scope of Work,
- b. There is known Work to be performed by other contractors,
- c. Outside contractors are hired by utilities,
- d. The Contract Document provides "Work by Others" or "By Others,"
- e. It is specifically noted during the Pre-Bid Conference,
- f. It is specifically noted in the Mandatory Job Walk,
- g. Affected by CO or ICD, and
- h. With respect to the installation of:
  1. Furniture,
  2. Electronics and networking equipment,
  3. Cabling,
  4. Low voltage,
  5. Off-site work,
  6. Grading (when by a separate contractor),

7. Environmental remediation when excluded by the Contract Documents (i.e. asbestos, lead, or other hazardous waste removal),
8. Deep cleaning crews,
9. Commissioning and testing,
10. Keying and re-keying, and
11. Programming.

6.1.4.2 Exception where no Coordination is required on the Part of Contractor for Turn Key Operations. If Contractor has specifically outlined a "Turn Key" or "Complete Delivery" of a final completed operational school in writing as part of the Baseline Schedule.

6.1.4.3 Contractor shall make any revisions to the Baseline Schedule (or Schedule Update) and Contract Sum deemed necessary after a joint review and mutual agreement. The Baseline Schedule (or Schedule Update) shall then constitute the Schedules to be used by Contractor, separate contractors, and the District until subsequently revised. Additionally, Contractor shall coordinate with Architect, District, and Inspector to ensure timely and proper progress of Work.

## 6.2 CONSTRUCTIVE OWNERSHIP OF PROJECT SITE AND MATERIAL

- 6.2.1 Upon commencement of Work, Contractor becomes the constructive owner of the entire site, improvements, materials, and equipment on Project site. Contractor must ensure proper safety and storage of all materials and assumes responsibility as if Contractor was the owner of the Project site. All risk of loss or damage shall be borne by Contractor during the Work until the date of Completion. As constructive owner of the Project site, Contractor must carry adequate insurance in case of calamity and is not entitled to rely on the insurance requirements as set forth in this Agreement as being adequate coverage in case of calamity.

## 6.3 DISTRICT'S RIGHT TO CLEAN UP

- 6.3.1 If a dispute arises among Contractor, separate contractors, and the District as to the responsibility under their respective contracts for maintaining the premises and surrounding area free from waste materials and rubbish, as described in Article 3.12, the District may clean up and allocate the cost among those it deems responsible.

**END OF SECTION 00 72 06**

**ARTICLE 7**  
**CHANGES IN THE WORK**

**7.1 CHANGES**

**7.1.1 No Changes Without Authorization**

7.1.1.1 There shall be no change whatsoever in the Drawings, Specifications, or in the Work without an executed Construction Change Directive, or order by the Architect for a minor change in the Work as herein provided. District shall not be liable for the cost of any extra work or any substitutions, changes, additions, omissions, or deviations from the Drawings and Specifications, unless the District's Governing Board or designated representative with delegated authority (subject to Board ratification) has authorized the same, and the cost thereof approved in writing by Change Order (CO) or executed Construction Change Directive. No extension of time for performance of the Work shall be allowed hereunder unless claim for such extension is made at the time changes in the Work are ordered, and such time duly adjusted in writing in the CO. The provisions of the Contract Documents shall apply to all such changes, additions, and omissions with the same effect as if originally embodied in the Drawings and Specifications. Notwithstanding anything to the contrary in this Article 7, all COs shall be prepared and issued by the Architect and shall become effective when executed by the District's Governing Board, the Architect, and Contractor.

7.1.1.2 Should any CO result in an increase in the Contract Price, the cost of such CO shall be agreed to, in writing, in advance by Contractor and District and be subject to the monetary limitations set forth in Public Contract Code section 20118.4 (check with the District since there are different interpretations of the limitations of Public Contract Code section 20118.4 depending on the County the Project is located). In the event that Contractor proceeds with any change in Work without first notifying District and obtaining the Architect's and District's consent to a CO, Contractor waives any Claim of additional compensation for such additional work, and Contractor takes the risk that a notice of noncompliance may issue, a critical path Project delay may occur, and Contractor will also be responsible for the cost of preparation and DSA Construction Change Document (CCD) review fees for a corrective DSA approved CCD.

**CONTRACTOR UNDERSTANDS, ACKNOWLEDGES, AND AGREES THAT THE REASON FOR THIS NOTICE REQUIREMENT IS SO THAT DISTRICT MAY HAVE AN OPPORTUNITY TO ANALYZE THE WORK AND DECIDE WHETHER THE DISTRICT SHALL PROCEED WITH THE CO OR ALTER THE PROJECT SO THAT SUCH CHANGE IN WORK BECOMES UNNECESSARY AND TO AVOID THE POSSIBLE DELAYS ASSOCIATED WITH THE ISSUANCE OF A NOTICE OF NONCOMPLIANCE.**

**7.1.2 Notices of Noncompliance**

7.1.2.1 Contractor deviation or changes from approved Plans and Specifications may result in the issuance of a notice of noncompliance (see DSA Form 154). Contractor is specifically notified that deviations from the Plans and Specifications, whether major or minor, may result in the requirement to obtain a DSA CCD to correct the notice of noncompliance (see Article 7.3.1 for definition of CCD). In some cases, the lack of a DSA approved CCD *and* verification from

the Inspector that a notice of noncompliance has been corrected may result in a critical path delay to the next stage of Work on the Project. Specifically, a deviation from approved Plans and Specifications may prevent approval of the category of Work listed in the DSA 152 Project Inspection Card. Any delays that are caused by Contractor's deviation from approved Plans and Specifications shall be Contractor's responsibility.

### 7.1.3 Architect Authority

7.1.3.1 The Architect will have authority to order minor changes in the Work that do not involve DSA approval not involving any adjustment in the Contract Sum or an extension of the Contract Time.

## 7.2 CHANGE ORDER (CO)

7.2.1 A CO is a written instrument prepared by the Architect and signed by the District (as authorized by the District's Governing Board), Contractor, and the Architect stating their agreement upon all of the following:

7.2.1.1 A description of a change in the Work,

7.2.1.2 The amount of the adjustment in the Contract Sum, if any, and

7.2.1.3 The extent of the adjustment in the Contract Time, if any.

7.2.2 A CO may be comprised of Immediate Change Directives (ICDs), Response to Request for Proposals (RFPs), and Change Order Requests (CORs).

## 7.3 CONSTRUCTION CHANGE DOCUMENT (CCD Category A, and CCD Category B) and IMMEDIATE CHANGE DIRECTIVE (ICD)

### 7.3.1 Definitions

7.3.1.1 *Construction Change Document (CCD)*. A CCD is a DSA term that is used to address changes to the DSA approved Plans and Specifications. There are two types of CCDs: (1) DSA approved CCD Category A (DSA Form 140) for Work affecting structural, access compliance, or fire/life safety of the Project, which will require a DSA approval, and (2) CCD Category B (DSA Form 141) for work not affecting structural safety, access compliance, or fire/life safety that will not require a DSA approval (except to confirm that no approval is required).

7.3.1.2 *Immediate Change Directive (ICD)*. An ICD is a written order to Contractor prepared by the Architect and signed by the District (and CM if there is a CM on the Project) and the Architect, directing a change in the Work and stating a proposed basis for adjustment, if any, in the Contract Sum, Contract Time, or both. The District may by ICD, without invalidating the Contract, direct immediate changes in the Work within the general scope of the Contract consisting of additions, deletions, or other revisions within. If applicable, the Contract Sum and Contract Time will be adjusted accordingly:

a. In the case of an ICD being issued, Contractor must commence Work immediately, or delays from failure to perform the ICD shall be the responsibility of Contractor and the failure to move forward with Work immediately shall also be grounds for Termination under Article 14.

b. An ICD does not automatically trigger an Article 7.6 Dispute or Claim. Contractor must timely follow the procedures outlined in Articles 7.6 and 4.6, where applicable.

c. Refer to Division 01 and Supplementary General Conditions for a copy of the proposed ICD form.

### 7.3.2 Use to Direct Change

7.3.2.1 An ICD shall be used to move work forward immediately and to avoid delay. In some cases, an ICD shall be issued in the absence of agreement on the terms of a CO, COR, or RFP. A copy of an ICD form is provided in the Supplementary General Conditions and Division 01. The anticipated not-to-exceed price for the Work will be inserted into the ICD. In the case of an ICD issued to correct Contractor Deficiencies or to correct a Contractor caused notice of noncompliance, the ICD may be issued with \$0 and no additional time. Contractor may prepare a COR associated with the ICD, pursuant to Article 7. However, Contractor shall proceed with all Work required under an approved ICD immediately upon issuance. Failure to proceed with the Work under an ICD shall be grounds for Termination for Cause under Article 14 or take over the Work under Article 2.2.

7.3.2.2 If adequate time exists, an ICD may be subject of an RFP for pricing and determination if any time that may be required; however, if an RFP is not completed, Contractor shall immediately commence Work when an ICD is issued. If the RFP is incomplete, it may still be completed to be submitted for pricing purposes as long as the RFP is submitted within the timeline provided by the RFP, or within ten (10) days following issuance of the ICD.

### 7.3.3 Immediate Change Directive Issued Over a Notice of Noncompliance or to Cover Work Subject to a DSA 152 Sign Off

7.3.3.1 In some cases, an ICD shall be for the purpose of proceeding with Work to keep the Project on Schedule and as an acknowledgement by the District that Contractor is proceeding with Work contrary to a notice of noncompliance, prior to issuance of a DSA approved CCD Category A, or to direct the covering of Work that has not yet received a DSA 152 Inspection Approval to move forward.

7.3.3.2 *Contractor Compliance with all Aspects of an ICD.* Contractor is to undertake the ICD and comply with all aspects of the Work outlined in the ICD. Inspector is to inspect the Work pursuant to the ICD. Failure to follow the ICD may result in deduction of the ICD Work under Article 2.2 or Termination of Contractor pursuant to Article 14.

7.3.3.3 *Exception in the Case of DSA Issued Stop Work Order.* Contractor must proceed with an ICD even if a CCD has not been approved by DSA, except in the case of a DSA issued Stop Work Order. If a DSA Stop Work Order is issued, Contractor must stop work and await further direction from the District.

7.3.3.4 *ICD Due to Contractor Deficiency or Contractor Caused Notice of Non-Compliance.* If an ICD is issued to correct a Contractor Deficiency or a Contractor caused notice of noncompliance, Contractor specifically acknowledges responsibility for all consequential damages associated with Contractor Deficiency or Contractor caused notice of noncompliance, and all consequential damages and costs incurred to correct the deficiency under Article 4.5.

## 7.4 REQUEST FOR INFORMATION (RFI)

### 7.4.1 Definition

7.4.1.1 A RFI is a written request prepared by Contractor requesting the Architect to provide additional information necessary to clarify or amplify an item of which Contractor believes is not clearly shown or called for in the Drawings or Specifications, or to address problems that have arisen under field conditions.

7.4.1.2 A RFI shall not be used as a vehicle to generate time extensions.

7.4.1.3 Resubmission of the same or similar RFI is not acceptable. RFIs that are similar should be addressed in Project meetings where the requestor (Contractor, Subcontractor, or vendor) is able to address the particular issue with the Architect or Engineer, and a resolution addressed in the minutes.

7.4.1.4 A RFI response applicable to a specific area cannot be extended to other situations unless specifically addressed in writing within the RFI or in a separate RFI.

7.4.1.5 RFIs should provide a proposed solution and should adequately describe the problem that has arisen.

### 7.4.2 Scope

7.4.2.1 The RFI shall reference all the applicable Contract Documents, including Specification Section, detail, page numbers, Drawing numbers, and sheet numbers, etc. Contractor shall make suggestions and interpretations of the issue raised by the RFI. A RFI cannot modify the Contract Cost, Contract Time, or the Contract Documents.

### 7.4.3 Response Time

7.4.3.1 The Architect must respond to a RFI within a reasonable time after receiving such request. If the Architect's response results in a change in the Work, then such change shall be affected by a written CO, COR, RFP, or ICD, as appropriate. If the Architect cannot respond to the RFI within a reasonable time, the Architect shall notify Contractor, with copies to the Inspector and the District, of the amount of time that will be required to respond.

### 7.4.4 Costs Incurred

7.4.4.1 Contractor shall be responsible for any costs incurred for professional services as more fully set forth in Article 4.5, which shall be subject to a Deductive Change Order, if an RFI requests an interpretation or decision of a matter where the information sought is equally available to the party making such request. District, at its sole discretion, shall issue a Deductive Change Order to Contractor for all such professional services arising from this Article.

## 7.5 REQUEST FOR PROPOSAL (RFP)

### 7.5.1 Definition

7.5.1.1 A RFP is a written request prepared by the Architect (and/or CM) requesting Contractor to submit to the District and the Architect an estimate of the effect of a proposed change on the Contract Price and/or the Contract Time, as applicable. If Architect issues a Bulletin, the changed items in the Bulletin shall be addressed as a RFP and all responses shall be prepared to a Bulletin as addressed in this Article 7.5. A form RFP is included in the Division 01 documents.

7.5.2 Scope

7.5.2.1 A RFP shall contain adequate information, including any necessary Drawings and Specifications, to enable Contractor to provide the cost breakdowns required by Article 7.7. Contractor shall not be entitled to any additional compensation for preparing a response to a RFP, whether ultimately accepted or not.

7.5.3 Response Time

7.5.2.2 Contractor shall respond to a RFP within ten (10) days, or the time period otherwise set forth in the RFP.

7.6 **CHANGE ORDER REQUEST (COR)**

7.6.1 Definition

7.6.1.1 A COR is a written request prepared by Contractor and supported by backup documentation requesting that the District and the Architect issue a CO based upon a proposed change, cost, time, or cost and time that may be incurred on the Project or arising from a RFP, ICD, or CCD.

7.6.2 Changes in Price

7.6.2.1 A COR shall include breakdowns per Article 7.7 to validate any change in Contract Price due to proposed change or Claim.

7.6.3 Changes in Time

7.6.3.1 A COR shall also include any additional time required to complete the Project only if the delay is a critical path delay. Any additional time requested shall not be the number of days to make the proposed change but must be based upon the impact to the Project Schedule as defined in Article 8. A schedule fragment showing the time delay must be submitted with the COR. Any changes in time will be granted only if there is an impact to the critical path. If Contractor fails to request a time extension in a COR, then Contractor is thereafter precluded from requesting or claiming a delay.

7.7 **COST OF CHANGE ORDERS**

7.7.1 Scope

7.7.1.1 Within ten (10) days after a request is made for a change that impacts the Contract Sum as defined in Article 9.1, the critical path, or the Contract Time as defined in Article 8.1.1, Contractor shall provide the District and Architect with

a written estimate of the effect of the proposed CO upon the Contract Sum and the actual cost of construction, which shall include a complete itemized cost breakdown of all labor and materials showing actual quantities, hours, unit prices, and wage rates required for the change, and the effect upon the Contract Time of such change. Changes may be made by District by an appropriate written CO, or, at the District's option, such changes shall be implemented immediately upon Contractor's receipt of an appropriate written CCD.

7.7.1.2 District may, as provided by law and without affecting the validity of this Agreement, order changes, modification, deletions, and extra work by issuance of written CO or CCD from time to time during the progress of the Project, Contract Sum being adjusted accordingly. All such Work shall be executed under conditions of the original Agreement, except that any extension of time caused thereby shall be adjusted at time of ordering such change. District has discretion to order changes on a "time and material" basis with adjustments to time made after Contractor has justified through documentation the impact on the critical path of the Project.

7.7.1.3 *Time and Material Charges.* If the District orders Work on a "time and material" basis, timesheets shall be signed daily by the Inspector or District Representative at or near the time the Work is actually undertaken and shall show the hours worked and the Work actually completed. No time sheets shall be signed the next day. A copy shall be provided to the person signing the document at the time the document is signed, but not before 10:00am the following day.

#### 7.7.2 Determination of Cost

7.7.2.1 The amount of the increase or decrease in the Contract Price from a CO or COR, if any, shall be determined in one or more of the following ways as applicable to a specific situation:

a. By mutual acceptance of a lump sum properly itemized and supported by sufficient substantiating data to permit evaluation. If an agreement cannot be reached within 15 days after submission and negotiation of Contractor's proposal, Contractor may submit, pursuant to Article 7.7.3., submission of sums, which, if having no basis in fact are at the sole risk of Contractor and may be a violation of the False Claims Act set forth under Government Code section 12650 et seq.:

1. If the District objects to 7.7.2(a) as a method for submission due to inaccuracies in the submitted amount, overstatement of manpower or time required to perform the CO, or unreliability of the data provided, the District may either have the Architect or a professional estimator determine the cost for the CO and the applicable time extension, or Contractor shall utilize Article 7.7.2(d) or 7.7.3.

2. Once the District provides a written objection to use of Article 7.7.2(a) due to unreliability of the estimated price, Contractor shall no longer utilize mutual acceptance of a lump sum as a method for submission of CO's and shall provide a breakdown of estimated or actual costs pursuant to Article 7.7.2(d) or 7.7.3:

a. By unit prices contained in Contractor's original bid and incorporated in the Project documents or fixed by subsequent agreement between District and Contractor,

b. By cost to be determined in a manner agreed upon by the parties at a



mutually acceptable fixed or percentage fee. However, in the case of disagreement, Contractor must utilize the procedure under Article 7.7.3,

c. By cost of material, labor, and percentage of overhead and profit. If the value is determined by this method, the following requirements shall apply:

a. Basis for Establishing Costs:

- a) Labor will be the actual cost for wages prevailing locally for each craft or type of workers at the time the extra Work is done, plus employer payments of payroll taxes and Workers' Compensation Insurance (excluding insurance costs as part of the overhead and profit mark-up), health and welfare, pension, vacation, apprenticeship funds, and other direct costs resulting from federal, state, or local laws, as well as assessments or benefits required by lawful collective bargaining agreements. In no case shall the total labor cost exceed the applicable prevailing wage rate for that particular classification. The use of a labor classification that would increase the extra Work cost will not be permitted unless Contractor establishes the necessity for such additional costs. Labor costs for equipment operators and helpers shall be reported only when such costs are not included in the invoice for equipment rental.
- b) Materials shall be at invoice or lowest current price at which such materials are locally available and delivered to the Site in the quantities involved, plus sales tax, freight, and delivery. The District reserves the right to approve materials and sources of supply, or to supply materials to Contractor if necessary, for the progress of the Work. No markup shall be applied to any material provided by the District.
- c) Tool and Equipment Rental. No payment will be made for the use of tools that have a replacement value of \$250 or less.
- d) Regardless of ownership, the rates to be used in determining equipment rental costs shall not exceed listed rates prevailing locally at equipment rental agencies or distributors at the time the Work is performed. Rates applied shall be appropriate based on actual equipment need and usage. Monthly, weekly, or other extended-use rates that result in the lowest cost shall be applied if equipment is used on site for extended periods.
- e) The rental rates paid shall include the cost of fuel, oil, lubrication, supplies, small tools, necessary attachments, repairs and maintenance of any kind, depreciation, storage, insurance, and all incidentals.
- f) Necessary loading and transportation costs for equipment used on the extra Work shall be included. If equipment is used intermittently, and when not in use could be returned to its rental source at less expense to the District than holding it at the Work site, it shall be returned, unless Contractor elects to keep it at the Work site at no expense to the District.
- g) All equipment shall be acceptable to the Inspector, in good working condition, and suitable for the purpose for which it is to be used. Manufacturer's ratings and modifications shall be used to classify equipment, and equipment shall be powered by a unit of at least the

minimum rating recommended by the manufacturer.

h) If tool and equipment charges are part of a Dispute, Claim, or Appeal, the District reserves the right to utilize actual costs for tools and equipment, or a depreciation rate for equipment based on audit finding under Article 13.11 and deduct any rental charges that exceed actual or depreciated costs.

d. By other items. The District may authorize other items that may be required for the extra work. Such items include labor, services, materials, and equipment that are different in their nature from those required by the Work, and that are of a type not ordinarily available from Contractor or any of the Subcontractors. Invoices covering all such items in detail shall be submitted with the request for payment,

e. By invoices. Vendors' invoices for materials, equipment rental, and other expenditures shall be submitted with the COR. If the request for payment is not substantiated by invoices or other documentation, the District may establish the cost of the item involved at the lowest price that was current at the time of the Daily Report, and

f. By overhead. Overhead, including direct and indirect costs, shall be submitted with the COR and include field overhead, home office overhead, off-site supervision, CO preparation/negotiation/research, time delays, Project interference and disruption, additional guaranty and warranty durations, onsite supervision, additional temporary protection, additional temporary utilities, additional material handling costs, liability and property damage insurance, and additional safety equipment costs.

7.1.2 Format for COR or CO's

The following format shall be used as applicable by the District and Contractor to communicate proposed additions to the Contract. All costs submitted shall be actual costs, and labor shall be unburdened labor. See below for approved Construction Change Order Form:

	EXTRA	CREDIT
(a) Material (attach itemized quantity and unit cost plus sales tax)		
(b) Labor (attach itemized hours and rates)		
(c) Equipment (attach invoices)		
(d) <b>Subtotal</b>		
(e) OVERHEAD: Social Security and Unemployment Taxes, not to exceed as follows: FICA @ <b>6.2%</b> - with a wage ceiling of \$84,900; Medicare @ <b>1.45%</b> - no wage ceiling; FUTA @ <b>.6%</b> - with a wage ceiling of \$7,000; ETT and SUI @ <b>3.4%</b> - with a wage ceiling of \$7,000; Workers' Compensation @ <b>5.94% **</b> ; <b>Total not-to-exceed 18% (17.59%) **</b> . ** Workers' Compensation and Total Not-To-Exceed percentages to be verified by employer. NEED TO REVIEW LABOR BURDEN		

(f)	<b>Subtotal</b>	
(g)	PROFIT: Subcontractors maximum allowed Profit not to exceed ten percent (10%)	
(h)	<b>Subtotal</b>	
(i)	PROFIT: General contractor's maximum profit allowed on subcontractor's portion of work not to exceed five percent (5%)	
<hr/>		
(j)	<b>Subtotal</b>	
(k)	PROFIT: General contractor's maximum profit allowed on contractor's self-performed portion of work not to exceed ten percent (10%)	
(m)	<b>Subtotal</b>	
(n)	Bond not to exceed two percent (2%) of Item (m)	
<hr/>		
(p)	<b>TOTAL</b>	

7.7.3.2 The undersigned Contractor approves the foregoing CO or ICD as to the changes, if any, and the Contract price specified for each item and as to the extension of time allowed, if any, for completion of the entire Work on account of said CO or ICD, and agrees to furnish all labor, materials, and services, and perform all Work necessary to complete any additional Work specified therein, for the consideration stated herein. It is understood that said CO or ICD shall be effective when approved by the Governing Board of the District.

7.7.3.3 It is expressly understood that the value of such extra Work or changes, as determined by any of the aforementioned methods, expressly includes any and all of Contractor's costs and expenses, both direct and indirect, resulting from additional time required on the Project, or resulting from delay to the Project. Any costs, expenses, damages, or time extensions not included are deemed waived.

7.7.3.4 Contractor expressly acknowledges and agrees that any change in the Work performed shall not be deemed to constitute a delay or other basis for claiming additional compensation based on theories, including, but not limited to, acceleration, suspension, or disruption to the Project.

7.7.3.5 Adjustment for Time and Compensable Delay.

7.7.3.6 A CO shall also include any additional time required to complete the Project. Any additional time requested shall not be the number of days to make the proposed change but must be based upon the impact to the Project Schedule as defined in Article 8 of the General Contract. A schedule fragment showing the time delay must be submitted with the CO. Any changes in time will be granted

only if there is an impact to the critical path. If Contractor fails to request a time extension in a CO, then Contractor is thereafter precluded from requesting or claiming a delay.

#### 7.7.4 Deductive Change Orders

7.7.4.1 All Deductive Change Orders must be prepared using the form under Article 7.7.3 (d) only, setting forth the actual costs incurred. Except in the case of an Article 2.2 or 9.6, Deductive Change Order, where no mark-up shall be allowed, Contractor will be allowed a maximum of 5% total profit and overhead.

7.7.4.2 For unilateral Deductive Change Orders, or where credits are due from Contractor for Allowances, deductive items, inspection, damage, DSA CCD review costs, Architect or Inspector costs for after hours or corrective services, or Work removed from the Agreement under Article 2.2 or Article 9.6, there shall be no mark-up.

7.7.4.3 District may, at any time after a Deductive Change Order is presented to Contractor by District for items under Article 2.2 or Article 9.6, if there is disagreement as to the Deductive Change Order, issue a unilateral Deductive Change Order on the Project and deduct the Deductive Change Order from a Progress Payment, Final Payment, or Retention.

#### 7.7.5 Discounts, Rebates, and Refunds

7.7.5.1 For purposes of determining the cost, if any, of any change, addition, or omission to the Work hereunder, all trade discounts, rebates, refunds, and all returns from the sale of surplus materials and equipment shall accrue and be credited to Contractor, and Contractor shall make provisions so that such discounts, rebates, refunds, and returns may be secured, and the amount thereof shall be allowed as a reduction of Contractor's cost in determining the actual cost of construction for purposes of any change, addition, or omissions in the Work as provided herein. All CO's are subject to Audit under Article 13.11 for discounts, rebates, and refunds.

#### 7.7.6 Accounting Records

7.7.6.1 With respect to portions of the Work performed by COs and CCDs on a time-and-materials unit cost, or similar basis, Contractor shall keep and maintain cost accounting records in a format consistent with accepted accounting standards and satisfactory to the District, which shall be available to the District on the same terms as any other books and records Contractor is required to maintain under the Contract Documents.

7.7.6.2 Any time and material charges shall require Inspector's signature on time and material cards showing the hours worked and the Work actually completed (see Article 7.7.1.3).

#### 7.7.7 Notice Required

7.7.7.1 If Contractor desires to initiate a Dispute for an increase in the Contract Price, or any extension in the Contract Time for completion, Contractor shall notify the applicable party responsible for addressing the Dispute or Claim pursuant to Article 4.6. No Claim or Dispute shall be considered unless made in accordance

with this subparagraph. Contractor shall proceed to execute the Work even though the adjustment may not have been agreed upon. Any change in the Contract Price or extension of the Contract Time resulting from such Claim shall be authorized through a CO.

7.7.8 Applicability to Subcontractors

7.7.8.1 Any requirements under this Article 7 shall be equally applicable to COs, CORs or ICDs issued to Subcontractors by Contractor to the same extent required by Contractor.

7.7.9 Alteration to Change Order Language

7.7.9.1 Contractor shall not alter or reserve time in CORs, COs or ICDs. Contractor shall execute finalized COs and proceed under Article 7.7.7 and Article 4.6 with proper notice. If Contractor intends to reserve time without an approved Critical Path Method Schedule prepared pursuant to Article 8, or without submitting a fragment showing delay to critical path, then Contractor may be prosecuted pursuant to the False Claim Act.

**END OF SECTION 00 72 07**

**ARTICLE 8**  
**TIME AND SCHEDULE**

**8.1 DEFINITIONS**

8.1.1 Contract Time

8.1.1.1 Contractor shall perform and reach Substantial Completion (see Article 1.1.46) within the time specified in the Agreement Form. Moreover, Contractor shall perform Work in strict accordance with the Project Milestones in the Contract Documents and shall proceed on a properly developed and approved Baseline Schedule, which represents Contractor's view of the practical way in which the Work will be accomplished. Note that Contract Time includes and incorporates all Float and other Baseline inclusions as noted in Article 8.3.2.1, and as otherwise specifically noted in Article 8.

8.1.2 Notice to Proceed

8.1.2.1 District may give a Notice to Proceed within 90 days of the award of the bid by District. Once Contractor has received the Notice to Proceed, Contractor shall complete the Work in the period of time referenced in the Contract Documents.

8.1.2.2 In the event that District desires to postpone the giving of the Notice to Proceed beyond this three-month period, it is expressly understood that with reasonable notice to Contractor, the giving of the date to proceed may be postponed by District. It is further expressly understood by Contractor, that Contractor shall not be entitled to any claim of additional compensation as a result of the postponement of the giving of the Notice to Proceed.

8.1.2.3 If Contractor believes that a postponement will cause a hardship to Contractor, Contractor may terminate the Contract with written notice to District within ten (10) days after receipt by Contractor of District's notice of postponement. It is further understood by Contractor that in the event that Contractor terminates the Contract as a result of postponement by the District, the District shall only be obligated to pay Contractor for the Work that Contractor had performed at the time of notification of postponement, and the grounds for notification and hardship shall be subject to Audit pursuant to Article 13.11. Should Contractor terminate the Contract as a result of a notice of postponement, District may award the Contract to the next lowest responsible bidder.

8.1.3 Computation of Time

8.1.3.1 The term "day(s)" as used in the Contract Documents shall mean calendar day(s) unless otherwise specifically defined.

8.1.4 Float

8.1.4.1 Float is the time the total number of days an activity may be extended or delayed without delaying the Completion Date shown in the schedule. Float will fall into three categories: (1) Rain Days, (2) Governmental Delays, and (3) Project Float. Project Float and Rain Days are owned by the Project and may

be utilized as necessary for critical path delays once the days become available for consumption (i.e. the Rain Day arrives and is not utilized since rain did not occur or Work was performed on the interior of a building). Governmental Delay Float shall not be utilized for purposes other than to address critical path delays that arise due to approvals, Inspector approvals, or verifications on governmental forms.

8.1.4.2 *Governmental Delay Float*. It is anticipated that there will be governmental-generated delays. Specific to DSA approvals, it is anticipated that not less than 25 days per calendar year be set aside as Governmental Delay Float to be utilized on critical path delays. A pro-rated number of days, based on the minimum of 25 Governmental Delay Float days per year period, shall be calculated from the length of Contract Time. For example, a two (2) year Contract Time shall require a minimum of 50 days of Governmental Delay Float, where a Contract Time of 182 days (6 months) requires a minimum of 12.5 days of Governmental Delay Float. This Governmental Delay Float must be incorporated into the Schedule and each critical activity, at Contractor's discretion. Major categories of Work under DSA 152 (Project Inspection Card) should also be allocated as Governmental Delay Float.

8.1.4.3 Contractor's failure to establish a protocol for requesting inspections is not grounds to utilize Governmental Delay Float. As noted in Article 3.1.4, 48 hours advance notice of commencing Work on a new area is required after submitting form DSA 156, and under PR 13-01 Special Inspection reports are not required to be posted until at least 14 days after the Work was inspected. Failure to plan, and pay (if applicable), for quicker delivery of Special Inspections is not Governmental Delay Float under Article 8.1.4.1. If Governmental Delay Float is not utilized, this float is carried through to other DSA 152 categories of inspection and consumed over the course of the Project

8.1.4.4 Governmental Delay Float may be utilized for a DSA Stop Work Order regardless of fault as defined under Education Code section 17307.5(b).

8.1.4.5 *Inclement Weather (Unusually Severe Weather)*. Contractor will only be allowed a time extension for unusually severe weather if it results in precipitation or other conditions that in the amount, frequency, or duration, is in excess of the norm at the location and time of year in question, as established by NOAA weather data. No less than 22 calendar days for each calendar year for Northern California will be allotted for in Contractor's schedule for each winter weather period or carried at the end of the schedule as Rain Float. Float for weather days in other geographical regions shall be adjusted based on NOAA weather data for the geographical location. Contractor has anticipated all the days it takes to dry out and re-prepare areas that may be affected by weather delays that extend beyond the actual weather days. The weather days shall be shown on the schedule, and if not used will become float for the Project's use. Contractor will not be allowed a day-for-day weather delay for periods noted as float in the Schedule. Contractor is expected to work seven (7) days per week (if necessary, irrespective of inclement weather), to maintain access, and to protect the Work under construction from the effects of inclement weather. Additional days beyond the NOAA shall be considered under the same criteria that weather days are granted below.

8.1.4.6 A Rain Day shall be granted by Architect or Construction Manager (CM) if the weather prevents Contractor from beginning Work at the usual daily

starting time, or prevents Contractor from proceeding with 75 percent (75%) of the normal labor and equipment force towards completion of the day's current controlling item on the accepted schedule for a period of at least five (5) hours, and the crew is dismissed as a result thereof, the Architect will designate such time as unavoidable delay and grant one (1) critical path activity calendar day extension if there is no available float for the calendar year.

8.1.4.7 *Project Float.* Contractor may determine some activities require a lesser duration than allocated and may set aside float in the Project Schedule. There shall be no early completion. Instead, to the extent float is either addressed at the end of the Project or throughout each category of critical path work, Project float may be used as necessary during the course of the Project and allocated on a first come, first serve basis. However, the use of float does not extend to Governmental Delay Float, which shall only be used for Governmental Delays.

## 8.2 HOURS OF WORK

### 8.2.1 Sufficient Forces

8.2.1.1 Contractors and Subcontractors shall continuously furnish sufficient forces to ensure the prosecution of the Work in accordance with the Construction Schedule.

### 8.2.2 Performance During Working Hours

8.2.2.1 Work shall be performed during regular working hours as permitted by the appropriate governmental agency, except that in the event of an emergency, or when required to complete the Work in accordance with job progress, Work may be performed outside of regular working hours with the advance written consent of the District and approval of any required governmental agencies.

### 8.2.3 Costs for After Hours Inspections

8.2.3.1 If the Work done after hours is required by the Contract Documents, a Recovery Schedule, or as a result of Contractor's failure to plan, and inspection must be conducted outside the Inspector's regular working hours, the costs of any after hour inspections, shall be borne by Contractor.

8.2.3.2 If the District allows Contractor to do Work outside regular working hours for Contractor's convenience, the costs of any inspections required outside regular working hours shall be invoiced to Contractor by the District and a Deductive Change Order shall be issued from the next Progress Payment.

8.2.3.3 If Contractor elects to perform Work outside the Inspector's regular working hours, costs of any inspections required outside regular working hours shall be invoiced to Contractor by the District and a Deductive Change Order shall be issued from the next Progress Payment.

## 8.3 PROGRESS AND COMPLETION

### 8.3.1 Time is of the Essence

8.3.1.1 Time limits stated in the Contract Documents are of the essence to the



Contract. By executing the Agreement, Contractor confirms that the Contract Time is a reasonable period for performing the Work.

### 8.3.2 Baseline Schedule Requirements

8.3.2.1 *Timing.* Within ten (10) calendar days after Notice to Proceed, Contractor shall submit a practical schedule showing the order in which Contractor proposes to perform the Work, and the dates on which Contractor contemplates starting and completing the salient categories of the Work. This first schedule that outlines Contractor's view of the practical way in which the Work will be accomplished is the Baseline Schedule. If Contractor Fails to submit the Baseline Schedule within the ten (10) days noted, then District may withhold processing and approval of progress payments pursuant to Articles 9.4 and 9.6.

8.3.2.2 *District Review and Approval.* District, Architect, and CM will review both a paper and electronic copy of the Baseline Schedule and may provide comments as noted in this Article and either approve or disapprove the Baseline Schedule. All Schedules shall be prepared using an electronic scheduling program acceptable to District. All Schedules shall be delivered in an electronic format usable by the District. All logic ties and electronic information shall be included in the electronic copy of the Baseline Schedule that is delivered to the District.

8.3.2.3 *Schedule Must Be Within the Given Contract Time.* The Baseline Schedule shall not exceed time limits set forth in the Contract Documents and shall comply with all of the scheduling requirements as set forth in the Specifications and Contract Documents.

8.3.2.4 *Submittals Must Be Incorporated (see Articles 3.7 and 3.9.* Contractor shall include Submittals as line items in the Baseline Schedule as required under Articles 3.7.2 and 3.9.6. Submittals shall not delay the Work, Milestones, or the Completion Date. Failure to include Submittals in the Baseline Schedule shall be deemed a material breach by Contractor.

8.3.2.5 *Float Must Be Incorporated.* The Baseline Schedule must indicate the beginning and completion of all phases of construction and shall use the "critical path method" (CPM) for the value reporting, planning, and scheduling, of all Work required under the Contract Documents. The Baseline Schedule must incorporate all Milestones in the Project and apply Governmental Float at each Milestone in Contractor's discretion. The Baseline Schedule shall incorporate any Schedule provided by the District as part of the bid and shall note durations that will not be adequate or should be shortened based on Contractor's review. These changes shall be identified and incorporated into Contractor's Baseline Schedule as long as requested changes are made within ten (10) days after the District chooses to move forward with the Project. Scheduling is necessary for the District's adequate monitoring of the progress of the Work and shall be prepared in accordance with the time frame described in this Article 8. The Architect may disapprove of any Schedule, or require modification to it, if, in the opinion of the Architect or District, adherence to the Schedule prepared by Contractor will not cause the Work to be completed in accordance with the Agreement.

8.3.2.6 *No Early Completion.* Contractor shall not submit any Schedule showing

early completion without indicating float time through the date set for Project completion by District. Contractor's Baseline Schedule shall account for all days past early completion as float that belong to the Project. Usage of float shall not entitle Contractor to any delay Claim or damages due to delay.

**8.3.2.7 Use of Schedule Provided in Bid Documents.** In some cases, the bid will include a preliminary schedule indicating Milestones and construction sequences for the Project along with general timing for the Project. The preliminary schedule is not intended to serve as the Baseline Schedule utilized for construction. It is up to Contractor to study and develop a Baseline Schedule to address the actual durations and sequences of Work that is anticipated while maintaining the Milestones provided by the District. Contract shall obtain information from Contractor's Subcontractors and vendors on the planning, progress, delivery of equipment, coordination, and timing of availability of Subcontractors so a practical plan of Work is fully developed and represented in the Baseline Schedule.

**8.3.2.8 Incorrect Logic, Durations, Sequences, or Critical Path.** The District may reject or indicate that durations, sequences, critical path, or logic are not acceptable and request changes. The electronic copy of the Baseline Schedule shall have adequate information so logic ties, duration, sequences, and critical path may be reviewed electronically. Contractor is to diligently rebuild and resubmit the Baseline Schedule to represent Contractor's plan to complete the Work and maintain Milestones at, or before, the next progress meeting. If Contractor is not able to build a Baseline Schedule that is acceptable to the District or Architect, the District reserves the right to utilize the unapproved originally submitted Baseline Schedule (see Article 8.3.2.12) and the comments submitted to hold Contractor accountable for timely delivery of Work and maintenance of Milestones. Furthermore, Contractor's representations in the Baseline Schedule, if unacceptable, may also be used as a basis for termination of the Contract under Article 14 if Contractor fails to adequately maintain the Schedule and falls significantly behind without undertaking the efforts to either submit and follow a Recovery Schedule, or fail to submit a Recovery Schedule and make no effort toward recovery on the Project.

**8.3.2.9 Contractor Responsibility Even if Schedule Issues Are Not Discovered.** Failure on the Part of the District to discover errors or omissions in any Schedules submitted shall not be construed to be an approval of the error or omission, and any flawed Schedule is not grounds for a time extension.

**8.3.2.9.1 Inclusions in Baseline Schedule.** In addition to scheduling requirements set forth in Article 8.3.2, Contractor is specifically directed to include (broken out separately) in Contractor's Baseline Schedule and all Schedule updates, the following items required pursuant to these General Conditions, including but not limited to:

1. Rain Day Float (excluding inclement weather) as required under Article 8.1.4. For example, if the NOAA provides 22 days of Rain Days, all 22 days must be incorporated and noted in the Baseline Schedule. Further, any days required to cleanup or dry out shall be included for operations that are likely to require a cleanup or dry out period. Days that are not utilized shall be considered float owned by the Project.
2. Governmental Delay Float under Article 8.1.4.2. This

Governmental Delay Float shall only be utilized for Governmental Delays and shall not be considered available float owned by the Project. This float shall only be distributed to the Project upon the completion of the Project and shall be used to offset Liquidated Damages and shall not generate compensable delays.

3. Submittal and Shop Drawing schedule under Article 3.9.

4. Deferred Approvals under Article 3.9.

5. Time for separate contractors, including furniture installation and start up activities under Article 6.1.

6. Coordination and timing of any Drawings, approvals, notifications, permitting, connection, and testing for all utilities for the Project. Article 2.1.4.

7. Testing, special events, or school activities.

8.3.2.10 *Failure to include Mandatory Schedule Items.* District may withhold payment pursuant to Articles 9.3, 9.4, and 9.6. In lieu of withholding payment for failure to include Mandatory Schedule Items, after the District or Architect has notified Contractor of failure to meet the Baseline Schedule or Updated Schedule requirements, provided a written notification of this failure, a written notice of Schedule preparation errors, and Contractor fails to correct the noted deficiencies, or Contractor does not provide an updated Baseline Schedule correcting the deficiencies, then Contractor shall not be granted an extension of time for failure to obtain necessary items and approvals under Article 8.3.2 and for the time required for failure to comply with laws, building codes, and other regulations (including Title 24 of the California Code of Regulations). Contractor shall maintain all required Article 8.3.2 Schedule items in the Baseline Schedule and indicate any days that have been used as allowed in Article 8. If Contractor fails to include all Article 8.3.2 items in its Baseline Schedule or Schedule Updates and the District either utilizes an Unapproved Schedule under Article 8.3.2.12 or does not object to the inclusion of required scheduling items, then all mandatory Schedule inclusions, including float, shall be utilized in the District's discretion. If the Contract Time is exceeded, then Contractor shall be subject to the assessment of Liquidated Damages pursuant to Article 8.4.

8.3.2.11 *Failure to Meet Requirements.* Failure of Contractor to provide proper Schedules as required by this Article and Article 9 is a material breach of the Contract and grounds for Termination, pursuant to Article 14. The District, at its sole discretion, may choose, instead, to withhold, in whole or in part, any Progress Payments or Retention amounts otherwise payable to Contractor.

8.3.2.12 *Use of an Unapproved Baseline Schedule.* If the Baseline Schedule submitted by Contractor is unacceptable to the District (i.e. failing to meet the requirements of Article 8.3.2), and Contractor does not incorporate or address the written comments to the Baseline Schedule, and a Baseline Schedule is not approved, but due to extreme necessity the District moves forward without an approved Baseline Schedule, Contractor shall diligently revise and meet Schedule update requirements of Article 8 and incorporate all Article 8.3.2 comments in all updates; however, for purposes of Termination pursuant to

Article 14, the unapproved Baseline Schedule initially submitted shall be treated as the Baseline Schedule with durations shortened or revised to accommodate all float, all mandatory Schedule requirements under Article 8.3.2, any requirements in the Contract Documents, and all revisions by the District or Architect.

### 8.3.3 Update Schedules

8.3.3.1 *Updates Shall Be Based on Approved Baseline Schedule.* Except in the case where there has not been agreement as to a Baseline Schedule, the approved Baseline Schedule shall be used to build future Schedule updates. Schedule updates shall be a CPM based Schedule consistent with the Baseline Schedule requirements of 8.3.2.

In the case that no Baseline has been approved, Schedule updates shall be provided monthly and each update shall incorporate all comments and revisions noted as not complying with the requirements of Article 8.3.2. Contractor shall be held to the Article 8.3.2.12, unapproved Baseline Schedule, inclusive of all Milestones, float, comments, and revisions by the District and Architect, all required Baseline Schedule Inclusions under Article 8.3.2, and any requirements in the Contract Documents.

8.3.3.2 *Schedule Updates.* Contractor shall update the approved Schedule each month to address actual start dates and durations, the percent complete on activities, actual completion dates, float times, and estimated remaining duration for the Work in progress, estimated start dates for Work scheduled to start at future times and changes in duration of Work items.

8.3.3.3 *Listing of Items Causing Delays.* Schedule updates shall provide a listing of activities that are causing delay(s) in the progress of Work, and a narrative shall be provided showing a description of problem areas, anticipated delays, and impacts on the Construction Schedule. Simply stating "District Delay" or "Architect Delay" shall be an inadequate listing. Delays shall only be listed if they meet the requirements of Article 8.4.

8.3.3.4 *Recovery Schedule.* In addition to providing a schedule update every 30 days, Contractor shall take the steps necessary to improve Contractor's progress and demonstrate to the District and Architect that Contractor has given serious consideration to lost time, the Completion Date, or the Milestones that are required to be met within the terms of the Contract. Contractor shall immediately provide a Recovery Schedule showing how Milestones and the Completion Date will be met. In no case, shall a Recovery Schedule be provided later than ten (10) days following the request for a Recovery Schedule from the Architect or District.

a. Failure to provide a recovery Schedule shall subject Contractor to the assessment of Liquidated Damages for failure to meet the Contract Time. Refusal or failure to provide a Recovery Schedule shall be considered a substantial failure of performance and a material breach of Contract, and may result in Termination of the Contract, pursuant to Article 14.

b. Recovery Schedule Acceleration without Additional Cost. The District may require Contractor to prepare a Recovery Schedule showing how the Project shall be accelerated, without any additional

cost to the District. The District may order, without additional cost, the following:

1. Increase the number of shifts,
2. Utilize overtime to recover the approved Schedule, or
3. Increase the days when Work occurs, including weekends, at the Project and at any manufacturer's plant.

c. If Contractor disputes that the Recovery Schedule acceleration shall be issued without additional costs, Contractor shall submit, concurrent with Recovery Schedule acceleration notice, pursuant to Articles 8.4.3 and 8.4.4.

#### 8.4 EXTENSIONS OF TIME - LIQUIDATED DAMAGES

##### 8.4.1 Liquidated Damages

8.4.1.1 CONTRACTOR AND DISTRICT HEREBY AGREE THAT THE EXACT AMOUNT OF DAMAGES FOR FAILURE TO COMPLETE THE WORK WITHIN THE TIME SPECIFIED IS EXTREMELY DIFFICULT OR IMPOSSIBLE TO DETERMINE. IF THE WORK IS NOT SUBSTANTIALLY COMPLETED IN THE TIME SET FORTH IN THE AGREEMENT, IT IS UNDERSTOOD THAT THE DISTRICT WILL SUFFER DAMAGES. IT BEING IMPRACTICAL AND UNFEASIBLE TO DETERMINE THE AMOUNT OF ACTUAL DAMAGE, IT IS AGREED THAT CONTRACTOR SHALL PAY TO THE DISTRICT THE AMOUNT OF LIQUIDATED DAMAGES SET FORTH IN THE AGREEMENT, FOR EACH CALENDAR DAY OF DELAY IN REACHING SUBSTANTIAL COMPLETION (SEE ARTICLE 1.1.46). ANY LIQUIDATED DAMAGES RECOVERED BY THE DISTRICT SHALL NOT, HOWEVER, LIMIT THE DISTRICT'S RIGHT TO SEPARATELY RECOVER ANY ACTUAL OUT-OF-POCKET DAMAGES IT SUFFERS DUE TO CONTRACTOR'S DELAY. CONTRACTOR AND CONTRACTOR'S SURETY SHALL BE LIABLE FOR THE AMOUNT THEREOF, PURSUANT TO GOVERNMENT CODE SECTION 53069.85.

##### 8.4.2 Delay

8.4.2.1 Except, and only to the extent provided under Article 7 and Article 8, by signing the Agreement, Contractor agrees to bear the risk of delays to Completion of the Work, and that Contractor's bid for the Project was made with full knowledge of this risk.

8.4.2.2 In agreeing to bear the risk of delays to complete the Work, Contractor understands that, except and only to the extent provided otherwise in Articles 7 and 8, the occurrence of events that delay the Work shall not excuse Contractor from the obligation to achieve Completion of the Project within the Contract Time, and shall not entitle Contractor to an adjustment to the Contract time.

##### 8.4.3 Excusable Delay

8.4.3.1 Contractor shall not be charged for Liquidated Damages because of any delays in completion of Work that are not the fault or negligence of Contractor

or his or her Subcontractors, arising from Rain Float or Project Float, including acts of God, as defined in Public Contract Code section 7105, acts of enemy, epidemics, and quarantine restrictions. Contractor shall, within five (5) calendar days of beginning any such delay, notify District in writing of causes of delay; thereupon, District shall ascertain the facts and extent of delay, and grant extension of time for completing Work when, in its judgment, the findings of fact justify such an extension. Extensions of time shall apply only to that portion of Work affected by delay and shall not apply to other portions of Work not so affected. An extension of time may only be granted after proper compliance with Article 8.3 requiring preparation and submission of a properly prepared CPM schedule.

**8.4.3.2 Excusable Delay Is Not Compensable.** No extended overhead, general conditions costs, impact costs, out-of-sequence costs or any other type of compensation, by any name or characterization, shall be paid to Contractor for any delay to any activity not designated as a critical path item on the latest approved Project schedule.

**8.4.3.3 Notification.** Contractor shall notify the Architect in writing of any anticipated delay and its cause, in order that the Architect may take immediate steps to prevent, if possible, the occurrence or continuance of delay, and may determine whether the delay is to be considered avoidable or unavoidable, how long it continues, and to what extent the prosecution and completion of the Work might be delayed thereby.

**8.4.3.4 Extension Request.** In the event Contractor requests an extension of Contract time for unavoidable delay, such request shall be submitted in accordance with the provisions in the Contract Documents governing changes in Work (see Article 7). When requesting time, i.e. extensions, for proposed Change Orders (Cos), requests must be submitted with the proposed CO with full justification and documentation. If Contractor fails to submit justification with the proposed CO, it waives its right to a time extension at a later date. Such justification must be based on the official Contract Schedule as updated at the time of occurrence of the delay or execution of Work related to any changes to the scope of Work. Blanket or general claims for extra days without specific detailed information as required herein, or a blanket or general reservation of rights, do not fulfill the requirements of this Article and shall be denied. The justification must include, but is not limited to, the following information:

- a. The duration of the activity relating to the changes in the Work and the resources (manpower, equipment, material, etc.) required to perform these activities within the stated duration.
- b. Logical ties to the official Baseline Schedule or Approved Updated Schedule for the proposed changes and/or delay, showing the activity/activities in the schedule whose start or completion dates are affected by the change and/or delay. A fragment of any delay of over ten (10) days must be provided.

Contractor and District understand and expressly agree that insofar as Public Contract Code section 7102 may apply to changes in the Work or delays under this Contract, the actual delays and damages, if any, and time extensions are intended to, and shall provide, the exclusive and full method of compensation for changes in the Work and construction delays.

8.4.4 Notice by Contractor Required

8.4.4.1 Contractor shall, within five (5) calendar days of beginning of any such delay, notify the District and the Architect in writing of causes of delay with justification and supporting documentation. In the case of a Recovery Schedule pursuant to Article 8.3.3.4, Contractor shall submit written notice concurrent with the Recovery Schedule. District will then ascertain the facts and extent of the delay and grant an extension of time for completing the Work when, in its judgment, the findings of fact justify such an extension. Extensions of time shall apply only to that portion of the Work affected by the delay and shall not apply to other portions of the Work not so affected.

8.4.4.2 Claims relating to time extensions shall be made in accordance with applicable provisions of Article 7.

8.4.4.3 *Adjustment for Compensable Delays.* The Schedule may be adjusted for a delay if, and only if, Contractor undertakes the following:

- a. Contractor submits a timely Change Order Request (COR) or CO pursuant to the requirements of Article 7,
- b. Contractor submits a fragment showing the critical path delay caused by the COR, CO, Changed Condition, Construction Change Document, or Immediate Change Directive,
- c. Contractor has addressed all required float days in the Fragment, and
- d. Contractor submits a complete breakdown of all costs incurred utilizing the format of Article 7.3.3.

8.4.5 No Additional Compensation for Coordinating Governmental Submittals and the Resulting Work

8.4.5.1 CONTRACTOR HAS PLANNED ITS WORK AHEAD OF TIME AND IS AWARE THAT GOVERNMENTAL AGENCIES, SUCH AS THE GAS COMPANIES, ELECTRICAL UTILITY COMPANIES, WATER DISTRICTS, AND OTHER AGENCIES MAY HAVE TO APPROVE CONTRACTOR PREPARED DRAWINGS OR APPROVE A PROPOSED INSTALLATION. CONTRACTOR HAS INCLUDED DELAYS AND DAMAGES THAT MAY BE CAUSED BY SUCH AGENCIES IN CONTRACTOR'S BID AND HAS INCLUDED ADEQUATE TIME IN CONTRACTOR'S BASELINE SCHEDULE. FAILURE TO ADEQUATELY PLAN AND SCHEDULE IS NOT A BASIS TO USE GOVERNMENTAL DELAY FLOAT.

8.4.6 District Right to Accelerate the Work

8.4.6.1 The District may direct Contractor to meet schedule requirements when the Work has been delayed. The District shall compensate Contractor for the additional costs incurred by acceleration to the extent that such costs are directly attributable to the acceleration and are incurred through no fault or negligence of Contractor.

8.4.6.2 *Management of Acceleration.* Contractor acceleration shall not include Work that is part of the scope of Work detailed in the Plans and Specifications. Instead, the acceleration costs shall be premium or overtime and quantifiable additional work added to the Project meant to accelerate the Project. Contractor

is directed to keep consistent crews on the Project so time can be tracked. If crews are circulated off the Project or crews brought in only for overtime, the District may be charged for Contract Work and not accelerated time. In such case, the District may object to the costs submitted.

8.4.6.3 *Costs for Acceleration.* Cost for Acceleration shall be supported by backup documentation, and time sheets signed by the Inspector for each day of work has been performed, at or near the time when the Work was performed. A listing on the time sheet shall document all labor, materials, and services utilized that day and provide areas of work, and amount of work performed. Contractor shall comply with submission requirements of Article 7.7.

**END OF SECTION 00 72 08**



**ARTICLE 9**  
**PAYMENTS AND COMPLETION**

**9.1 CONTRACT SUM**

9.1.1 The Contract Sum or Contract Price is stated in the Agreement and, including authorized adjustments, is the total amount payable by the District to Contractor for performance of the Work under the Contract Documents.

**9.2 COST BREAKDOWN**

9.2.1 Required Information

9.2.1.1 Contractor shall furnish the following:

a. Within ten (10) days after Notice to Proceed, a detailed breakdown of the Contract Price (hereinafter "Schedule of Values") for each Project, site, building, Milestone, or other meaningful method to measure the level of Project completion as determined by the District shall be submitted as a Submittal for the Project,

b. Within ten (10) days after the date of the Notice to Proceed, a schedule of estimated monthly payment requests due Contractor showing the values and construction time of the various portions of the Work to be performed by Contractor and Subcontractors or material and equipment suppliers containing such supporting evidence as to its correctness as the District may require, and

c. Within ten (10) days after the date of the Notice to Proceed, address, telephone number, telecopier number, California State Contractors License number, classification and monetary value of all subcontracts for parties furnishing labor, material, or equipment for completion of the Project.

9.2.2 Information and Preparation of Schedule of Values

9.2.2.1 *Break Down of Schedule of Values.* Schedule of Values shall be broken down by Project, site, building, Milestone, or other meaningful method to measure the level of Project Completion as determined by the District.

9.2.2.2 *Based on Contractor Bid Costs.* The Schedule of Values shall be based on the costs from Contractor's bid to the District. However, the submission of the Schedule of Values shall not be front loaded so that Contractor is paid a greater value than the value of the Work actually performed and shall not shift funds from later parts of the Project to Work that is performed earlier.

9.2.2.3 *Largest Dollar Value for Each Line Item.* Identify Subcontractors and material suppliers proposed to provide portions of Work equal to or greater than ten thousand dollars (\$10,000) or one-half of one percent (0.5%) of their Contract Price, whichever is less.

9.2.2.4 *Allowances.* Any Allowances provided for in the Contract shall be a line item in the Schedule of Values.

9.2.2.5 *Labor and Materials Shall Be Separate.* Labor and Materials shall be broken into two separate line items unless specifically agreed in writing by the

District.

9.2.3 District Approval Required

9.2.3.1 The District shall review all submissions received pursuant to Article 9.2 in a timely manner. All submissions must be approved by the District before becoming the basis of any payment.

9.3 **PROGRESS PAYMENTS**

9.3.1 Payments to Contractor

9.3.1.1 Unless there is a resolution indicating that the Work for the Project is substantially complex, within 30 days after approval of the Request for Payment, Contractor shall be paid a sum equal to 95 percent (95%) of the value of the Work performed (as certified by Architect and Inspector, and verified by Contractor) up to the last day of the previous month, less the aggregate of previous payments. In the case of a Project designated substantially complex, the sum paid to Contractor shall be equal to 90 percent (90%) of the value of the Work performed (as certified by the Architect and Inspector and verified by Contractor). The value of the Work completed shall be Contractor's best estimate. Work completed as estimated shall be an approximation or estimate only, and no mistake, inaccuracy, error, or falsification in any approved estimate shall operate to release Contractor, or any Surety upon any bond, from damages arising from such Work, or from the District's enforcement of each and every provision of this Contract, including but not limited to, the Performance Bond and Payment Bond. The District shall have the right to subsequently correct any mistake, inaccuracy, error, or falsification made or otherwise set forth in any approved Request for Payment, and such correction may occur in any future Payment Application or in the Retention Payment to Contractor. No Surety upon any bond shall be relieved, released, or exonerated of its obligations under this Contract or any applicable bond when the District is unable to correct an overpayment to Contractor due to any abandonment by Contractor or termination by the District.

9.3.1.2 Contractor shall not be entitled to have any payment requests processed or be entitled to have any payment made for Work performed, so long as any lawful or proper direction given by the District concerning the Work, or any portion thereof, remains incomplete.

9.3.1.3 Notwithstanding anything to the contrary stated above, Contractor may include in its Request for Payment the value of any structural steel, glue laminated beams, trusses, bleachers, and other such custom-made materials prepared specifically for the Project and unique to the Project so long as all of the following requirements are satisfied:

- a. The aggregate cost of materials stored off-site shall not exceed at any time or as otherwise agreed to be District in writing,
- b. Title to such materials shall be vested in the District as evidenced by documentation satisfactory in form and substance to the District, including, without limitation, recorded financing statements, UCC filings and UCC searches,
- c. With each Contractor Request for Payment, Contractor shall submit to the District a written list identifying each location where materials are

stored off-site (which must be a bonded warehouse) and the value of the materials at each location. Contractor shall procure insurance satisfactory to the District (in its reasonable discretion) for materials stored off-site in an amount not less than the total value thereof,

d. The consent of any Surety shall be obtained to the extent required prior to payment for any materials stored off-site;

e. Representatives of the District shall have the right to make inspections of the storage areas at any time, and

f. Such materials shall be (1) protected from diversion, destruction, theft, and damage to the reasonable satisfaction of the District, (2) specifically marked for use on the Project, and (3) segregated from other materials at the storage facility.

### 9.3.2 Purchase of Materials and Equipment and Cost Fluctuations

9.3.2.1 Contractor is required to order, obtain, and store materials and equipment sufficiently in advance of its Work at no additional cost or advance payment from District to assure that there will be no delays. Contractor understands that materials fluctuate in value and shall have adequately addressed market fluctuations through agreements with Contractor vendors or by other means. Contractor further understands and incorporates into Contractor's bid cost any wage rate increases during the Project for Contractor's labor force as well as all other Subcontractor and vendor labor forces. District shall not be responsible for market fluctuations in costs or labor rate increases during the Project. Contractor further has incorporated any and all cost increases in areas of Work where there may be schedule variations so that cost increases are not passed through to the District.

### 9.3.3 No Waiver

9.3.3.1 No payment by District hereunder shall be interpreted so as to imply that District has inspected, approved, or accepted any part of the Work. Contractor specifically understands Title 24 Section 4-343, which states:

"It is the duty of Contractor to complete the work covered by his or her contract in accordance with the approved Plans and Specifications therefore. Contractor in no way is relieved of any responsibility by the activities of the Architect, Engineer, Inspector or DSA in the performance of such duties... In no case, however, shall the instruction of the Architect or registered Engineer be construed to cause work to be done with is not in conformity with the approved Plans, Specifications, and change orders..."

9.3.3.2 Notwithstanding any payment, the District may enforce each and every provision of this Contract, which includes, but is not limited to, the Performance Bond and Payment Bond. The District may correct any error subsequent to any payment. In no event shall Contractor or the Surety be released or exonerated from performance under this Contract when the District overpays Contractor based upon any mistake, inaccuracy, error, or falsification in any estimate that is included in any Request for Payment.

### 9.3.4 Issuance of Certificate of Payment

9.3.4.1 The Architect shall, within seven (7) days after receipt of Contractor's Application for Payment, either approve such payment or notify Contractor in

writing of the Architect's reasons for withholding approval in whole or in part as provided in Article 9.6. The review of Contractor's Application for Payment by the Architect is based on the Architect's observations of the Project and the data comprising the Application for Payment that the Work has progressed to the point indicated and that, to the best of the Architect's knowledge, information, and belief, the quality of the Work is in accordance with the Contract Documents. In some cases, the Architect may act upon or rely on the evaluation of the Work by the Inspector. This review of Payment Applications is sometimes called a "Pencil Draft." District's return of a Pencil Draft shall constitute the District's dispute of the Payment Application that has been submitted. Contractor shall promptly respond to Pencil Drafts, or Contractor's Payment Applications may be delayed. Contractor's failure to promptly respond to a Pencil Draft shall qualify as a delay in the prompt payment of a Request for Payment or Request for Retention. The foregoing representations are subject to (1) an evaluation of the Work for conformance with the Contract Documents, (2) results of subsequent tests and inspections, (3) minor deviations from the Contract Documents correctable prior to completion, and (4) specific qualifications expressed by the Architect. The issuance of a Certificate for Payment will further constitute Contractor's verified representation that Contractor is entitled to payment in the amount certified.

#### 9.3.5 Payment of Undisputed Contract Payments

9.3.5.1 In accordance with Public Contract Code section 7100, payments by the District to Contractor for any and all undisputed amounts (including all Progress Payments, Final Payments, or Retention Payment) is contingent upon submission of a proper and accurate Payment Application and Contractor furnishing the District with a release of all Claims against the District related to such undisputed amounts. Disputed Contract Claims in stated amounts may be specifically excluded by Contractor from the operation of the release. If, however, Contractor specifically excludes any Claims, Contractor shall provide details such as a specific number of disputed days or costs of any such exclusion in accordance with Articles 4.6 and 7.7.

### 9.4 APPLICATIONS FOR PROGRESS PAYMENTS

#### 9.4.1 Procedure

9.4.1.1 *Application for Progress.* On or before the fifth (5th) day of each calendar month during the progress of the Work, Contractor shall submit to the Architect an itemized Application for Progress Payment for operations completed. Such application shall be notarized, if required, and supported by the following or such portion thereof as Architect requires:

1. The amount paid to date of the Payment Application to Contractor, to all Subcontractors, and all others furnishing labor, material, or equipment for Contract.
2. The amount being requested under the Payment Application by Contractor on Contractor's own behalf, and separately stating the amount requested on behalf of each of the Subcontractors and all others furnishing labor, material, and equipment under the Contract.
3. The balance that will be due to each of such entities after said payment is made.

4. A certification that the As-Built Drawings and annotated Specifications are current.
5. Itemized breakdown of Work done for the purpose of requesting partial payment.
6. An updated or approved Baseline Schedule or other Schedule updates in conformance with Article 8.
7. Failure to submit an updated Schedule for the month or any previous month.
8. The additions to and subtractions from the Contract Price and Contract Time
9. A summary of the Retention held.
10. Material invoices, evidence of equipment purchases, rentals, and other support and details of cost as the District may require from time to time.
11. The percentage of completion of Contractor's Work by line item.
12. An updated Schedule of Values from the preceding Application for Payment.
13. Prerequisites for Progress Payments.
14. Any other information or documents reasonably requested by the District, Architect, Inspector, or CM (if applicable).

9.4.1.2 *First Payment Request.* The following items, if applicable, must be completed before the first payment request will be accepted for processing:

1. Installation of the Project sign.
2. Receipt by Architect of Submittals.
3. Installation of field office.
4. Installation of temporary facilities and fencing.
5. Submission of documents listed in Article 9.2 relating to Contract Price breakdown.
6. Preliminary schedule analysis, due within ten (10) days after Notice to Proceed.
7. Contractor's Baseline Schedule (to be CPM based in conformance with Article 8).
8. Schedule of unit prices, if applicable.
9. Submittal Schedule.

10. Copies of necessary permits.
11. Copies of authorizations and licenses from governing authorities.
12. Initial progress report.
13. Surveyor qualifications.
14. Written acceptance of District's survey of rough grading, if applicable.
15. List of all Subcontractors, with names, license numbers, telephone numbers, and scope of work.
16. All bonds and insurance endorsements.
17. Resumes of General Contractor's Project Manager, and if applicable, job site secretary, record documents recorder, and job site Superintendent.

9.4.1.3 *Second Payment Request.* The second payment request will not be processed until all Submittals and Shop Drawings have been accepted for review by the Architect.

9.4.1.4 *All Payment Requests.* No payment requests will be processed unless Contractor has submitted copies of the certified payroll records for the Work, which correlates to the payment request and a proper CPM schedule pursuant to Article 8 is submitted.

9.4.1.5 Final Payment Application (90% or 95%): See Article 9.11.1.

9.4.1.6 Final Payment Application (100%): See Article 9.11.3.

## 9.5 **STOP NOTICE CLAIMS AND WARRANTY OF TITLE**

- 9.5.1 Contractor warrants title to all Work. Contractor further warrants that all Work is free and clear of liens, claims, security interests, stop notices, or encumbrances in favor of Contractor, Subcontractors, material and equipment suppliers, or other persons or entities making a claim by reason of having provided labor, materials, and equipment relating to the Work. Failure to keep work free of liens, stop notices, claims, security interests, or encumbrances is grounds to make a claim against Contractor's Payment and Performance Bond to immediately remedy and defend.
- 9.5.2 If a lien or stop notice of any nature should at any time be filed against the Work or any District property, by any entity that has supplied material or services at the request of Contractor, Contractor and Contractor's Surety shall promptly, on demand by District and at Contractor's and Surety's own expense, take any and all action necessary to cause any such lien or stop notice to be released or discharged immediately therefrom.
- 9.5.3 If Contractor fails to furnish to the District within ten (10) calendar days after written demand by the District, satisfactory evidence that a lien or stop notice has been so released, discharged, or secured, then District may discharge such indebtedness and deduct the amount required therefor, together with any and all

losses, costs, damages, and attorney's fees, and expense incurred or suffered by District from any sum payable to Contractor under the Contract. In addition, any liens, stop notices, claims, security interests, or encumbrances shall trigger the indemnification requirements under Article 3.15 and the Agreement Form, and shall act as a trigger under Civil Code section 2778 and 2779 requiring reimbursement for any and all costs following the District's written demand has been made. Any withholdings by the District for stop notices in accordance with Civil Code section 9358 shall not be a basis by Contractor to make a Claim for interest penalties under Public Contract Code section 7107 or 20104.50.

## 9.6 DECISIONS TO WITHHOLD PAYMENT

### 9.6.1 Reasons to Withhold Payment

9.6.1.1 The District may withhold payment in whole, or in part, to the extent reasonably necessary to protect the District if, in the District's opinion, the representations to the District required by Article 9.4 cannot be made. The District may withhold payment, in whole, or in part, to such extent as may be necessary to protect the District from loss because of, but not limited to:

- a. Defective Work not remedied,
- b. Stop notices served upon the District,
- c. Liquidated Damages assessed against Contractor,
- d. The cost of Completion of the Contract if there exists reasonable doubt that the Work can be Completed for the unpaid balance of any Contract Price or by the completion date,
- e. Damage to the District or other contractor,
- f. Unsatisfactory prosecution of the Work by Contractor,
- g. Failure to store and properly secure materials,
- h. Failure of Contractor to submit on a timely basis, proper and sufficient documentation required by the Contract Documents, including, without limitation, acceptable monthly progress schedules, Shop Drawings, Submittal schedules, Schedule of Values, Product Data and samples, proposed product lists, executed Change Order, Construction Change Documents, and verified reports,
- i. Failure of Contractor to maintain As-Built Drawings,
- j. Erroneous estimates by Contractor of the value of the Work performed, or other false statements in a Payment Application,
- k. Unauthorized deviations from the Contract Documents (including but not limited to Unresolved Notices of Deviations [DSA Form 154]),
- l. Failure of Contractor to prosecute the Work in a timely manner in compliance with established progress schedules and completion dates,
- m. Failure to properly pay prevailing wages as defined in Labor Code section 1720, et seq.,
- n. Failure to properly maintain or clean up the Project site,
- o. Payments to indemnify, defend, or hold harmless the District,
- p. Any payments due to the District including but not limited to payments for failed tests, or utilities changes or permits,

- q. Failure to submit an acceptable Baseline Schedule or any Schedule or Schedule update in accordance with Article 8,
- r. Failure to pay Subcontractor or suppliers as required by Article 9.8.1,
- s. Failure to secure warranties, including the cost to pay for warranties,
- t. Failure to provide releases from material suppliers or Subcontractors when requested to do so,
- u. Items deducted pursuant to Article 2.2,
- v. Incomplete Punch List items under Article 9.9.1.2 that have gone through the Article 2.2 process, and
- w. Allowances that have not been used.

9.6.2 Reallocation of Withheld Amounts

9.6.2.1 District may, in its discretion, apply any withheld amount to payment of outstanding claims or obligations as defined in Articles 9.6.1 and 9.5. In so doing, District shall make such payments on behalf of Contractor. If any payment is so made by District, then such amount shall be considered as a payment made under Contract by District to Contractor, and District shall not be liable to Contractor for such payments made in good faith. Such payments may be made without prior judicial determination of claim or obligation. District will render Contractor an accounting of such funds disbursed on behalf of Contractor.

9.6.2.2 If Contractor defaults or neglects to carry out the Work in accordance with the Contract Documents, or fails to perform any provision thereof, District may, after ten (10) calendar days, with written notice to Contractor, and without prejudice to any other remedy, make good such deficiencies. The District shall adjust the total Contract price by reducing the amount thereof by the cost of making good such deficiencies. If District deems it inexpedient to correct Work that is damaged, defective, or not done in accordance with Contract provisions, an equitable reduction in the Contract Price (of at least 150% of the estimated reasonable value of the nonconforming Work) shall be made therefor.

9.6.3 Payment After Cure

9.6.3.1 When the grounds for declining approval are removed, payment shall be made for amounts withheld because of them. No interest shall be paid on any retainage or amounts withheld due to the failure of Contractor to perform in accordance with the terms and conditions of the Contract Documents.

9.7 **NONCONFORMING WORK**

9.7.1.1 Contractor shall promptly remove from premises all Work identified by District as failing to conform to the Contract, whether incorporated or not. Contractor shall promptly replace and re-execute its own Work to comply with the Contract without additional expense to District and shall bear the expense of making good all Work of other contractors destroyed or damaged by such removal or replacement.

9.7.1.2 If Contractor does not remove such Work that has been identified by District as failing to conform to the Contract Documents within a reasonable time, fixed by written notice, District may remove it and may store the material at Contractor's expense. If Contractor does not pay expenses of such removal



within ten (10) calendar days thereafter, District may, upon ten (10) calendar days written notice, sell such materials at auction or at private sale and shall account for net proceeds thereof, after deducting all costs and expenses that should have been borne by Contractor.

## 9.8 SUBCONTRACTOR PAYMENTS

### 9.8.1 Payments to Subcontractors

9.8.1.1 No later than ten (10) days after receipt, or pursuant to Business and Professions Code section 7108.5, Contractor shall pay to each Subcontractor, out of the amount paid to Contractor on account of such Subcontractor's portion of the Work, the amount to which said Subcontractor is entitled. Contractor shall, by appropriate agreement with each Subcontractor, require each Subcontractor to make payments to Sub-subcontractors in a similar manner.

### 9.8.2 No Obligation of District for Subcontractor Payment

9.8.2.1 The District shall have no obligation to pay, or to see to the payment of, money to a Subcontractor except as may otherwise be required by law.

### 9.8.3 Payment Not Constituting Approval or Acceptance

9.8.3.1 An approved Request for Payment, a progress payment, a Certificate of Substantial Completion, or partial or entire use or occupancy of the Project by the District shall not constitute acceptance of Work that is not in accordance with the Contract Documents.

### 9.8.4 Joint Checks

9.8.4.1 District shall have the right, if necessary, for the protection of the District, to issue joint checks made payable to Contractor and Subcontractors, and material or equipment suppliers. The joint check payees shall be responsible for the allocation and disbursement of funds included as part of any such joint payment. In no event shall any joint check payment be construed to create any contract between the District and a Subcontractor of any tier, any obligation from the District to such Subcontractor, or rights in such Subcontractor against the District. The District may choose to issue joint checks at District's sole discretion and only after all the requirements of that particular school district and county are specifically met. Some school districts cannot issue joint checks, so the ability to issue joint checks depends on the school district and the specific circumstances.

## 9.9 COMPLETION OF THE WORK

### 9.9.1 Closeout Procedures

9.9.1.1 *Incomplete Punch Items.* When Contractor considers the Work Substantially Complete (see Article 1.1.46 for definition of Substantially Complete), Contractor shall prepare and submit to the District a comprehensive list of minor items to be completed or corrected (hereinafter "Incomplete Punch Items" or "Punch List"). Contractor and/or Subcontractors shall proceed promptly to complete and correct the Incomplete Punch Items listed. Failure to include an item on such list does not alter the responsibility of Contractor to complete all Work in accordance with the Contract Documents. Contractor is aware that Title

24 Section 4-343(a) provides:

“RESPONSIBILITIES. IT IS THE DUTY OF CONTRACTOR TO COMPLETE THE WORK COVERED BY HIS OR HER CONTRACT IN ACCORDANCE WITH THE APPROVED PLANS AND SPECIFICATIONS THEREFOR. CONTRACTOR IN NO WAY IS RELIEVED OF ANY RESPONSIBILITY BY THE ACTIVITIES OF THE ARCHITECT, ENGINEER, INSPECTOR OR DSA IN THE PERFORMANCE OF SUCH DUTIES.

*9.9.1.2 Punch List Is Prepared Only After the Project Is Substantially Complete.*

If any of the conditions noted in Article 1.1.46 as defining Substantial Completion are not met, the Inspector, Architect, or District may reject Contractor's Incomplete Punch Items as premature. If the Architect and Inspector commence review of Incomplete Punch Items, all rights are reserved until the Project actually meets the definition of Substantially Complete. Liquidated Damages, warranties, and other contractual rights are not affected by Incomplete Punch Items unless otherwise addressed in these General Conditions. Once the Inspector and the Architect determine that the Project is Substantially Complete, a Certificate of Substantial Completion shall be issued. The Inspector and Architect shall prepare a Punch List of items that is an inspection report of the Work, if any, required in order to complete the Contract Documents and ensure compliance with the DSA Approved Plans so the Project may be completed by Contractor and a final DSA Closeout is approved. When all Work for the Project is Complete, including Punch Lists, and all Work complies with the approved Contract Documents and Change Orders, the Project has reached Final Completion.

*9.9.1.3 Time for Completion of Punch List.*

Contractor shall only be given a period of no more than 30 days to complete the Punch List for the Project. During the Punch List period, Contractor's Superintendent and Project Manager shall remain engaged in the Project and shall not be removed or replaced. If the Punch List is not completed at the end of the Punch List time, then Contractor shall issue a valued Punch List within five (5) days after the date the Punch List time ends. If Contractor does not issue such a list, the District or Architect may issue a valued Punch List to Contractor and withhold up to 150 percent (150%) of the value of the Punch List Work pursuant to Article 2.2 of this Agreement. Failure to issue a timely written request for additional time to complete Punch List shall result in the deletion of the remaining Punch List Work pursuant to Article 2.2, and the issuance of a Deductive Change Order.

a. Extension of Time to Complete Punch List. If Contractor cannot finish the Punch List Work during the time period allotted under Article 9.9.1.3, Contractor may make a written request for a Non-Compensable Punch List time extension, accompanied by an estimate of the number of additional days it will take to complete the Punch List Work, for a written consent from the District to allow continued Punch List Work. Punch List time extensions are for a maximum of 30 days for each request and must be accompanied by an itemized valued Punch List.

b. If there is no valued Punch List accompanying any request, or if Contractor intends to undertake Punch List without the continued support and supervision of its Superintendent and Project Manager (as required under Article 3.2), the District, Construction Manager, or Architect may issue a valued Punch List, reject the Punch List Time Extension, and deduct 150 percent (150%) of the valued Punch List pursuant to Article 2.2, and proceed to closeout the Project. Contractor shall cease work on the Project and proceed to complete Contractor's

Retention Payment Application and complete the Work for the Project required pursuant to Article 9.11.3.

9.9.1.4 *District Rejection of Written Request for Punch List Time Extensions.* Following 60 Days of Punch List under Article 9.9.1.3, the District has the option of rejecting Punch List Time Extension requests. The District may proceed under Article 2.2 and deduct the value of remaining Punch List Work pursuant to Article 2.2. If the District rejects the Punch List Time Extension request, then Contractor shall cease Work on the Project and proceed to Final Inspection pursuant to Article 9.11.2.

9.9.1.5 *Punch List Liquidated Damages to Compensate for Added District Project Costs.* If the total time utilized for Punch List exceeds 60 days (the 30-day period under Article 9.9.1.3 plus an additional 30-day period that has been requested in writing), and the District grants an additional written Punch List Time Extension that exceeds 60 days of Punch List, then Contractor shall be charged Liquidated Damages of at least \$750 per day for continued Punch List Work to partially compensate the Inspector, Architect, and Construction Manager's extended time on the Project. This Punch List Liquidated Damage number is based on anticipated cost for an Inspector on site and additional costs for the Architect and Construction Manager to reinspect Punch List items and perform the administration of the closeout.

9.9.1.6 Contractor received 30 days without any charges for Punch List Liquidated Damages and is placed on notice pursuant to this Article 9.9.1.5 that \$750 is due for each day of Punch List that exceeds 60 days at \$750 per day, a cost much lower than typical (and actual) costs for Inspection, Architect, and Construction Manager time required during Punch List. Starting at 90 days of Punch List (an excessive number of days to complete Punch List), the District shall be entitled to adjust Punch List Liquidated Damages to an estimate of the actual costs incurred to oversee, monitor, and inspect the Punch List. If costs exceed \$750 per day, the anticipated extended contract charges for Inspection, Architect, Construction Manager, and any other costs that will be incurred due to the extended Punch List shall be itemized and a daily rate of Punch List Liquidated Damages shall be presented in writing to Contractor within five (5) days following the receipt of a written request for Punch List Time Extension by Contractor that extends the Punch List time beyond 90 days. This written notice of actual Punch List Liquidated Damages may be provided to Contractor at any time following the first written request for Punch List Time extension requested under Article 9.9.1.3. The adjusted actual Punch List Liquidated Damage amount shall be applicable as Punch List Liquidated Damages commencing on day 90 of Punch List.

9.9.2 Closeout Requirements for Final Completion of the Project

9.9.2.1 *Utility Connections.* Buildings shall be connected to water, gas, sewer, and electric services, complete and ready for use. Service connections shall be made, and existing services reconnected.

9.9.2.2 *As-Builts Up to Date and Complete.* The intent of this procedure is to obtain an exact "As-Built" record of the Work upon completion of the project. The following information shall be carefully and correctly drawn on the prints and all items shall be accurately located and dimensioned from finished surfaces of building walls on all As-Built Drawings:

- a. The exact location and elevations of all covered utilities, including

valves, cleanouts, etc. must be shown on As-Built Drawings,

b. Contractor is liable and responsible for inaccuracies in As-Built Drawings, even though they become evident at some future date,

c. Upon completion of the Work and as a condition precedent to approval of Retention Payment, Contractor shall obtain the Inspector's approval of the As-Built information. When completed, Contractor shall deliver corrected sepias and/or a Diskette with an electronic file in a format acceptable to the District, and

d. District may withhold the cost to hire a draftsman and potholing and testing service to complete Record As-Built Drawings at substantial cost if Contractor does not deliver a complete set of Record As-Built Drawings. This shall result in withholding of between \$10,000 and \$20,000 per building that does not have a corresponding Record As-Built Drawing.

9.9.2.3 Any Work not installed as originally indicated on Drawings.

9.9.2.4 All DSA closeout requirements (see DSA Certification Guide) Contractor is also specifically directed to Item 3.2 in the DSA Certification Guide and the applicable certificates for the DSA-311 form.

9.9.2.5 *Submission of Form 6-C.* Contractor shall be required to execute a Form 6-C as required under Title 24 Sections 4-343. Contractor understands that the filing with DSA of a Form 6-C is a requirement to obtain final DSA Approval of the construction by Contractor and utilized to verify under penalty of perjury that the Work performed by Contractor complies with the DSA approved Contract Documents. The failure to file a DSA Form 6C has two consequences. First, the Construction of the Project will not comply with the design immunity provisions of Government Code section 830.6 and exposes the District and the individual Board members to personal liability for injuries that occur on the Project.

Secondly, under DSA IR A-20, since the Project cannot be certified by DSA, no future or further Projects will be authorized, so Contractor will have essentially condemned the campus from any future modernization or addition of new classrooms through their failure to file the DSA Form 6C.

9.9.2.6 *Execution of the DSA Form 6-C is Mandatory.* Refusal to execute the Form 6-C, which is a Final DSA Verified Report that all Work performed complies with the DSA approved Contract Documents is a violation of Education Code section 17312 and shall be referred to the Attorney General for Prosecution.

9.9.2.7 *Referral to the District Attorney for Extortion.* If Contractor's refusal to execute the DSA Form 6C is to leverage a Dispute, Claim, or Litigation, then the matter shall also be referred to the District Attorney for prosecution for extortion.

9.9.2.8 *Contractor shall be Responsible for All Costs to Certify the Project.* The District may certify that the Project complies with approved Plans and Specifications by utilizing the procedures under the Project Certification Guide (located at the DSA website). All costs for professionals, inspection, and testing required for an alternate Project Certification shall be Contractor's responsibility and the District reserves its right to institute legal action against Contractor and Contractor's Surety for all costs to certify the Project, and all costs to correct Noncompliant Work that is discovered during the Alternate Certification Process.

9.9.2.9 *ADA Work that must be corrected to receive DSA certification.* See Article 12.2.

9.9.2.10 *Maintenance Manuals.* At least 30 days prior to final inspection, three (3) copies of complete operations and maintenance manuals, repair parts lists, service instructions for all electrical and mechanical equipment, and equipment warranties shall be submitted. All installation, operating, maintenance information, and Drawings shall be bound in 8-1/2-inch by eleven-inch (8-1/2"x11") binders. A table of contents provided in the front and all items shall be indexed with tabs. Each manual shall also contain a list of Subcontractors with their addresses and the names of persons to contact in cases of emergency. Identifying labels shall provide names of manufacturers, their addresses, ratings, and capacities of equipment and machinery.

9.9.2.11 Maintenance manuals shall also be delivered in electronic media for the Project. Any demonstration videos shall also be provided on electronic media.

9.9.2.12 *Inspection Requirements.* Before calling for final inspection, Contractor shall determine that the following Work has been performed:

- a. All Punch List items are completed,
- b. All fire/ life safety items are completed and in working order,
- c. Mechanical and electrical work is complete, fixtures are in place, connected, and tested,
- d. Electrical circuits scheduled in panels and disconnected, switches are labeled,
- e. Painting and special finishes are complete,
- f. Doors are complete with hardware, cleaned of protective film, relieved of sticking or binding, and are in working order,
- g. Tops and bottoms of doors are sealed,
- h. Floors are waxed and polished, as specified,
- i. Broken glass has been replaced, and glass cleaned,
- j. Grounds have been cleared of Contractor's equipment, raked clean of debris, and trash has been removed from site,
- k. Work is clean, free of stains, scratches, and other foreign matter, and all damaged and broken material has been replaced,
- l. Finished and decorative work had all marks, dirt, and superfluous labels removed,
- m. Final cleanup has been performed, as in Article 3.12,
- n. All Work has been performed, pursuant to Article 9.11, and
- o. A letter to District stating that the District's Representative or other designated person or persons have been instructed in working

characteristics of mechanical and electrical equipment has been furnished.

9.9.3 Costs of Multiple Inspections

9.9.3.1 More than two (2) requests of the District to make inspections required under Article 9.9.1 shall be considered an additional service of Architect, Inspector, Engineer, or other consultants and shall be Contractor's responsibility pursuant to Article 4.5 and all subsequent costs will be prepared as a Deductive Change Order.

9.10 **PARTIAL OCCUPANCY OR USE**

9.10.1 District's Rights

9.10.1.1 The District may occupy or use any completed or partially completed portion of the Work at any stage. The District and Contractor shall agree in writing to the responsibilities assigned to each of them for payments, security, maintenance, heat, utilities, damage to the Work, insurance, the period for correction of the Work, and the commencement of warranties required by the Contract Documents. If District and Contractor cannot agree as to responsibilities, such disagreement shall be resolved pursuant to Article 4.6. When Contractor considers a portion complete, Contractor shall prepare and submit a Punch List to the District as provided under Article 9.9.1.

9.10.2 Inspection Prior to Occupancy or Use

9.10.2.1 Immediately prior to such partial occupancy or use, the District, Contractor, and the Architect shall jointly inspect the area to be occupied, or portion of the Work to be used, in order to determine and record the condition of the Work.

9.10.3 No Waiver

9.10.3.1 Unless otherwise agreed upon, partial occupancy, or use of a portion or portions of the Work, shall not constitute acceptance of Work not complying with the requirements of the Contract Documents.

9.11 **COMPLETION AND FINAL PAYMENT**

9.11.1 Final Payment (90% Billing if Substantially Complex Finding and 95% Billing If no such Finding Is Made)

9.11.1.1 The following items must be completed before the Final Payment Application will be accepted for processing at Substantial Completion of the Project:

- a. Inspector sign-off of each item in the DSA 152 Project Inspection Card,
- b. The Project has reached the Punch List items under Article 9.9.1.2 and the Project has been determined to be Substantially Complete under Article 1.1.28,
- c. Removal of temporary facilities and services,

- d. Testing, adjusting, and balancing records are complete,
- e. Removal of surplus materials, rubbish, and similar elements,
- f. Changeover of door locks,
- g. Deductive items pursuant to Article 9.6 and Article 2.2, and
- h. Completion and submission of all final Change Orders for the Project.

9.11.2 Final Inspection (Punch List Completion)

9.11.2.1 Contractor shall comply with Punch List procedures under Article 9.9.1.1 and maintain the presence of Project Superintendent and Project Manager (not replacement project superintendent or project manager) until the Punch List is complete to ensure proper and timely completion of the Punch List. Under no circumstances shall Contractor demobilize its forces prior to completion of the Punch List.

9.11.2.2 Upon completion of the Work under Article 9.9.1, Contractor shall notify the District and Architect, who shall again inspect such Work. If the Architect and the District finds the Work contained in Punch List acceptable under the Contract Documents, then the Work shall have reached Final Completion. Architect shall notify Contractor, who shall then submit to the Architect the Application for Retention Payment. This Application for Retention Payment shall contain any deductions under Article 9.6, including but not limited to incomplete Punch List items under Article 9.9.1.

9.11.2.3 Upon receipt and approval of Application for Retention Payment, the Architect shall issue a Form 6 stating that to the best of Architect's knowledge, information, and belief, and on the basis of observations, inspections, and all other data accumulated or received by the Architect in connection with the Work, such Work has been completed in accordance with the Contract Documents. The District shall thereupon inspect such Work and either accept the Work as complete or notify the Architect and Contractor in writing of reasons why the Work is not complete. Upon acceptance of the Work of Contractor as fully complete (which, absent unusual circumstances, will occur when the Punch List items have been satisfactorily completed), the District shall record a Notice of Completion with the County Recorder, and Contractor shall, upon receipt of payment from the District, pay the amounts due Subcontractors.

9.11.2.4 If the Architect and the District find that the Work contained in the Punch List is unacceptable, then Contractor shall issue a valued Punch List within five (5) days after the date the Punch List time ends. If Contractor does not issue such a list, the District or Architect may issue a valued Punch List to Contractor and withhold up to 150 percent (150%) of the value of the Punch List Work, pursuant to Article 2.2 of this Agreement.

9.11.3 Retainage (100% Billing for the Entire Project)

9.11.3.1 The retainage, less any amounts disputed by the District, or for which the District has the right to withhold pursuant to the Contract Documents (including but not limited to incomplete Punch List items under Article 9.9.1), shall be paid after approval by the District of the Application for Retention Payment, after the satisfaction of the conditions set forth in Article 9, the Final Inspection under Article 9.11.2 is completed, and after 35 days after the acceptance of the Work and recording of the Notice of Completion by District.

No interest shall be paid on any retainage, or on any amounts withheld due to a failure of Contractor to perform, in accordance with the terms and conditions of the Contract Documents, except as provided to the contrary in any escrow agreement between the District and Contractor.

a. Procedures for Application for Retention Payment. The following conditions must be fulfilled prior to release of Retention Payment:

1. A full and final waiver or release of all stop notices in connection with the Work shall be submitted by Contractor, including a release of stop notice in recordable form, together with (to the extent permitted by law) a copy of the full and final release of all Stop Notice rights.

2. Contractor shall have made all corrections, including all Punch List Items, to the Work that are required to remedy any defects therein, to obtain compliance with the Contract Documents or any requirements of applicable codes and ordinances, or to fulfill any of the orders or directions of District required under the Contract Documents.

3. Each Subcontractor shall have delivered to Contractor all written guarantees, warranties, applications, releases from the Surety, and warranty bonds (if applicable) required by the Contract Documents for their respective portions of the Work.

4. Contractor must have completed all requirements set forth in Article 9.9.

5. Contractor must have issued a Form 6-C for the Project.

6. Contractor shall have delivered to the District all manuals and materials required by the Contract Documents.

7. Contractor shall have completed final clean up, as required by Article 3.12.

8. Contractor shall have all deductive items under Article 9.6 and Article 2.2 submitted as part of the Retention Payment.

#### 9.11.4 Recording of a Notice of Completion After Punch List Period and Final Inspection

9.11.4.1 When the Work, or designated portion thereof, is complete, or the District has completed the Article 9.6 and/or the Article 2.2 process, whichever occurs first, the District will file either a Notice of Completion or a Notice of Completion noting valued Punch List items. Valued Punch List items will be deducted from the Retention Payment.

9.11.4.2 During the time when Work is being performed on the Punch List, the Project does not meet the definition of "complete" under Public Contract Code section 7107(c)(1), even if there is "beneficial occupancy" of the Project since there has been no "cessation of labor" on the Project. Completion of Punch List under this Article is not "testing, startup, or commissioning by the public entity or its agent." In other words, the continuing Punch List Work is Contractor labor on the Project until each and every item of Punch List Work is complete, or the time periods under Article 9.9.1 have expired.



9.11.5 Warranties

9.11.5.1 Warranties required by the Contract Documents shall commence on the date of Completion of the entire Work. Warranty periods DO NOT commence at Substantial Completion or when a particular Subcontractor work is complete. No additional charges, extras, Change Orders, or Claims may be sought for warranties commencing from the Notice of Completion.

9.11.5.2 District shall have the right to utilize equipment, test and operate as necessary for acclimation, or perform testing without voiding or starting warranties. Taking beneficial occupancy shall not start warranties, except in the case where the District agrees, in writing, that warranties shall commence running or where the District is taking phased occupancy of specific buildings or areas and completes separate Punch Lists, as further addressed in Article 4.2.7.

9.11.6 Time for Submission of Application for Final Payment and Retention Payment (Unilateral Processing of Final and Retention Payment Application)

9.11.6.1 If Contractor submits a Final Payment Application that fails to include deductive items under Article 9.6, the District or Architect shall note this defective request for Final Payment Application. Contractor shall be notified that specific deductive items shall be included in the Final Payment Application. If Contractor either continues to submit the Final Payment Application without deductive items under Article 9.6, or a period of 14 calendar days pass after Contractor is provided written notice of deductive items for inclusion in Final Payment Application, then District may either alter the Final Payment Application and recalculate the math on the Final Payment Application to address the Article 9.6 deductive items, or process a unilateral Final Payment Application.

9.11.7 Unilateral Release of Retention

9.11.7.1 After the recordation of the Notice of Completion, or within 60 days following the completion of the Punch List or the expiration of the time for completion of Punch List under Article 9.9.1, if Contractor does not make an Application for Release of Retention, the District may unilaterally release retention less any deductions under Article 9.6 and/or Article 2.2, withholds due to stop notice, or other defective work on the Project. District may also choose to unilaterally release Retention after deduction of 150 percent (150%) of any disputed items, which may also include items under Articles 9.6 and 2.2. If a deduction pursuant to Article 9.6 is made from Retention, a letter deducting specific valued items shall be considered a notice of Default under the terms of the Escrow Agreement.

9.12 **SUBSTITUTION OF SECURITIES**

9.12.1 The District will permit the substitution of securities in accordance with the provisions of Public Contract Code section 22300 as set forth in the form contained in the Bid Documents.

**END OF SECTION 00 72 09**

**ARTICLE 10**  
**PROTECTION OF PERSONS AND PROPERTY**

**10.1 SAFETY PRECAUTIONS AND PROGRAMS**

10.1.1 Contractor Responsibility

10.1.1.1 Contractor shall be responsible for all damages to persons or property that occur as a result of Contractor's fault or negligence in connection with the prosecution of this Contract, and shall take all necessary measures and be responsible for the proper care and protection of all materials delivered and Work performed until completion and final acceptance by the District. All Work shall be solely at Contractor's risk, with the exception of damage to the Work caused by "acts of God" as defined in Public Contract Code section 7105(b)(2).

10.1.1.2 Contractor shall take, and require Subcontractor to take, all necessary precautions for safety of workers on the Work and shall comply with all applicable federal, state, local, and other safety laws, standards, orders, rules, regulations, and building codes to prevent accidents or injury to persons on, about, or adjacent to premises where Work is being performed, and to provide a safe and healthful place of employment. In addition to meeting all requirements of OSHA, Cal-OSHA, state, and local codes, Contractor shall furnish, erect, and properly maintain at all times, as directed by District or Architect, or required by conditions and progress of Work, all necessary safety devices, safeguards, construction canopies, signs, audible devices for protection of the blind, safety rails, belts and nets, barriers, lights, and watchmen for protection of workers and the public, and shall post danger signs warning against hazards created by such features in the course of construction. Contractor shall designate a responsible member of Contractor's organization on the Work, whose duty shall be to post information regarding protection and obligations of workers and other notices required under occupational safety and health laws, to comply with reporting and other occupational safety requirements, and to protect the life, safety, and health of workers. The name and position of person so designated shall be reported to District by Contractor. Contractor shall correct any violations of safety laws, rules, orders, standards, or regulations. Upon the issuance of a citation or notice of violation by the Division of Occupational Safety and Health, such violation shall be corrected promptly.

10.1.2 Subcontractor Responsibility

10.1.2.1 Contractor shall require that Subcontractors participate in, and enforce, the safety and loss prevention programs established by Contractor for the Project, which will cover all Work performed by Contractor and its Subcontractors. Each Subcontractor shall designate a responsible member of its organization whose duties shall include loss and accident prevention, and who shall have the responsibility and full authority to enforce the program. This person shall attend meetings with the representatives of the various Subcontractors employed to ensure that all employees understand and comply with the programs.

10.1.3 Cooperation

10.1.3.1 All Subcontractors and material or equipment suppliers shall

cooperate fully with Contractor, the District, and all insurance carriers and loss prevention engineers.

10.1.4 Accident Reports

10.1.4.1 Subcontractors shall immediately, report in writing to Contractor all accidents, whatsoever arising out of, or in connection with, the performance of the Work, whether on or off the site, that caused death, personal injury, or property damage, giving full details and statements of witnesses. In addition, if death, serious injury, or serious damage is caused, the accident shall be reported by Contractor, in writing, to the District and Architect, within 24 hours by email, telephone, or messenger, giving full details of the accident.

10.1.5 First-Aid Supplies at Site

10.1.5.1 Contractor will provide and maintain at the site's first-aid supplies, which comply with the current Occupational Safety and Health Regulations.

10.1.6 Material Safety Data Sheets and Compliance with Proposition 65

10.1.6.1 Contractor is required to have material safety data sheets available in a readily accessible place at the job site for any material requiring a material safety data sheet per the Federal "hazard communication" standard, or employees' "right-to-know law." Contractor is also required to properly label any substance brought onto the job site, and require that any person working with the material, or within the general area of the material, is informed of the hazards of the substance and follows proper handling and protection procedures.

10.1.6.2 Contractor is required to comply with the provisions of California Health and Safety Code section 25249, et seq., which requires the posting and giving of notice to persons who may be exposed to any chemical known to the State of California to cause cancer. Contractor agrees to familiarize itself with the provisions of this Section, and to comply fully with its requirements.

10.1.7 Non-Utilization of Asbestos Material

10.1.7.1 No asbestos or asbestos-containing products shall be used in this construction or in any tools, devices, clothing, or equipment used to affect this construction.

10.1.7.2 Asbestos and/or asbestos-containing products shall be defined as all items containing, but not limited to, chrysotile, amosite, anthophyllite, tremolite, and antinolite.

10.1.7.3 Any or all material containing greater than 1/10 of one percent (1%) asbestos shall be defined as asbestos-containing material.

10.1.7.4 All Work or materials found to contain asbestos or Work or material installed with asbestos-containing equipment will be immediately rejected and this Work will be removed at no additional cost to the District.

10.1.7.5 Decontamination and removal of Work found to contain asbestos or Work installed with asbestos-containing equipment shall be done only under

supervision of a qualified consultant, knowledgeable in the field of asbestos abatement and accredited by the Environmental Protection Agency (EPA).

10.1.7.6 The asbestos removal contractor shall be an EPA accredited contractor qualified in the removal of asbestos and shall be chosen and approved by the asbestos consultant who shall have sole discretion and final determination in this matter.

10.1.7.7 The asbestos consultant shall be chosen and approved by the District, who shall have sole discretion and final determination in this matter.

10.1.7.8 The Work will not be accepted until asbestos contamination is reduced to levels deemed acceptable by the asbestos consultant.

10.1.7.9 Interface of Work under this Contract with Work containing asbestos shall be executed by Contractor at his or her risk and at his or her discretion, with full knowledge of the currently accepted standards, hazards, risks, and liabilities associated with asbestos work and asbestos-containing products. By execution of this Contract, Contractor acknowledges the above and agrees to hold harmless District and its assigns for all asbestos liability that may be associated with this work and agrees to instruct his or her employees with respect to the above-mentioned standards, hazards, risks, and liabilities.

## 10.2 SAFETY OF PERSONS AND PROPERTY

### 10.2.1 Contractor

10.2.1.1 Contractor shall take reasonable precautions for the safety of, and shall provide reasonable protection to prevent damage, injury, or loss to:

- a. Employees on the Work and other persons who may be affected thereby,
- b. The Work, material, and equipment to be incorporated therein, whether in storage on or off the site, under the care, custody, or control of Contractor or Contractor's Subcontractors or Sub-subcontractors, and
- c. Other property at the Site or adjacent thereto such as trees, shrubs, lawns, walks, pavement, roadways, structures, and utilities not designated for removal, relocation, or replacement in the course of construction.

10.2.1.2 Contractor is constructive owner of Project site as more fully discussed in Article 6.2.

### 10.2.2 Contractor Notices

10.2.2.1 Contractor shall give notices and comply with applicable laws, ordinances, rules, regulations, and lawful orders of public authorities bearing on the safety of persons or property or their protection from damage, injury, or loss.

### 10.2.3 Safety Barriers and Safeguards

10.2.3.1 Contractor shall erect and maintain, as required by existing conditions and performance of the Contract, reasonable safeguards for safety and protection, including posting danger signs and other warnings against hazards, promulgating safety regulations, and notifying owners and users of adjacent sites and utilities.

10.2.4 Use or Storage of Hazardous Material

10.2.4.1 When use or storage of explosives, other hazardous materials or equipment, or unusual methods are necessary for execution of the Work, Contractor shall exercise utmost care and carry on such activities under supervision of properly qualified personnel. Contractor shall notify the District any time that explosives or hazardous materials are expected to be stored on site. Location of storage shall be coordinated with the District and local fire authorities.

10.2.5 Protection of Work

10.2.5.1 Contractor and Subcontractors shall continuously protect the Work, the District's property, and the property of others, from damage, injury, or loss arising in connection with operations under the Contract Documents. Contractor and Subcontractors, at their own expense, shall make good any such damage, injury, or loss, except such as may be solely due to, or caused by, agents or employees of the District.

10.2.5.2 Contractor, at Contractor's expense, will remove all mud, water, or other elements as may be required for the proper protection and prosecution of Work.

10.2.5.3 Contractor shall take adequate precautions to protect existing roads, sidewalks, curbs, pavements, utilities, adjoining property and structures (including, without limitation to, protection from settlement or loss of lateral support), and to avoid damage thereto, and repair any damage thereto caused by construction operations. All permits, licenses, or inspection fees required for such repair Work shall be obtained and paid for by Contractor.

10.2.6 Requirements for Existing Sites

10.2.6.1 Contractor shall (unless waived by the District in writing):

- a. When performing construction on existing sites, become informed and take into specific account the maturity of the students on the site, perform Work that may interfere with school routine before or after school hours, enclose working area with a substantial barricade, and arrange Work to cause a minimum amount of inconvenience and danger to students and faculty in their regular school activities. Contractor shall comply with Specifications and directives of the District regarding the timing of certain construction activities in order to avoid unnecessary interference with school functioning,
- b. Avoid performing any Work that will disturb students during testing,
- c. Provide substantial barricades around any shrubs or trees indicated to be preserved,
- d. Deliver materials to building area over route designated by Architect,

- e. Take preventive measures to eliminate objectionable dust, noise, or other disturbances,
- f. Confine apparatus, the storage of materials, and the operations of workers to limits indicated by law, ordinances, permits, or directions of Architect, and not interfere with the Work or unreasonably encumber premises or overload any structure with materials, enforce all instructions of District and Architect regarding signs, advertising, fires, and smoking, and require that all workers comply with all regulations while on the Project site,
- g. Take care to prevent disturbing or covering any survey markers, monuments, or other devices marking property boundaries or corners. If such markers are disturbed by accident, they shall be replaced by an approved land surveyor or civil engineer and all maps and records required therefrom shall be filed with county and local authorities, at no cost to the District. All filing and plan check fees shall be paid by Contractor, and
- h. Provide District on request with Contractor's written safety program and safety plan for each site.

10.2.7 Shoring and Structural Loading

10.2.7.1 Contractor shall not impose structural loading upon any part of the Work under construction or upon existing construction on or adjacent to the site in excess of safe limits or loading such as to result in damage to the structural, architectural, mechanical, electrical, or other components of the Work. The design of all temporary construction equipment and appliances used in construction of the Work and not a permanent part thereof, including, without limitation, hoisting equipment, cribbing, shoring, and temporary bracing of structural steel, is the sole responsibility of Contractor. All such items shall conform to the requirements of governing codes and all laws, ordinances, rules, regulations, and orders of all authorities having jurisdiction. Contractor shall take special precautions, such as shoring of masonry walls and temporary tie bracing of structural steel Work, to prevent possible wind damage during construction of the Work. The installation of such bracing or shoring shall not damage the Work in place, or the Work installed by others. Any damage that does occur shall be promptly repaired by Contractor at no cost to the District.

10.2.8 Conformance within Established Limits

10.2.8.1 Contractor and Subcontractors shall confine their construction equipment, the storage of materials, and the operations of workers to the limits indicated by laws, ordinances, permits, and the limits established by the District or Contractor, and shall not unreasonably encumber the premises with construction equipment or materials.

10.2.9 Subcontractor Enforcement of Rules

10.2.9.1 Subcontractors shall enforce the District's and Contractor's instructions, laws, and regulations regarding signs, advertisements, fires, smoking, the presence of liquor, and the presence of firearms by any person at the site.

10.2.10 Site Access

10.2.10.1 Contractor and the Subcontractors shall use only those ingress and egress routes designated by the District, observe the boundaries of the site designated by the District, park only in those areas designated by the District, which areas may be on or off the site, and comply with any parking control program established by the District, such as furnishing license plate information and placing identifying stickers on vehicles.

10.2.11 Security Services

10.2.11.1 Contractor shall be responsible for providing security services for the Site as needed for the protection of the Site and as determined in the District's sole discretion.

10.3 **EMERGENCIES**

10.3.1 Emergency Action

10.3.1.1 In an emergency affecting the safety of persons or property, Contractor shall take any action necessary, at Contractor's discretion, to prevent threatened damage, injury, or loss. Additional compensation or extension of time claimed by Contractor on account of an emergency shall be determined as provided in Article 7.

10.3.2 Accident Reports

10.3.2.1 Contractor shall promptly report in writing to the District all accidents arising out of or in connection with the Work, which caused death, personal injury, or property damage, giving full details and statements of any witnesses in conformance with Article 10.1.4. In addition, if death, serious personal injuries, or serious property damages are caused, the accident shall be reported in accordance with Article 10.1.4, immediately by telephone or messenger to the District.

10.4 **HAZARDOUS MATERIALS**

10.4.1 Discovery of Hazardous Materials

10.4.1.1 In the event Contractor encounters or suspects the presence on the job site of material reasonably believed to be asbestos, polychlorinated biphenyl (PCB), or any other material defined as being hazardous by § 25249.5 of the California Health and Safety Code, which has not been rendered harmless, Contractor shall immediately stop Work in the area affected and report the condition to the District and the Architect in writing, whether or not such material was generated by Contractor or the District. The Work in the affected area shall be resumed only in the absence of asbestos, PCB, or other hazardous material, or when it has been rendered harmless, and upon written agreement of the District and Contractor.

10.4.2 Hazardous Material Work Limitations

10.4.2.1 In the event that the presence of hazardous materials is suspected or

discovered on the site (except in cases where asbestos and other hazardous material Work in Contractor's responsibility), the District shall retain an independent testing laboratory to determine the nature of the material encountered and whether corrective measures or remedial action is required. Contractor shall not be required, pursuant to Article 7, to perform without consent any Work in the affected area of the site relating to asbestos, PCB, or other hazardous material, until any known or suspected hazardous material has been removed, or rendered harmless, or determined to be harmless by District, as certified by an independent testing laboratory and approved by the appropriate government agency.

10.4.3 Indemnification by Contractor for Hazardous Material Caused by Contractor

10.4.3.1 In the event the hazardous materials on the Project site is caused by Contractor, Contractor shall pay for all costs of testing and remediation, if any, and shall compensate the District for any additional costs incurred as a result of Contractor's generation of hazardous material on the Project site. In addition, Contractor shall defend, indemnify, and hold harmless District and its agents, officers, and employees from and against any and all claims, damages, losses, and costs and expenses incurred in connection with, arising out of, or relating to, the presence of hazardous material on the Project site.

10.4.4 Terms of Hazardous Material Provision

10.4.3.2 The terms of this Hazardous Material provision shall survive the completion of the Work and/or any termination of this Contract.

**END OF SECTION 00 72 10**



**ARTICLE 11**  
**INSURANCE AND BONDS**

**11.1 CONTRACTOR'S LIABILITY INSURANCE**

11.1.1 Insurance Requirements

11.1.1.1 Before the commencement of the Work, Contractor shall purchase from, and maintain, in a company or companies lawfully authorized to do business in California with a financial rating of at least an A-VIII status, as rated in the most recent edition of Best's Insurance Reports, or as amended by the Supplementary General Conditions, such insurance as will protect the District from claims set forth below, which may arise out of or result from Contractor's Work under the Contract, and for which Contractor may be legally liable, whether such Work is by Contractor, by a Subcontractor, by anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable. Any required insurance shall not contain any exclusion that applies to the type of work performed by Contractor under the Contract Documents.

a. Claims for damages because of bodily injury, sickness, disease, or death of any person District would require indemnification and coverage for employee claim.

b. Claims for damages insured by usual personal injury liability coverage, which are sustained by a person as a result of an offense directly or indirectly related to employment of such person by Contractor or by another person.

c. Claims for damages because of injury or destruction of tangible property, including loss of use resulting therefrom, arising from operations under the Contract Documents.

d. Claims for damages because of bodily injury, death of a person, or property damage arising out of the ownership, maintenance, or use of a motor vehicle, all mobile equipment, and vehicles moving under their own power and engaged in the Work.

e. Claims involving contractual liability applicable to Contractor's obligations under the Contract Documents, including liability assumed by, and the indemnity and defense obligations of Contractor and the Subcontractors.

f. Claims involving Completed Operations, Independent Contractors' coverage, and Broad Form property damage, without any exclusions for collapse, explosion, demolition, underground coverage, and excavating (XCU).

g. Claims involving sudden or accidental discharge of contaminants or pollutants.

11.1.2 Specific Insurance Requirements

11.1.2.1 Contractor shall take out and maintain, and shall require all Subcontractors, if any, whether primary or secondary, to take out and maintain:

Comprehensive General Liability Insurance with a combined single limit per occurrence of not less than two million dollars (\$2,000,000.00) or Commercial General Liability Insurance which provides limits of not less than:

- |  |                |
|--|----------------|
| (a) Per occurrence (combined single limit)             | \$2,000,000.00 |
| (b) Project Specific Aggregate (for this Project only) | \$2,000,000.00 |
| (c) Products and Completed Operations (aggregate)      | \$2,000,000.00 |
| (d) Personal and Advertising Injury Limit              | \$1,000,000.00 |

11.1.2.2 Insurance Covering Special Hazards

11.1.2.3 The following Special hazards shall be covered by riders or riders to above mentioned public liability insurance or property damage insurance policy or policies of insurance, in amounts as follows:

- |   |                |
|---|----------------|
| (a) Automotive and truck where operated in amounts      | \$1,000,000.00 |
| (b) Material Hoist where used in amounts                | \$1,000,000.00 |
| (c) Explosion, Collapse, and Underground (XCU coverage) | \$1,000,000.00 |
| (d) Hazardous Materials                                 | \$1,000,000.00 |

11.1.2.4 In addition, provide Excess Liability Insurance coverage in the amount of four million dollars (\$4,000,000.00).

11.1.3 Subcontractor Insurance Requirements

11.1.3.1 Contractor shall require Subcontractors to take out and maintain public liability insurance and property damage insurance required under Article 11.1 in like amounts. A "claims made" or modified "occurrence" policy shall not satisfy the requirements of Article 11.1 without prior written approval of the District.

11.1.4 Additional Insured Endorsement Requirements

11.1.4.1 Contractor shall name, on any policy of insurance required under Article 11.1, the District, Construction Manager (CM), Architect, Inspector, the State of California, their officers, employees, agents, volunteers, and independent contractors as additional insureds. Subcontractors shall name Contractor, the District, Architect, Inspector, the State of California, their officers, employees, agents, volunteers, and independent contractors as additional insureds. The Additional Insured Endorsement included on all such insurance policies shall be an ISO CG 20 10 (04/13), or an ISO CG 20 38 (04/13), or their equivalent as determined by the District in its sole discretion, and must state that coverage is afforded the additional insured with respect to claims arising out of operations performed by or on behalf of the insured. If the additional insureds have other insurance that is applicable to the loss, such other insurance shall be on an excess or contingent basis. The insurance provided by Contractor pursuant to 11.1 must be designated in the policy as primary to any insurance obtained by the District. The amount of the insurer's liability shall not be reduced by the existence of such other insurance.

## 11.2 WORKERS' COMPENSATION INSURANCE

11.2.1 During the term of this Contract, Contractor shall provide workers' compensation and employer's liability insurance for all of Contractor's employees engaged in Work under this Contract on or at the site of the Project and, in case any of Contractor's Work is subcontracted, Contractor shall require the Subcontractor to provide workers' compensation insurance for all the Subcontractor's employees engaged in Work under the subcontract. Any class of employee or employees not covered by a Subcontractor's insurance shall be covered by Contractor's insurance. In case any class of employees engaged in Work under this Contract on or at the site of the Project is not protected under the Workers' Compensation laws, Contractor shall provide or cause a Subcontractor to provide insurance coverage for the protection of those employees not otherwise protected. Contractor shall file with the District certificates of insurance as required under Article 11.6 and in compliance with Labor Code § 3700.

Workers' compensation limits as required by the Labor Code, but not less than one million dollars (\$1,000,000.00) and employers' liability limits of one million dollars (\$1,000,000.00) per accident for bodily injury or disease.

## 11.3 BUILDER'S RISK/ "ALL RISK" INSURANCE

11.3.1 Course-of-Construction Insurance Requirements

11.3.1.1 Contractor, during the progress of the Work and until final acceptance of the Work by District upon completion of the entire Contract, shall maintain Builder's Risk, Course of Construction, or similar first party property coverage issued on a replacement cost value basis consistent with the total replacement cost of all insurable Work and the Project included within the Contract Documents. Coverage is to insure against all risks of accidental direct physical loss, and must include, by the basic grant of coverage or by endorsement, the perils of vandalism, malicious mischief (both without any limitation regarding vacancy or occupancy), fire, sprinkler leakage, civil authority, sonic boom, earthquake, flood, collapse, wind, lightning, smoke, and riot. The coverage must include debris removal, demolition, increased costs due to enforcement of building ordinance and law in the repair and replacement of damage and undamaged portions of the property, and reasonable costs for the Architect's and engineering services and expenses required as a result of any insured loss upon the Work and Project, which is the subject of the Contract Documents, including completed Work and Work in progress, to the full insurable value thereof. Such insurance shall include the District and the Architect as additional named insureds, and any other person with an insurable interest as designated by the District.

11.3.1.2 Contractor shall submit to the District for its approval all items deemed to be uninsurable. The risk of the damage to the Work due to the perils covered by the Builder's Risk/All Risk Insurance, as well as any other hazard that might result in damage to the Work, is that of Contractor and the Surety, and no Claims for such loss or damage shall be recognized by the District, nor will such loss or damage excuse the complete and satisfactory performance of the Contract by Contractor.

## 11.4 FIRE INSURANCE

- 11.4.1 Before the commencement of the Work, Contractor shall procure, maintain, and cause to be maintained at Contractor's expense, fire insurance on all Work subject to loss or damage by fire. The amount of fire insurance shall be sufficient to protect the Project against loss or damage in full until the Work is accepted by the District. This requirement may be waived upon confirmation by the District that such coverage is provided under the Builder's Risk Insurance being provided.

**11.5 AUTOMOBILE LIABILITY**

- 11.5.1 The District, Architect, CM, Inspectors, their directors, officers, employees, agents, and volunteers shall be covered as additional insureds with respect to the ownership, operation, maintenance, use, loading, or unloading of any auto owned, leased, hired, or borrowed by Contractor, or for which Contractor is responsible. Such insurance coverage shall be primary and non-contributory insurance as respects the District, Architect, CM, Project Inspector, their directors, officers, employees, agents, and volunteers, or if excess, shall stand in an unbroken chain of coverage excess of Contractor's scheduled underlying coverage. Any insurance or self-insurance maintained by the District, Architect, CM, Project Inspector, their directors, officers, employees, agents, and volunteers shall be excess of Contractor's insurance and shall not be called upon to contribute with it. The insurer shall agree to waive all rights of subrogation against the District, Architect, CM, Project Inspector, their directors, officers, employees, agents, and volunteers for losses paid under the terms of the insurance policy that arise from Work performed by Contractor.

- 11.5.2 Insurance Services Office Business Auto Coverage Form Number CA 0001, Code 1 (any auto) is required. Comprehensive Automobile Liability insurance to include all autos, owned, non-owned, and hired, with limits of one million dollars (\$1,000,000.00) per accident for bodily injury and property damage.

**11.6 OTHER INSURANCE**

- 11.6.1 Contractor shall provide all other insurance required to be maintained under applicable laws, ordinances, rules, and regulations.

**11.7 PROOF OF INSURANCE**

- 11.7.1 Contractor shall not commence Work nor shall it allow any Subcontractor to commence Work under this Contract until all required insurance and certificates have been obtained and delivered in duplicate to the District for approval subject to the following requirements:

- 11.7.1.1 Certificates and insurance policies shall include the following clause:

"This policy and any coverage shall not be suspended, voided, non-renewed, canceled, or reduced in required limits of liability or amounts of insurance or coverage until notice has been mailed via certified mail to the District. Date of cancellation or reduction may not be less than thirty (30) days after the date of mailing notice."

- 11.7.1.2 Certificates of insurance shall state in particular those insured, the

extent of insurance, location and operation to which the insurance applies, the expiration date, and cancellation and reduction notices.

11.7.1.3 Certificates of insurance shall clearly state that the District and the Architect are named as additional insureds under the policy described and that such insurance policy shall be primary to any insurance or self-insurance maintained by District.

11.7.1.4 Contractor and Subcontractors shall produce a certified copy of any insurance policy required under this Section upon written request of the District.

## 11.8 COMPLIANCE

11.8.1 In the event of the failure of Contractor to furnish and maintain any insurance required by this Article 11, Contractor shall be in default under the Contract. Compliance by Contractor with the requirement to carry insurance and furnish certificates or policies evidencing the same shall not relieve Contractor from liability assumed under any provision of the Contract Documents, including, without limitation to, the obligation to defend and indemnify the District and the Architect.

## 11.9 WAIVER OF SUBROGATION

11.9.1 Contractor waives (to the extent permitted by law) any right to recover against the District for damages to the Work, any part thereof, or any and all claims arising by reason of any of the foregoing, but only to the extent that such damages and/or claims are covered by property insurance and only to the extent of such coverage (which shall exclude deductible amounts) by insurance actually carried by the District.

11.9.2 The provisions of this Article are intended to restrict each party to recovery against insurance carriers only to the extent of such coverage, and waive fully and for the benefit of each any rights and/or claims that might give rise to a right of subrogation in any insurance carrier. The District and Contractor shall each obtain in all policies of insurance carried by either of them a waiver by the insurance companies thereunder of all rights of recovery by way of subrogation for any damages or claims covered by the insurance.

## 11.10 PERFORMANCE AND PAYMENT BONDS

### 11.10.1 Bond Requirements

11.10.1.1 Unless otherwise specified in the Supplemental Conditions, prior to commencing any portion of the Work, Contractor shall furnish separate Payment and Performance Bonds for its portion of the Work that shall cover 100% faithful performance of, and payment of, all obligations arising under the Contract Documents and/or guaranteeing the payment in full of all claims for labor performed and materials supplied for the Work. All bonds shall be provided by a corporate Surety authorized and admitted to transact business in California as sureties.

11.10.1.2 To the extent, if any, that the Contract Price is increased in accordance with the Contract Documents, Contractor shall, upon request of the District, cause the amount of the bonds to be increased accordingly and shall promptly deliver satisfactory evidence of such increase to the District. To the extent

available, the bonds shall further provide that no change or alteration of the Contract Documents (including, without limitation, an increase in the Contract Price, as referred to above), extensions of time, or modifications of the time, terms, or conditions of payment to Contractor will release the Surety. If Contractor fails to furnish the required bonds, the District may terminate the Contract for cause.

11.10.2 Surety Qualification

11.10.2.1 Only bonds executed by admitted Surety insurers as defined in Code of Civil Procedure § 995.120 shall be accepted. Surety must be a California-admitted Surety and listed by the U.S. Treasury with a bonding capacity in excess of the Project cost.

11.10.3 Alternate Surety Qualifications

11.10.3.1 If a California-admitted Surety insurer issuing bonds does not meet these requirements, the insurer will be considered qualified if it is in conformance with § 995.660 of the California Code of Civil Procedure and proof of such is provided to the District.

**END OF SECTION 00 72 11**

**ARTICLE 12**  
**UNCOVERING AND CORRECTION OF WORK**

**12.1 COMPLIANCE WITH TITLE 24 INSTALLATION REQUIREMENTS**

12.1.1 Contractor is aware of the requirements governing Contractor's Work under title 24 Section 4-343 which provides, in pertinent part:

4-343. Duties of Contractor

(a) *Responsibilities.* It is the duty of Contractor to complete the Work covered by his or her contract in accordance with the approved Plans and Specifications therefor. Contractor in no way is relieved of any responsibility by the activities of the Architect, Engineer, Inspector, or DSA in the performance of such duties.

(b) *Performance of the Work.* Contractor shall carefully study the approved Plans and Specifications and shall plan a schedule of operations well ahead of time. If at any time it is discovered that Work is being done that is not in accordance with the approved Plans and Specifications, Contractor shall correct the Work immediately. All inconsistencies or items that appear to be in error in the Plans and Specifications shall be promptly called to the attention of the architect or registered Engineer, through the Inspector, for interpretation or correction. In no case, however, shall the instruction of the Architect or registered Engineer be construed to cause Work to be done that is not in conformity with the approved Plans, Specifications, and Change Orders. Contractor must notify the Project Inspector, in advance, of the commencement of construction of each and every aspect of the Work.

12.1.2 Issuance of Notices of Noncompliance

12.1.2.1 The Inspector may issue a notice of noncompliance on the Project indicating deviation from Plans and Specifications. It is Contractor's responsibility to correct all deviations from the approved Plans and Specifications unless the District has issued an Immediate Change Directive (ICD). In such case, Contractor shall proceed with the Work with the understanding of the District as set forth in the ICD and as specifically noted in Article 7.3.

**12.2 SPECIAL NOTICE OF AMERICAN'S WITH DISABILITIES ACT**

12.2.1 Some of the requirements in the Plans and Specifications are meant to comply with the Americans with Disabilities Act (ADA). The requirements of the ADA are technical in nature and may appear to be minor in nature (i.e. whether a walkway or ramp has a 2% cross-slope). Contractor is warned that even the slightest deviation from the specific requirements from the ADA is considered a Civil Rights violation and subjects the District to fines of three (3) times actual damages sustained by a disabled individual, or up to four thousand dollars (\$4,000.00) per violation and attorney's fees required to enforce the ADA violation. As a result of the significant liability and exposure associated with ADA aspects of the Contract, Contractor shall take special care to meet all ADA requirements detailed in the Plans and Specifications. Failure to comply with ADA rules resulting in a notice of noncompliance shall be repaired to meet ADA

requirements promptly. In addition, any ADA violations that are not identified by Inspector or Architect that are later identified shall be repaired and charged back to Contractor through a Deductive Change Order.

12.2.2 Indemnification of ADA Claims

12.2.2.1 ADA claims arising from failure to comply with Plans and Specifications shall be indemnified, held harmless, and defended by Contractor. Further, any withholdings for ADA violations under Article 9.6 shall include potential redesign costs and an accelerated repair costs due to the potential for ADA claims arising from DSA posting of ADA violations on the Project.

12.3 **UNCOVERING OF WORK**

12.3.1 Uncovering Work for Required Inspections

12.3.1.1 Work shall not be covered without the Inspector's review and the Architect's knowledge that the Work conforms to the requirements of the approved Plans and Specifications (except in the case of an ICD under Article 7.3). Inspector must be timely notified of inspections and of new areas so Work can be inspected at least 48 hours before opening a new area. For example, see DSA Form 156 for Commencement/Completion of Work Notification, which requires "at least 48 hours" advance notification of a new area. An Inspector must comply with DSA protocols for signing each category or phase of Work under DSA Form 152 (in compliance with the Form 152 Manual) or a Notice of Deviation (DSA Form 154) will be issued requiring the Work that was not inspected be uncovered for inspection. Thus, if a portion of the Work is covered without inspection or Architect approval, is subject to a notice of noncompliance for being undertaken without inspection, or otherwise not in compliance with the Contract Documents, after issuance of a Written notice of noncompliance (Form 154) or a written notice to uncover Work, Contractor shall promptly uncover all Work (which includes furnishing all necessary facilities, labor, and material) for the Inspector's or the Architect's observation and be replaced at Contractor's expense without change in the Contract Sum or Time.

12.3.2 Costs for Inspections Not Required

12.3.2.1 If a portion of the Work having been covered is believed to be nonconforming to the Plans and Specifications, even if the Form 152 for the category of Work has been signed by the Inspector, the Inspector or the Architect may request to see such Work, and it shall be promptly uncovered by Contractor. If such Work is in accordance with the Contract Documents, costs of uncovering and replacement shall, by appropriate Change Order, be charged to the District. If such Work is not in accordance with Contract Documents, Contractor shall be responsible for all costs to uncover the Work, delays incurred to uncover the Work, and Contractor shall pay all costs to correct the incorrect construction condition, unless the condition was caused by the District or a separate contractor, in which event the District shall be responsible for payment of such costs to Contractor.

12.4 **CORRECTION OF WORK**

12.4.1 Correction of Rejected Work



12.4.1.1 Contractor shall promptly correct the Work rejected by the Inspector or the District upon recommendation of the Architect as failing to conform to the requirements of the Contract Documents, whether observed before or after Completion, and whether or not fabricated, installed, or completed. Contractor shall bear costs of correcting the rejected Work, including costs for delays that may be incurred by Contractor or Subcontractors, the costs for additional testing, inspections, and compensation for the Inspector's or the Architect's services and expenses made necessary thereby (including costs for preparing a Construction Change Document [CCD], DSA CCD review fees, and additional inspection and special inspection costs).

12.4.2 One-Year Warranty Corrections

12.4.2.1 If, within one (1) year after the date of Completion of the Work or a designated portion thereof, or after the date for commencement of warranties established under Article 9.9.1, or by the terms of an applicable special warranty required by the Contract Documents, any of the Work is found to be not in accordance with the requirements of the Contract Documents, Contractor shall correct it promptly after receipt of written notice from the District to do so, unless the District has previously given Contractor a written acceptance of such condition. This period of one (1) year shall be extended with respect to portions of the Work first performed after Completion by the period of time between Completion and the actual performance of the Work. This obligation under this Article 12.4.2 shall survive acceptance of the Work under the Contract and termination of the Contract. The District shall give such notice promptly after discovery of the condition.

12.4.3 District's Rights if Contractor Fails to Correct

12.4.3.1 If Contractor fails to correct nonconforming Work within a reasonable time, the District may correct the Work and seek a Deductive Change Order, pursuant to Article 9.6 or Article 2.2.

**END OF SECTION 00 72 12**

**ARTICLE 13**  
**MISCELLANEOUS PROVISIONS**

**13.1 GOVERNING LAW**

The Contract shall be governed by applicable federal, state, and county/local laws and regulations in force at the Project's location.

**13.2 SUCCESSORS AND ASSIGNS**

The District and Contractor respectively bind themselves, their partners, successors, assigns, and legal representatives to the other party hereto, and to partners, successors, assigns, and legal representatives of such other party in respect to covenants, agreements, and obligations contained in the Contract Documents. Neither party to the Contract shall assign the Contract as a whole without written consent of the other. If either party attempts to make such an assignment without such consent, that party shall nevertheless remain legally responsible for all obligations under the Contract.

**13.3 WRITTEN NOTICE**

In the absence of specific notice requirements in the Contract Documents, written notice shall be deemed to have been duly served if delivered in person to the individual, member of the firm or entity, or to an officer of the corporation for which it was intended, or if delivered at or sent by registered or certified mail to the last business address known to the party giving notice.

**13.4 RIGHTS AND REMEDIES**

13.4.1 Duties and Obligations Cumulative

13.4.1.1 Duties and obligations imposed by the Contract Documents and rights and remedies available thereunder shall be in addition to and not a limitation of duties, obligations, rights, and remedies otherwise imposed or available by law.

13.4.2 No Waiver

13.4.2.1 No action or failure to act by the Inspector, the District, or the Architect shall constitute a waiver of a right or duty afforded them under the Contract Documents, nor shall such action or failure to act constitute approval of or acquiescence in a breach thereunder, except as may be specifically agreed in writing.

**13.5 TESTS AND INSPECTIONS**

13.5.1 Compliance

13.5.1.1 Tests, inspections, and approvals of portions of the Work required by the Contract Documents will comply with Division 01, Title 24, and with all other laws, ordinances, rules, regulations, or orders of public authorities having jurisdiction.

13.5.2 Independent Testing Laboratory

13.5.2.1 The District will select and pay an independent testing laboratory to

conduct all tests and inspections. Selection of the materials required to be tested shall be made by the laboratory or the District's representative and not by Contractor. See Articles 3.13.1 and 4.3.6 regarding costs or expenses of inspection or testing outside of the Project Site.

13.5.3 Advance Notice to Inspector

13.5.3.1 Contractor shall notify the Inspector a sufficient time in advance of his or her readiness for required observation or inspection so that the Inspector may arrange for same. Contractor shall notify the Inspector a sufficient time in advance of the manufacture of material to be supplied under the Contract Documents that must, by terms of the Contract Documents, be tested in order that the Inspector may arrange for the testing of the material at the source of supply.

13.5.4 Testing Off-Site

13.5.4.1 Any material shipped by Contractor from the source of supply, prior to having satisfactorily passed such testing and inspection, or prior to the receipt of notice from said Inspector that such testing and inspection will not be required, shall not be incorporated in the Work.

13.5.5 Additional Testing or Inspection

13.5.5.1 If the Inspector, the Architect, the District, or public authority having jurisdiction determines that portions of the Work require additional testing, inspection, or approval not included under Article 13.5.1, the Inspector will, upon written authorization from the District, make arrangements for such additional testing, inspection, or approval. The District shall bear such costs except as provided in Articles 13.5.6 and 13.5.7.

13.5.6 Costs for Retesting

13.5.6.1 If such procedures for testing, inspection, or approval under Articles 13.5.1 and 13.5.2 reveal failure of the portions of the Work to comply with requirements established by the Contract Documents, Contractor shall bear all costs arising from such failure, including those of re-testing, re-inspection, or re-approval, including, but not limited to, compensation for the Architect's services and expenses. Any such costs shall be paid by the District, invoiced to Contractor, and deducted from the next Progress Payment.

13.5.7 Costs for Premature Test

13.5.7.1 In the event Contractor requests any test or inspection for the Project and is not completely ready for the inspection, Contractor shall be invoiced by the District for all costs and expenses resulting from that testing or inspection, including, but not limited to, the Inspector's and Architect's fees and expenses, and the amount of the invoice shall be deducted from the next Progress Payment.

13.6 **TRENCH EXCAVATION**

13.6.1 Trenches Greater Than Five Feet (5')

13.6.1.1 Pursuant to Labor Code section 6705, if the Contract Price exceeds

twenty-five thousand dollars (\$25,000.00) and involves the excavation of any trench or trenches five feet (5') or more in depth, Contractor shall, in advance of excavation, submit to the District or a registered civil or structural engineer employed by the District or Architect, a detailed plan showing the design of shoring for protection from the hazard of caving ground during the excavation of such trench or trenches.

13.6.2 Excavation Safety

13.6.2.1 If such plan varies from the Shoring System Standards established by the Construction Safety Orders, the plan shall be prepared by a registered civil or structural engineer, but in no case shall such plan be less effective than that required by the Construction Safety Orders. No excavation of such trench or trenches shall be commenced until said plan has been accepted by the District or by the person to whom authority to accept has been delegated by the District.

13.6.3 No Tort Liability of District

13.6.3.1 Pursuant to Labor Code §6705, nothing in this Article shall impose tort liability upon the District or any of its employees.

13.6.4 No Excavation without Permits

13.6.4.1 Contractor shall not commence any excavation Work until it has secured all necessary permits including the required CAL OSHA excavation/shoring permit. Any permits shall be prominently displayed on the Site prior to the commencement of any excavation.

13.7 **WAGE RATES, TRAVEL, AND SUBSISTENCE**

13.7.1 Wage Rates

13.7.1.1 Pursuant to the provisions of Article 2 (commencing at §1720), Chapter 1, Part 7, Division 2, of the Labor Code, the District has obtained the general prevailing rate of per diem wages and the general prevailing rate for holiday and overtime work in the locality in which this public works project is to be performed for each craft, classification, or type of worker needed for this Project from the Director of the Department of Industrial Relations (Director). These rates are on file at the administrative office of the District and are also available from the Director of the Department of Industrial Relations. Copies will be made available to any interested party on request. Contractor shall post a copy of such wage rates at appropriate, conspicuous, weatherproof points at the Site.

13.7.1.2 Any worker employed to perform Work on the Project, but such Work is not covered by any classification listed in the published general prevailing wage rate determinations or per diem wages determined by the Director of the Department of Industrial Relations, shall be paid not less than the minimum rate of wages specified therein for the classification which most nearly corresponds to the employment of such person in such classification.

13.7.2 Holiday and Overtime Pay

13.7.2.1 Holiday and overtime work, when permitted by law, shall be paid for at the rate set forth in the prevailing wage rate determinations issued by the Director

of the Department of Industrial Relations or at least one and one-half (1½) times the specified basic rate of per diem wages, plus employer payments, unless otherwise specified in the Contract Documents or authorized by law.

13.7.3 Wage Rates Not Affected by Subcontracts

13.7.3.1 Contractor shall pay, and shall cause to be paid, each worker engaged in the execution of the Work on the Project not less than the general prevailing rate of per diem wages determined by the Director, regardless of any contractual relationship that may be alleged to exist between Contractor or any Subcontractor and such workers.

13.7.4 Per Diem Wages

13.7.4.1 Contractor shall pay and shall cause to be paid to each worker needed to execute the Work on the Project per diem wages including, but not limited to, employer payments for health and welfare, pensions, vacation, travel time, and subsistence pay as provided for in Labor Code §1773.1.

13.7.5 Forfeiture and Payments

13.7.5.1 Pursuant to Labor Code §1775, Contractor shall forfeit to the District not more than two hundred dollars (\$200.00) for each calendar day, or portion thereof, for each worker paid less than the prevailing wage rates as determined by the Director of the Department of Industrial Relations, for the work or craft in which the worker is employed for any Work done under the Agreement by Contractor or by any of Contractor's Subcontractors. The amount of the penalty shall be determined by the Labor Commissioner and shall be based on consideration of (1) whether Contractor or Subcontractor's failure to pay the correct rate of per diem wages was a good faith mistake and, if so, the error was promptly and voluntarily correct upon being brought to the attention of Contractor or Subcontractor, and (2) whether Contractor or Subcontractor has a prior record of failing to meet prevailing wage obligations.

13.7.6 Monitoring and Enforcement by Labor Commissioner

13.7.6.1 Monitoring and enforcement of the prevailing wage laws and related requirements will be performed by the Labor Commissioner/Department of Labor Standards Enforcement (DLSE). Contractor and all subcontractors shall be required to furnish, at least monthly, certified payroll records directly to the Labor Commissioner in accordance with Labor Code section 1771.4. All payroll records shall be furnished in a format required by the Labor Commissioner. Contractor and all subcontractors must sign up for, and use, the Labor Commissioner's electronic certified payroll records submission system. The District will have direct and immediate access to all CPRs for the Project that are submitted through the Labor Commissioner's system. The District can use this information for any appropriate purpose, including monitoring compliance, identifying suspected violations, and responding to Public Records Act requests.

13.7.6.2 The Labor Commissioner/DLSE may conduct various compliance monitoring and enforcement activities including, but not limited to, confirming the accuracy of payroll records, conducting worker interviews, conducting audits, requiring submission of itemized statements prepared in accordance with Labor Code section 226, and conducting random in-person inspections of the Project

site (onsite visits). Onsite visits may include inspections of records, inspections of the Work site and observation of work activities, interviews of workers and others involved with the Project, and any other activities deemed necessary by the Labor Commissioner/DLSE to ensure compliance with prevailing wage requirements. The Labor Commissioner/DLSE shall have free access to any construction site or other place of labor and may obtain any information or statistics pertaining to the lawful duties of the Labor Commissioner/DLSE.

13.7.6.3 Any lawful activities conducted, or any requests made by the Labor Commissioner/DLSE shall not be the basis for any delays, claims, costs, damages or liability of any kind against the District by Contractor. Contractor and all subcontractors shall cooperate and comply with any lawful requests by the Labor Commissioner/DLSE. The failure of the Labor Commissioner, DLSE, or any other entity related to the Department of Industrial Relations to comply with any requirement imposed by the California Code of Regulations, Title 8, Chapter 8 shall not of itself constitute a defense to the failure to pay prevailing wages or to comply with any other obligation imposed by Division 2, Part 7, Chapter 1 of the Labor Code.

13.7.6.4 Prior to commencing any Work on the Project, Contractor shall post the required notice/poster required under the California Code of Regulations and Labor Code section 1771.4, in both English and Spanish, at a conspicuous, weatherproof area at the Project site. The required notice/poster is available on the Labor Commissioner's website.

## 13.8 RECORDS OF WAGES PAID

### 13.8.1 Payroll Records

13.8.1.1 Pursuant to §1776 of the Labor Code, Contractor and each Subcontractor shall keep an accurate payroll record showing the name, address, social security number, work classification, and straight time and overtime hours worked each day and week, and the actual per diem wages paid to each journeyman, apprentice, worker, or other employee employed by him or her in connection with the Project.

13.8.1.2 All payroll records as specified in Labor Code §1776 of Contractor and all Subcontractors shall be certified and furnished directly to the Labor Commissioner in accordance with Labor Code §1771.4(a)(3) on a monthly basis (or more frequently if required by the District or the Labor Commissioner) and in a format prescribed by the Labor Commissioner. Payroll records as specified in Labor Code §1776 shall be certified and submitted to the District with each application for payment. All payroll records shall be available for inspection at all reasonable hours at the principal office of Contractor on the following bases:

- a. A certified copy of an employee's payroll record shall be made available for inspection or furnished to the employee or his or her authorized representative on request,
- b. A certified copy of all payroll records shall be made available for inspection, or furnished upon request, to a representative of District, the Division of Labor Standards Enforcement, or the Division of Apprenticeship Standards of the Department of Industrial Relations.
- c. A certified copy of all payroll records shall be made available upon

request by the public for inspection or for copies thereof; however, a request by the public shall be made through the District, the Division of Apprenticeship Standards, or the Division of Labor Standards Enforcement. If the requested payroll records have not been provided pursuant to Paragraph (2) above, the requesting party shall, prior to being provided the records, reimburse the costs, according to law for the preparation by Contractor, Subcontractor(s), and the entity through which the request was made. The public shall not be given access to such records at the principal office of Contractor.

d. The certified payroll records shall be on forms provided by the Division of Labor Standards Enforcement or shall contain the same information as the forms provided by the Division of Labor Standards Enforcement.

e. Contractor or Subcontractor(s) shall file a certified copy of all payroll records with the entity that requested such records within ten (10) calendar days after receipt of a written request.

f. Any copy of records made available for inspection as copies and furnished upon request to the public or any public agency by the District, the Division of Apprenticeship Standards or the Division of Labor Standards Enforcement shall be marked or obliterated to prevent disclosure of an individual's name, address, and social security number. The name and address of Contractor awarded the Contract, or the Subcontractor(s) performing the Contract, shall not be marked or obliterated. Any copy of records made available for inspection by, or furnished to, a joint labor-management committee established pursuant to the federal Labor Management Cooperation Act of 1978 (Section 175a of Title 29 of the United States Code) shall be marked or obliterated only to prevent disclosure of an individual's name and social security number. Notwithstanding any other provision of law, agencies that are included in the Joint Enforcement Strike Force on the Underground Economy established pursuant to Section 329 of the Unemployment Insurance Code and other law enforcement agencies investigating violations of law shall, upon request, be provided non-redacted copies of certified payroll records.

g. Contractor shall inform the District of the location of all payroll records, including the street address, city, and county, and shall, within five (5) working days, provide a notice of a change of location and address.

h. Contractor or Subcontractor(s) shall have ten (10) calendar days in which to comply, subsequent to receipt of a written notice requesting payroll records. In the event that Contractor or Subcontractor(s) fails to comply within the ten (10) day period, Contractor or Subcontractor(s) shall, as a penalty to the District, forfeit one hundred dollars (\$100.00) for each calendar day, or portion thereof, for each worker, until strict compliance is effectuated. Upon the request of the Division of Apprenticeship Standards or the Division of Labor Standards Enforcement, these penalties shall be withheld from progress payments then due.

13.8.1.3 Responsibility for compliance with this Article shall rest upon Contractor.

13.8.2 Withholding of Contract Payments and Penalties

13.8.2.1 The District may withhold or delay contract payments to Contractor and/or any Subcontractor if:

- a. The required prevailing rate of per diem wages determined by the Director of the Department of Industrial Relations is not paid to all workers employed on the Project,
- b. Contractor or Subcontractor(s) fail to submit all required certified payroll records with each application for payment, but not less than once per month,
- c. Contractor or Subcontractor(s) submit incomplete or inadequate payroll records,
- d. Contractor or Subcontractor(s) fail to comply with the Labor Code requirements concerning apprentices, or
- e. Contractor or Subcontractor(s) fail to comply with any applicable state laws governing workers on public works projects.

### 13.9 APPRENTICES

#### 13.9.1 Apprentices Wages and Definitions

13.9.1.1 All apprentices employed by Contractor to perform services under the Contract shall be paid the standard wage paid to apprentices under the regulations of the craft or trade for which he or she is employed, and as determined by the Director of the Department of Industrial Relations, and shall be employed only at the craft or trade to which he or she is registered. Only apprentices, as defined in §3077 of the Labor Code, who are in training under apprenticeship standards that have been approved by the Chief of the Division of Apprenticeship Standards and who are parties to written apprenticeship agreements under Chapter 4 (commencing with §3070) of Division 3, are eligible to be employed under this Contract. The employment and training of each apprentice shall be in accordance with the apprenticeship standards and apprentice agreements under which he or she is training, or in accordance with the rules and regulations of the California Apprenticeship Council.

#### 13.9.2 Employment of Apprentices

13.9.2.1 Contractor agrees to comply with the requirements of Labor Code §1777.5. Contractor awarded the Project, or any Subcontractor under him or her, when performing any of the Work under the Contract or subcontract, employs workers in any apprenticeable craft or trade, Contractor and Subcontractor shall employ apprentices in the ratio set forth in Labor Code §1777.5. Contractor or any Subcontractor must apply to any apprenticeship program in the craft or trade that can provide apprentices to the Project site for a certificate approving Contractor or subcontractor under the apprenticeship standards for the employment and training of apprentices in the area or industry affected. However, the decision of the apprenticeship program to approve or deny a certificate shall be subject to review by the Administrator of Apprenticeship. The apprenticeship program or programs, upon approving Contractor or Subcontractor, shall arrange for the dispatch of apprentices to Contractor or Subcontractor upon Contractor's or Subcontractor's request. "Apprenticeable craft or trade" as used in this Article means a craft or trade determined as an



apprenticeable occupation in accordance with the rules and regulations prescribed by the California Apprenticeship Council. The ratio of work performed by apprentices to journeyman employed in a particular craft or trade on the Project shall be in accordance with Labor Code §1777.5.

13.9.3 Submission of Contract Information

13.9.3.1 Prior to commencing Work on the Project, Contractor and Subcontractors shall submit contract award information to the applicable apprenticeship program(s) that can supply apprentices to the Project and make the request for the dispatch of apprentices in accordance with the Labor Code. The information submitted shall include an estimate of journeyman hours to be performed under the Contract, the number of apprentices proposed to be employed, and the approximate dates the apprentices would be employed. A copy of this information shall also be submitted to the District, if requested. Within 60 days after concluding Work on the Project, Contractor and Subcontractors shall submit to the District, if requested, and to the apprenticeship program, a verified statement of the journeyman and apprentice hours performed on the Project.

13.9.4 Apprentice Fund

13.9.4.1 Contractor or any Subcontractor under him or her, who, in performing any of the Work under the Contract, employs journeymen or apprentices in any apprenticeable craft or trade shall contribute to the California Apprenticeship Council the same amount that the Director determines is the prevailing amount of apprenticeship training contributions in the area of the Project. Contractor and Subcontractors may take as a credit for payments to the California Apprenticeship Council any amounts paid by Contractor or Subcontractor to an approved apprenticeship program that can supply apprentices to the Project. Contractor and Subcontractors may add the amount of the contributions in computing his or her bid for the Contract.

13.9.5 Prime Contractor Compliance

13.9.5.1 The responsibility of compliance with Article 13 and §1777.5 of the Labor Code for all apprenticeable occupations is with the Prime Contractor. Any Contractor or Subcontractor that knowingly violates the provisions of this Article or Labor Code §1777.5 shall be subject to the penalties set forth in Labor Code §1777.7.

13.10 **ASSIGNMENT OF ANTITRUST CLAIMS**

13.10.1 Application

13.10.1.1 Pursuant to Government Code § 4551, in entering into a public works contract or a subcontract to supply goods, services, or materials pursuant to a public works contract, Contractor or Subcontractor offers and agrees to assign to the 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. § 15), or under the Cartwright Act (Chapter 2 [commencing with § 16700] of Part 2 of Division 7 of the Business and Professions Code), arising from the purchase of goods, services, or materials pursuant to the public works contract or the subcontract. This assignment shall be made and become effective at the time the awarding body

tenders Retention Payment to Contractor, without further acknowledgment by the parties. If the District receives, either through judgment or settlement, a monetary recovery for a cause of action assigned under Chapter 11 (commencing with § 4550) of Division 5 of Title 1 of the Government Code, the assignor shall be entitled to receive reimbursement for actual legal costs incurred and may, upon demand, recover from the District any portion of the recovery, including treble damages, attributable to overcharges that were paid by the assignor but were not paid by the District as part of the bid price, less the expenses incurred in obtaining that portion of the recovery.

13.10.2 Assignment of Claim

13.10.2.1 Upon demand in writing by the assignor, the District shall, within one (1) year from such demand, reassign the cause of action assigned pursuant to this Article if the assignor has been, or may have been, injured by the violation of law for which the cause of action arose, and the District has not been injured thereby, or the District declines to file a court action for the cause of action.

**13.11 STATE AND DISTRICT CONDUCTED AUDITS**

13.11.1.1 Pursuant to and in accordance with the provisions of Government Code §10532, or any amendments thereto, all books, records, and files of the District, Contractor, or any Subcontractor connected with the performance of this Contract involving the expenditure of state funds in excess of ten thousand dollars (\$10,000.00), including, but not limited to, the administration thereof, shall be subject to the examination and audit of the Office of the Auditor General of the State of California for a period of five (5) years after Retention Payment is made or a Notice of Completion is recorded, whichever occurs first. Contractor shall preserve, and cause to be preserved, such books, records, hard drives, electronic media, and files for the audit period.

13.11.1.2 Pursuant to the remedies under Public Contract Code section 9201 and Government Code section 930.2, Contractor, through execution of this Agreement, also agrees the District shall have the right to review and audit, upon reasonable notice, the books and records of Contractor concerning any monies associated with the Project. The purpose of this audit is to quickly and efficiently resolve Disputes based on the actual costs incurred and to reduce the uncertainty in resolving Disputes with limited information. The District shall perform any audits at its own cost, and any such audit shall be performed by an independent auditor, having no direct or indirect relationship with the functions or activities being audited, or with the business conducted by Contractor or District. In the event the independent auditor determines that Change Orders, response to Request for Proposals, Claims, Appeal of Claims, or other requests for payment are in error, or has any other concerns or questions, the Auditor shall report the results of the Audit findings to the District and provide a copy to Contractor after giving the District Board the opportunity for at least 10 days review. If Contractor disputes the findings of the independent auditor, such dispute shall be handled in the manner set forth under Article 4.6.2 entitled Disputes.

13.11.1.3 If Contractor, having agreed to the terms of this Contract, fails to produce books or records requested by Auditor, such failure to produce books or records that were required to be preserved for audit, it shall be presumed that the information contained in the withheld books or records were unfavorable to Contractor, and the Auditor shall note this refusal in the results of the audit

findings for further evaluation by the District and the District's Board. The refusal to release records that are concerning monies associated with the Project may be used as a grounds to debar Contractor under Article 15 for failure to preserve records under Article 13.11, and the failure to produce required audit records may also be used as a grounds for a negative finding against Contractor depending on the significance of the records that are withheld by Contractor. Failure to produce job cost data tied to job cost categories and budgets shall be presumed an intentional failure to produce key audit records. Similarly, failure to produce Daily Reports (prepared at or near the time the Work actually took place (see Article 3.16) shall be presumed an intentional failure to produce key audited records.

13.11.1.4 If Contractor is seeking costs for inefficiency, home office overhead, or unanticipated increased costs due to delays or acceleration, Contractor shall also produce copies of the original bid tabulation utilized in submitting Contractor's bid for the Project. This document shall be considered confidential, shall not be subject to disclosure through a Public Records Act, and shall not be distributed to anyone other than the District and the District's counsel. This bid tabulation shall only be used in litigation, arbitration, evaluation of Claims or Disputes, audit, and trial. If the records for the bid tabulation are kept on a computer, Contractor shall also produce all metadata (in native format) that accompanies the bid tabulation for inspection to prove the authenticity of the underlying bid tabulation. Failure to produce the bid tabulation for review of inefficiency, home office overhead, or unanticipated increased costs due to delays or accelerations shall be considered material evidence that the bid tabulation was not favorable to Contractor. This evidence shall be entered as a jury instruction for trial that the bid tabulation was not produced, and the bid tabulation information was unfavorable to Contractor. The evidence may also be used in debarment proceedings and noted as an exception to audit findings.

13.11.1.5 Upon notification of Contractor concerning the results of the audit, and a reasonable time has passed for Contractor to respond to the Audit findings, and if either there is no Dispute of the Audit findings under Article 4.6 or if the result after utilizing the Disputes Clause confirms the Audit findings, the District may seek reimbursement for overstated Claims, Change Orders, or Appeal of Claims, and may also undertake debarment proceedings under Article 15 of these General Conditions.

## 13.12 **STORM WATER POLLUTION PREVENTION**

### 13.12.1 Application

13.12.1.1 This section addresses the preparation, implementation, and monitoring of a Storm Water Pollution Prevention Plan (SWPPP) for the purpose of preventing the discharge of pollutants from the construction site. This includes the elimination of pollution discharges such as improper dumping, spills, or leakage from storage tanks or transfer areas. The District will not issue a Notice to Proceed until Contractor has prepared by a qualified individual and obtained approval of the Permit Registration Documents (PRDs) that include a Notice of Intent, Construction Risk Calculation, Site Map, SWPPP, Annual Fee, and any additional required documents from all applicable local governing agencies including the Regional Water Quality Control Board. Contractor shall also secure a certification that the Project has met all of the conditions of the General Construction Activity Storm Water Permit (GCASP) and comply with all

applicable local, state, and federal regulations governing storm water pollution prevention.

13.12.2 References and Materials

13.12.2.1 - California Stormwater Quality Association New Development and Redevelopment Best Management Practice Handbook.

13.12.2.2 - 2015 California Stormwater Quality Association Construction BMP Handbook.

13.12.2.3 - State Water Resources Control Board (2009). Order 2009-0009-DWQ, NPDES General Permit No. CAS000002: Waste Discharge Requirements for Discharges of Storm Water Runoff Associated with Construction and Land Disturbing Activities, and as amended by 2010-0014-DWQ and 2012-0006-DWQ. Available online at: <http://www.waterboards.ca.gov>.

13.12.2.4 Use materials of a class, grade, and type needed to meet the performance described in the BMP Handbook.

13.12.3 Preparation and Approval

13.12.3.1 Contractor shall prepare by a qualified individual the PRDs that include a Notice of Intent, Construction Risk Calculation, Site Map, SWPPP, Annual Fee, and any additional required documents. Contractor's Qualified SWPPP Developer (QSD) shall prepare the SWPPP as required to comply with storm water pollution regulations for project sites with storm water discharges associated with construction activity, such as clearing or demolition, grading, excavation, and other land disturbances. The SWPPP shall apply to all areas that are directly related to construction activity, including but not limited to, staging areas, storage yards, material borrow areas, and access roads.

13.12.3.2 Contractor shall prepare and submit to the local governing agencies and the District the SWPPP for review and approval if the project sites, new or existing, with land disturbance of one (1) or more acres (or less than one [1] acre if part of a common plan of development), the construction activity that results in land surface disturbances of less than one (1) acre is part of a larger common plan of development or sale of one (1) or more acres of disturbed land surface, or the construction activity associated with Linear Underground/Overhead Projects (LUPs) including, but not limited to, those activities necessary for the installation of underground and overhead linear facilities (e.g., conduits, substructures, pipelines, towers, poles, cables, wires, connectors, switching, and regulating and transforming equipment and associated ancillary facilities) and include, but are not limited to, underground utility mark-out, potholing, concrete and asphalt cutting and removal, trenching, excavation, boring and drilling, access road and pole/tower pad and cable/wire pull station, substation construction, substructure installation, construction of tower footings and/or foundations, pole and tower installations, pipeline installations, welding, concrete and/or pavement repair or replacement, and stockpile/borrow locations.

13.12.3.3 Contractor shall also pay annual renewal fee(s) until the contract is completed and make all such checks payable to the State Water Resources Control Board. The Notice of Intent must be submitted at least two (2) weeks prior to the commencement of construction activities.

13.12.3.4 Contractor shall prepare the SWPPP by following the format in Sections 2, 3, 4, and Appendices A through F of the California Stormwater BMP Handbook - Construction, January 2015 edition, published by the California Stormwater Quality Association. The publication is available from:

California Stormwater Quality Association  
P.O. Box 2105  
Menlo Park, CA 94026-  
2105  
Phone: (650) 366-1042  
E-mail: info@casqa.org

or

<https://www.casqa.org/store/products/tabid/154/p-167-construction-handbookportal-initial-subscription.aspx>

13.12.3.5 Where land disturbance is less than one (1) acre, any BMPs indicated in the BMP Handbook needed to prevent or minimize storm water pollution shall be implemented at no extra cost to the District.

13.12.3.6 Within two (2) weeks after Award of Contract by the District, Contractor shall submit to the District's Civil Engineer one (1) copy of the PRDs including the SWPPP for review. After the District's approval, Contractor shall provide approved copies of the SWPPP as follows: one (1) copy each to the District's Construction Inspector, District's Construction Manager, District Architect, Commissioned Architect, and District's Civil Engineer.

#### 13.12.4 Implementation

13.12.4.1 Contractor shall implement the SWPPP by doing the following:

- a. Obtain a Waste Discharger Identification (WDID) number from the SWRCB before beginning construction. This number will be issued once PRDs are administratively accepted and fee is received,
- b. Keep the SWPPP, REAPs, and monitoring data on the construction site,
- c. Employ a Qualified SWPPP Practitioner (QSP) to implement the SWPPP during construction and develop Rain Event Action Plans (REAPs),
- d. Install, inspect, maintain, and monitor BMPs required by the General Permit,
- e. Install perimeter controls prior to starting other construction work at the site,
- f. Contain onsite storm water at the jobsite. Do not drain onsite water directly into the storm drain,
- g. Implement the SWPPP,
- h. Provide SWPPP and BMP implementation training for those responsible for implementing the SWPPP,
- i. Designate trained personnel for the proper implementation of the SWPPP,

- j. Conduct monitoring, as required, and assess compliance with the Numeric Action Levels (NALs) or Numeric Effluent Limitations (NELs) appropriate to your project,
- k. Report monitoring data:
  - 1. Maintain a paper or electronic copy of all required records for three (3) years from the date generated or date submitted, whichever is last. These records must be available at the construction site until construction is completed,
  - 2. Have a QSD revise the SWPPP as needed to reflect the phases of construction and to suit changing site conditions and instances when properly installed systems are ineffective, and
  - 3. Assist the District with entering any necessary data or information into the Stormwater Multi-Application and Reporting System (SMARTS), and
- l. At the end of Construction Contract:
  - 1. Submit Notice of Termination (NOT) into the SMARTS when construction is complete, and conditions of termination listed in the NOT have been satisfied. A copy of the NOT can be found at: <http://www.waterboards.ca.gov>,
  - 2. Leave in place storm water pollution prevention controls needed for post-construction storm water management and remove those that are not needed as determined by the District. Thereafter, left-in-place controls will be maintained by the District, and
  - 3. Provide Site Monitoring Reports, SWPPP revisions, compliance certifications and related documents to the District. Post-construction storm water operation and management plan, as mentioned in the compliance certifications, are considered to be in place at the end of the Construction Contract.

#### 13.12.5 Monitoring

13.12.5.1 Contractor shall conduct examination of storm water pollution prevention controls as required by the State Water Resources Control Board (2009) Order 2009-0009-DWQ, NPDES General Permit No. CAS000002: Waste Discharge Requirements for Discharges of Storm Water Runoff Associated with Construction and Land Disturbing Activities, and as amended by 2010-0014-DWQ and 2012-0006-DWQ. This includes properly qualified personnel performing all required monitoring, testing, and inspections. Contractor shall also conduct examination of storm water pollution prevention controls, as well as before and after each storm event in compliance with the State Water Resources Control Board Order No. 2009-0009-DWQ, National Pollutant Discharge Elimination System General Permit No. CAS000002: Waste Discharge Requirements for Discharges of Storm Water Runoff Associated with Construction and Land Disturbance Activities, and as amended by 2010-0014-DWQ and 2012-0006-DWQ, and at least once each 24-hour period during extended storm events to identify BMP effectiveness and implement repairs or BMP changes as soon as feasible. All maintenance related to a storm event

should be completed within 48 hours of the storm event. Contactor shall also prepare and maintain, at the jobsite, a log of each inspection using site monitoring report forms.

13.12.6 Liabilities and Penalties

13.12.6.1 Review of the SWPPP and inspection logs by the District shall not relieve Contractor from liabilities arising from noncompliance with storm water pollution regulations.

13.12.6.2 Payment of penalties for noncompliance by Contractor shall be the sole responsibility of Contractor and will not be reimbursed by the District.

13.12.6.3 Compliance with the Clean Water Act pertaining to construction activity is the sole responsibility of Contractor. For any fine(s) levied against the District due to noncompliance by Contractor, the District will deduct from the final payment due Contractor the total amount of the fine(s) levied on the District, plus legal and associated costs.

13.12.6.4 Contractor shall submit to the District a completed NOI for change of information (Construction Site Information and Material Handling/Management Practices).

**END OF SECTION 00 72 13**

**ARTICLE 14**  
**TERMINATION OR SUSPENSION OF THE CONTRACT**

**14.1 TERMINATION BY CONTRACTOR FOR CAUSE**

14.1.1 Grounds for Termination

14.1.1.1 Contractor may terminate the Contract if the Work is stopped for a period of 30 consecutive days through no act or fault of Contractor, a Subcontractor, a Sub-subcontractor, their agents or employees, or any other persons performing portions of the Work for whom Contractor is contractually responsible, for only the following reasons:

- a. Issuance of an order of a court or other public authority having jurisdiction, or
- b. An act of the United States or California government, such as a declaration of a national emergency.

14.1.2 Notice of Termination

14.1.2.1 If one of the above reasons exists, Contractor may, upon written notice of seven (7) additional days to the District, terminate the Contract and recover from the District payment for Work executed and for reasonable costs verified by the Architect with respect to materials, equipment, tools, construction equipment, and machinery, including reasonable overhead, profit, and damages.

**14.2 TERMINATION BY THE DISTRICT FOR CAUSE**

14.2.1 Grounds for Termination

14.2.1.1 The District may terminate Contractor and/or this Contract for the following reasons:

- a. Persistently or repeatedly refusing or failing to supply enough properly skilled workers or proper materials,
- b. Persistently or repeatedly is absent, without excuse, from the job site,
- c. Fails to make payment to Subcontractors, suppliers, materialmen, etc.,
- d. Persistently disregards laws, ordinances, rules, regulations, or orders of a public authority having jurisdiction,
- e. Fails to provide a schedule, or fails or refuses to update schedules required under the Contract,
- f. Falls behind on the Project and refuses or fails to undertake a Recovery Schedule,
- g. If Contractor has been debarred from performing Work,
- h. Becomes bankrupt or insolvent, including the filing of a general assignment for the benefit of creditors, or
- i. Otherwise is in substantial breach of a provision of the Contract Documents.



14.2.2 Notification of Termination

14.2.2.1 When any of the above reasons exist, the District may, without prejudice to any other rights or remedies of the District and after giving Contractor and Contractor's Surety written notice of seven (7) days, terminate Contractor and/or this Contract and may, subject to any prior rights of the Surety:

- a. Take possession of the Project and of all material, equipment, tools, and construction equipment and machinery thereon owned by Contractor,
- b. Accept assignment of Subcontracts. Contractor acknowledges and agrees that if the District (in its sole and absolute discretion) decides to takeover completion of the Project, Contractor agrees to immediately assign all subcontracts to the District, which the District has chosen to accept,
- c. Complete the Work by any reasonable method the District may deem expedient, including contracting with a replacement contractor or contractors, and
- d. Agree to accept a takeover and completion arrangement with Surety that is acceptable to the District Board.

14.2.3 Takeover and Completion of Work after Termination for Cause

14.2.3.1 A Termination for Cause is an urgent matter that requires immediate action since Project Work is open and incomplete, the site is subject to vandalism and theft, the Project site is considered a public nuisance, and there is a possibility of injury and deterioration of the Project Work and materials. Thus, the District shall be entitled to enter a takeover contract to either remediate the unfinished condition or complete the Work for this Project.

14.2.4 Payments Withheld

14.2.4.1 If the District terminates the Contract for one of the reasons stated in Article 14.2.1, Contractor shall not be entitled to receive further payment until the Work is complete. All costs associated with the termination and completion of the Project shall be the responsibility of Contractor and/or its Surety.

14.2.5 Payments upon Completion

14.2.5.1 If the unpaid balance of the Contract Sum exceeds costs of completing the Work, including compensation for professional services and expenses made necessary thereby, such excess shall be paid to Contractor. If such costs exceed the unpaid balance, Contractor and its Surety shall pay the difference to the District. The amount to be paid to Contractor, or District, as the case may be, shall be certified by the Architect upon application. This payment obligation shall survive completion of the Contract.

**14.3 TERMINATION OF CONTRACT BY DISTRICT (CONTRACTOR NOT AT FAULT)**

14.3.1 Termination for Convenience

14.3.1.1 District may terminate the Contract upon 15 calendar days of written

notice to Contractor and use any reasonable method the District deems expedient to complete the Project, including contracting with replacement contractor or contractors, if it is found that reasons beyond the control of either the District or Contractor make it impossible or against the District's interest to complete the Project. In such a case, Contractor shall have no Claims against the District except for (1) the actual cost for approved labor, materials, and services performed in accordance with the Contract Documents that have not otherwise been previously paid for and that are supported and documented through timesheets, invoices, receipts, or otherwise, (2) profit and overhead of ten percent (10%) of the approved costs in item (1), and (3) termination cost of five percent (5%) of the approved costs in item (1). Contractor acknowledges and agrees that if the District (in its sole and absolute discretion) decides to takeover completion of the Project, Contractor agrees to immediately assign all subcontracts to the District that the District has chosen to accept.

#### 14.3.2 Non-Appropriation of Funds/Insufficient Funds

14.3.2.1 In the event that sufficient funds are not appropriated to complete the Project, or the District determines that sufficient funds are not available to complete the Project, District may terminate or suspend the completion of the Project at any time by giving written notice to Contractor. In the event that the District exercises this option, the District shall pay for any and all work and materials completed or delivered onto the site for which value is received, the value of any and all work then in progress, and orders actually placed that cannot be canceled up to the date of notice of termination. The value of work and materials not otherwise already paid for by the District up to the time of termination under this Paragraph shall include a factor of 15 percent (15%) for Contractor's overhead and profit and there shall be no other costs or expenses paid to Contractor. All work, materials, and orders paid for pursuant to this provision shall become the property of the District. District may, without cause, order Contractor in writing to suspend, delay, or interrupt the Project in whole or in part for such period of time as District may determine. Adjustment shall be made for increases in the cost of performance of the Agreement caused by suspense, delay, or interruption.

### 14.4 REMEDIES OTHER THAN TERMINATION

14.4.1 If a default occurs, the District may, without prejudice to any other right or remedy, including, without limitation, its right to terminate the Contract pursuant to Article 14.2, do any of the following:

14.4.1.1 Permit Contractor to continue under this Contract, but make good such deficiencies or complete the Contract by whatever method the District may deem expedient, and the cost and expense thereof shall be deducted from the Contract Price or paid by Contractor to the District on demand,

14.4.1.2 If the workmanship performed by Contractor is faulty or defective materials are provided, erected or installed, then the District may order Contractor to remove the faulty workmanship or defective materials, and to replace the same with work or materials that conform to the Contract Documents, in which event Contractor, at his or her sole cost and expense, shall proceed in accordance with the District's order and complete the same within the time period given by the District in its notice to Contractor, or

14.4.1.3 Initiate procedures to declare Contractor a non-responsible bidder for a period of two (2) to five (5) years thereafter.

14.4.2

All amounts expended by the District in connection with the exercise of its rights hereunder shall accrue interest from the date expended until paid to the District at the maximum legal rate. The District may retain or withhold any such amounts from the Contract Price. If Contractor is ordered to replace any faulty workmanship or defective materials pursuant to this Article 14, Contractor shall replace the same with new work or materials approved by the Architect and the District, and, at its own cost, shall repair or replace, in a manner and to the extent the Architect and the District shall direct, all Work or material that is damaged, injured, or destroyed by the removal of said faulty workmanship or defective material, or by the replacement of the same with acceptable work or materials. In no event shall anything in this Article be deemed to constitute a waiver by the District of any other rights or remedies that it may have at law or in equity, it being acknowledged and agreed by Contractor that the remedies set forth in this Article are in addition to, and not in lieu of, any other rights or remedies that the District may have at law or in equity.

**END OF SECTION 00 72 14**

**ARTICLE 15**  
**DEBARMENT**

**15.1 DEBARMENT MEANS THERE HAS BEEN A FINDING THAT THE CONTRACTOR IS NOT RESPONSIBLE**

15.1.1 During the course of the Project, or if it is determined through Change Orders, Claims, or Audit that a Contractor is not responsible, the District may, in addition to other remedies provided in the Contract, debar the Contractor from bidding or proposing on, or being awarded, and/or performing work on District contracts for a specified period of time, which generally will not exceed five (5) years, but may exceed five (5) years or be permanent if the circumstances warrant such debarment. In addition to the debarment proceeding, a finding that a Contractor is to be debarred shall result in the termination of any or all existing Contracts the Contractor may have with the District.

**15.2 BOARD FINDING**

15.2.1 The District may debar a Contractor if the Board, or the Board's delegate, in its discretion, finds the Contractor has done any of the following:

15.2.2 Intentionally or with reckless disregard violated any term of the Contract with the District,

15.2.3 Committed an act or omission that reflected on the Contractor's quality, fitness, or capacity to perform Work for the District,

15.2.4 Committed an act or offense that indicated a lack of business integrity or business honesty, or

15.2.5 Made or submitted a false claim against the District or any other public entity.

**15.3 HEARING AND PRESENTATION OF EVIDENCE**

15.3.2 If there is evidence that the Contractor may be subject to debarment, the District shall notify the Contractor in writing of the evidence that which is the basis for the proposed debarment and shall advise the Contractor of the scheduled date for a debarment hearing before the District Board, or its delegate.

15.3.3 The District Board, or delegate, shall conduct a hearing where evidence on the proposed debarment is presented. The Contractor, or the Contractor's representative, shall be given an opportunity to submit evidence at the hearing. The Contractor shall be provided an adequate amount of time to prepare and object to evidence presented. A tentative proposed decision shall be issued as a tentative decision and the District shall be entitled to modify, deny, or adopt the proposed decision. The proposed decision shall contain a recommendation regarding whether the Contractor should be debarred, and, if so, the appropriate length of time of the debarment. The Contractor and the District shall be provided an opportunity to object to the tentative proposed decision for a period of 15 days. If additional evidence is presented, the District shall evaluate this evidence and either issue an amended ruling, issue the same ruling, or call a further hearing.

15.3.4 If a Contractor has been debarred for a period of longer than five (5) years, that

Contractor may, after the debarment has been in effect for at least five (5) years, submit a written request for review of the debarment determination to reduce the period of debarment or terminate the debarment. The District may, in its discretion, reduce the period of debarment or terminate the debarment if it finds that the Contractor has adequately demonstrated one or more of the following: (1) elimination of the grounds for which the debarment was imposed, (2) a bona fide change in ownership or management, (3) material evidence discovered after debarment was imposed, or (4) any other reason that is in the best interests of the District.

15.3.5 The District will consider a request for review of a debarment determination only where (1) the Contractor has been debarred for a period longer than five (5) years, (2) the debarment has been in effect for at least five (5) years, and (3) the request is in writing, states one or more of the grounds for reduction of the debarment period or termination of the debarment, and includes supporting documentation. Upon receiving an appropriate request, the District will provide notice of the hearing on the request. At the hearing, the District shall review evidence on the proposed reduction of the debarment period. This hearing shall be conducted and the request for review decided by the District pursuant to the same procedures as for a debarment hearing.

15.3.6 The District's proposed decision shall contain a recommendation on the request to reduce the period of debarment or terminate the debarment.

**15.4 THE TERMS SHALL ALSO APPLY TO SUBCONTRACTORS OF CONTRACTORS**

**END OF SECTION 00 72 15**

### **SUPPLEMENTARY GENERAL CONDITIONS**

The following supplements modify the General Conditions. Where a portion of the General Conditions is modified and or deleted by these Supplementary Conditions, the unaltered portions of the General Conditions shall remain in effect.

#### **ARTICLE 3 – CONTRACTOR**

Article 3.10.4 Add the following: Contractor shall require all Subcontractors to prepare and submit to Contractor, within 15 days of execution of the Subcontract, comprehensive lists, in duplicate, of the manufacturers and products proposed for the Project, including information on materials, equipment, and fixtures required by the Contract Documents, as may be required for Contractor's or Architect's approval.

#### **ARTICLE 8 – TIME**

**Article 8 Schedule Inclusion Requirements.** The Baseline Schedule shall include the following Milestone Schedule:

Section 00 00 44: Notice of Award  
Section 00 00 45: Notice to Proceed  
Section 00 00 46: Change Order form

Section 00 00 47: Contractor's Request for Information form  
Section 00 00 49: Certificate of Substantial Completion  
Section 00 00 50: Meeting Minutes

Section 01 10 00: Summary  
Section 01 33 00: Submittal Procedures

Add the following: Article 8.4.1 Liquidated Damages: Contractor will be liable to the District for Liquidated Damages pursuant to Article 8.4 for each calendar day of delay in the amount of five thousand dollars (\$5,000.00).

#### **ARTICLE 11 – INSURANCE AND BONDS**

Add the following: Article 11.10.4: Performance and Payment Bonds. The number of executed copies of the Performance Bond and the Payment Bond required is three (3).

#### **ARTICLE 12 – UNCOVERING AND CORRECTION OF WORK**

Add the following: Article 12.2.1.1 Acknowledgement of the American Disabilities Act (ADA) and the California Building Code Section 11B applies to this project.

#### **ARTICLE 13 – MISCELLANEOUS PROVISIONS**

Add the following: COVID-19 Conditions. Contractors must conform, and ensure that all Subcontractors and other Project personnel including, but not limited to, workers and site visitors conform to all regulations, limitations, and requirements as put forth and recommended by Associated General Contractors of California (AGC) as prepared by AGC, March 31, 2020, and State of California Guidance on Outbreak of 2019 Novel Coronavirus (2019-nCoV) in Wuhan, China, and local Health Department agencies. Contractor to provide a job-site specific plan for addressing COVID-19 requirements for site

PBK Architects  
Project No. 220394  
personnel and site visitors.

Parker Whitney Elementary School - Replace Existing Fire Alarm System  
Rocklin Unified School District

**END OF SECTION 00 72 16**

SUPPLEMENTARY GENERAL CONDITIONS  
00 72 16 - 2

**INSURANCE DOCUMENTS AND ENDORSEMENTS**

- A. The following insurance endorsements and documents must be provided to the Rocklin Unified School District within \_\_\_\_ calendar days after receipt of notification of award. If the apparent low bidder fails to provide the documents required below, the District may award the Contract to the next lowest responsible and responsive bidder, or release all bidders, and the bidder's bid security will be forfeited. All insurance provided by the bidder shall fully comply with the requirements set forth in Article 11 of the General Conditions.
- B. General Liability Insurance: Certificate of Insurance with all specific insurance coverages set forth in Article 11 of the General Conditions, proper Project description, designation of the District as the Certificate Holder, a statement that the insurance provided is primary to any insurance obtained by the District and minimum of 30 days' cancellation notice. Bidder shall also provide required additional insured endorsement(s) designating all parties required in Article 11 of the General Conditions. The additional insured endorsement shall be an ISO CG 20 10 (04/13), or an ISO CG 20 38 (04/13), or their equivalent as determined by the District in its sole discretion.
- C. Workers' Compensation/ Employer's Liability Insurance: Certificate of Workers' Compensation Insurance meeting the coverages and requirements set forth in Article 11 of the General Conditions, minimum of 30 days' cancellation notice, proper Project description, waiver of subrogation and any applicable endorsements.
- D. Automobile Liability Insurance: Certificate of Automobile Insurance meeting the coverages and requirements set forth in Article 11 of the General Conditions, minimum 30 days' cancellation notice, any applicable endorsements, and a statement that the insurance provided is primary to any insurance obtained by the District.

**SECTION CONTINUES ON NEXT PAGE**



**Incidents and claims are to be reported to the insurer at:**

Attn: \_\_\_\_\_  
(Title) (Department)

\_\_\_\_\_  
(Company)

\_\_\_\_\_  
(Street Address)

\_\_\_\_\_  
(City) (State) (Zip Code)

(\_\_\_\_\_) \_\_\_\_\_  
(Telephone Number)

**Incidents and claims are to be reported to the insurer at:**

Attn: \_\_\_\_\_  
(Title) (Department)

\_\_\_\_\_  
(Company)

\_\_\_\_\_  
(Street Address)

\_\_\_\_\_  
(City) (State) (Zip Code)

(\_\_\_\_\_) \_\_\_\_\_  
(Telephone Number)

DATE: \_\_\_\_\_

CONTRACTOR

By: \_\_\_\_\_

Signature

**END OF SECTION 00 73 00**

**CONTRACTOR'S CERTIFICATE REGARDING ALCOHOLIC BEVERAGE AND TOBACCO-FREE  
CAMPUS POLICY**

The Contractor agrees that he or she will abide by and implement the District's Alcoholic Beverage and Tobacco-Free Campus Policy, which prohibits the use of alcoholic beverages and tobacco products, of any kind and at any time, on District-owned or leased buildings, on District property and in District vehicles. The Contractor shall procure signs stating "ALCOHOLIC BEVERAGE AND TOBACCO USE IS PROHIBITED" and shall ensure that these signs are prominently displayed at all entrances to school property at all times.

Contractor Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Printed Name: \_\_\_\_\_

**END OF SECTION 00 73 19**

**CONTRACTOR'S CERTIFICATE REGARDING**  
**DRUG-FREE WORKPLACE**

- A. This Drug-Free Workplace Certification form is required from all successful bidders pursuant to the requirements mandated by Government Code section 8350 et seq., the Drug-Free Workplace Act of 1990. The Drug-Free Workplace Act of 1990 requires that every person or organization awarded a contract or grant for the procurement of any property or service from any State agency must certify that it will provide a drug-free workplace by performing certain specified acts. In addition, the Act provides that each contract or grant awarded by a State agency may be subject to suspension of payments or termination of the contract or grant, and the Contractor or grantee may be subject to debarment from future contracting if the contracting agency determines that specified acts have occurred.
- B. Pursuant to Government Code section 8355, every person or organization awarded a contract or grant from a State agency shall certify that it will provide a drug-free workplace by doing all of the following:
1. Publishing a statement notifying employees that the unlawful manufacture, distribution, dispensation, possession, or use of a controlled substance is prohibited in the person's or organization's workplace and specifying actions that will be taken against employees for violations of the prohibition.
  2. Establishing a drug-free awareness program to inform employees about all of the following:
    - a. The dangers of drug abuse in the workplace,
    - b. The person's or organization's policy of maintaining a drug-free workplace,
    - c. The availability of drug counseling, rehabilitation, and employee-assistance programs, and
    - d. The penalties that may be imposed upon employees for drug abuse violations.
  3. Requiring that each employee engaged in the performance of the contract or grant be given a copy of the statement required by subdivision (a) and that, as a condition of employment on the contract or grant, the employee agrees to abide by the terms of the statement.

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

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

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

Contractor's Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Printed Name: \_\_\_\_\_

**END OF SECTION 00 73 20**



# VOLUME 2

## Specifications

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### **Parker Whitney Elementary School**

5145 Topaz Avenue, Rocklin, CA 95677

Rocklin Unified School District

2615 Sierra Meadows Drive, Rocklin, CA. 95677

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Submittal Package

## SECTION 01 10 00 SUMMARY

### PART 1 GENERAL

#### 1.1 RELATED DOCUMENTS

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

#### 1.2 SUMMARY

- A. Section includes requirements including but not limited to:
  - 1. Project information.
  - 2. Work covered by Contract Documents.
  - 3. Phased construction.
  - 4. Work by Owner.
  - 5. Work under separate contracts.
  - 6. Future Work.
  - 7. Purchase contracts.
  - 8. Owner furnished products.
  - 9. Owner furnished, Contractor installed products.
  - 10. Access to site.
  - 11. Coordination with occupants.
  - 12. Work restrictions.
  - 13. Specification and Drawing conventions.
  - 14. Miscellaneous provisions.

#### 1.3 PROJECT INFORMATION

- A. Project Identification:
  - 1. Project Location: **Parker Whitney Elementary School**  
5145 Topaz Avenue  
Rocklin, CA 95677
  - 2. Owner Rep: **Craig Rouse**  
Senior Director of Facilities, Maintenance & Operations
- B. Architect: **PBK Architects**  
2520 Venture Oaks Way, Suite 440  
Sacramento, CA 95833
- C. Electrical Engineer: Lawrence W. Myers, PE  
Senior Electrical Engineer  
**Leaf Engineers Sacramento**  
2520 Venture Oaks Way, Suite 440  
Sacramento, CA 95833

#### WORK COVERED BY CONTRACT DOCUMENTS

- D. The Work of Project is defined by the Contract Documents and consists of the following:  
Replacement of the existing fire alarm system with an addressable voice-evacuation fire alarm detection and alarm system.

- E. Type of Contract: Project will be constructed under a stipulated sum contract.

#### 1.4 WORKSEQUENCE

- A. The Work shall be completed according to the Project schedule set forth below.
- B. Occupancy: The Project may be occupied by District staff as shown below. If so, the premises will be occupied whether or not the Work is completed, regardless of time extensions (if any).
- C. Any Work performed after this date will need to be fully coordinated with District and will be limited to after school hours or on weekends.
- D. Project Schedule:

The following schedule summarizes the major activity dates:

Activity	Dates and Time (As Applicable)
Add Date #1	March 15, 2023
Add Date #2	March 22, 2023
Mandatory Pre-Bid Job Walk	2:00 PM, Monday, March 27, 2023
Bids RFI's Due to District	Noon, April 7, 2023
Addendum Issued	Noon, April 11, 2023
Bid Opening Date	2:00 PM, April 18, 2023
Board Award of Contract	7:00 PM, Wednesday May 3, 2023
Construction to Begin	7:00 AM, Friday, June 2, 2023
Substantial Completion	4:00 PM, Friday, August 4, 2023
Final Completion Date	4:00 PM, Tuesday, August 8, 2023

#### 1.5 WORK BY OWNER AND UNDER SEPARATE CONTRACTS

- A. The Owner reserves the right to let separate contract for work outside of the scope of this Contract. Cooperate fully with separate contractors so work on those contracts may be carried out smoothly, without interfering with or delaying Work under this Contract or other contracts. Coordinate the Work of this Contract with work performed under separate contracts.
- B. Owner Furnished Products (OFCI):
  - 1. The Owner will furnish products indicated. The Work includes receiving, unloading, handling, storing, protecting, and installing Owner furnished products and making building services connections when applicable:
    - a. Owner Furnished Products: Major control panels, amplifiers and power supplies.

#### 1.6 ACCESS TO SITE

- A. Use of Site:
  - 1. Limit use of Project site to Work in areas and areas within the Contract limits indicated. Do not disturb portions of site beyond areas in which the Work is indicated:
    - a. Limits: The Drawings indicate the limits of the construction operations.
    - b. Driveways, Walkways, and Entrances:
      - 1) Keep driveways, parking areas, student drop off and pick up points, loading areas, and entrances serving premises clear and available to Owner, Owner's employees, the students, and emergency vehicles at all times. Do not use these areas for parking or storage of materials:
        - a) Schedule deliveries to minimize use of driveways and entrances by

- construction operations.
  - b) Schedule deliveries to minimize space and time requirements for storage of materials and equipment onsite.
- B. Condition of Existing Building: Maintain portions of existing building affected by construction operations in weathertight condition throughout construction period. Repair damage caused by construction operations.
- C. COVID-19 Conditions: Contractors must conform, and ensure that all subcontractors and other Project personnel, including but not limited to; workers and site visitors, conform to all regulations, limitations, and requirements as put forth and recommended by Associated General Contractors of California (AGC), State of California Guidance on Outbreak of 2019 Novel Coronavirus (2019-nCoV) in Wuhan, China, and local Health Department agencies.

## 1.7 COORDINATION WITH OCCUPANTS

- A. Owner Limited Occupancy of Completed Areas of Construction:
1. Owner reserves the right to occupy and to place and install equipment in completed portions of the Work, prior to Substantial Completion of the Work, provided occupancy does not interfere with completion of the Work. Such placement of equipment and limited occupancy shall not constitute acceptance of the total Work:
    - a. Architect will prepare a Certificate of Substantial Completion for each specific portion of the Work to be occupied prior to Owner acceptance of the completed Work.
    - b. Obtain a Certificate of Occupancy from authorities having jurisdiction before limited Owner occupancy.
    - c. Before limited Owner occupancy, ensure mechanical and electrical systems are fully operational, and required tests and inspections and start up procedures are successfully completed. On occupancy, Owner will operate and maintain mechanical and electrical systems serving occupied portions of Work.
    - d. Upon occupancy, Owner will assume responsibility for maintenance and custodial service for occupied portions of Work.

## 1.8 WORK RESTRICTIONS

- A. Work Restrictions: Comply with restrictions on construction operations. Comply with limitations on use of public streets and with other requirements of authorities having jurisdiction.
- B. On Site Work Hours: Limit Work in the existing building to normal working hours, Monday through Friday, unless otherwise indicated. Coordinate with Owner when it is necessary to extend working hours or Work on weekends.
- C. Existing Utility Interruptions:
1. Do not interrupt utilities serving facilities occupied by Owner or others unless permitted under the following conditions and after providing temporary utility services according to requirements indicated:
    - a. Notify Owner not less than two (2) weeks in advance of proposed utility interruptions.
    - b. Obtain Owner's written permission before proceeding with utility interruptions.
- D. Noise, Vibration, and Odors:
1. Coordinate operations that result in high levels of noise and vibration, odors, or other disruption to Owner occupancy with Owner:
    - a. Notify Owner not less than two (2) weeks in advance of proposed disruptive

- operations.
- b. Obtain Owner's written permission before proceeding with disruptive operations.
- E. Controlled Substances, Firearms, and Explosive Devices: Use of tobacco products, controlled substances, firearms, and explosive devices on the site is not permitted.
- F. Employee Identification: Provide identification tags for Contractor personnel working on site. Require personnel to use identification tags at all times.
- G. Employee Screening:
  - 1. Comply with Owner's requirements for drug and background screening of Contractor personnel working on site:
    - a. Maintain list of approved screened personnel with Owner's representative.

## 1.9 SPECIFICATION AND DRAWING CONVENTIONS

- A. Specification Content:
  - 1. The Specifications use certain conventions for the style of language and the intended meaning of certain terms, words, and phrases when used in particular situations. These conventions are as follows:
    - a. Imperative mood and streamlined language are generally used in the Specifications. The words "shall," "shall be," or "shall comply with," depending on the context, are implied where a colon (:) is used within a sentence or phrase.
    - b. Specification requirements are to be performed by Contractor unless specifically stated otherwise.
- B. Drawing Coordination:
  - 1. Requirements for materials and products identified on Drawings are described in detail in the Specifications. One or more of the following are used on Drawings to identify materials and products:
    - a. Terminology: Materials and products are identified by the typical generic terms used in the individual Specifications Sections.
    - b. Abbreviations: Materials and products are identified by abbreviations.

## PART 2 PRODUCTS (NOT USED)

## PART 3 EXECUTION

### 3.1 CONSTRUCTION SCHEDULE

- A. The Owner has a critical need for the Work to begin upon Notice to Proceed and shall be Substantially Complete by the date specified on the Project Schedule. **There will be No Extensions of Time due to weather.**

**END OF SECTION 01 10 00**



## **SECTION 01 25 00 SUBSTITUTION PROCEDURES AND FORM**

### **PART 1 GENERAL**

#### **1.1 RELATED DOCUMENTS**

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

#### **1.2 SUMMARY**

- A. This Section includes administrative and procedural requirements for substitutions.

#### **1.3 DEFINITIONS**

- A. Products: Items purchased for incorporation in the Work, regardless if specifically purchased for the Project or taken from Contractor's previously purchased stock. The term *product* is inclusive for material, equipment, assembly, system, and other terms of similar intent.
- B. Substitutions:
  - 1. Changes in products, materials, equipment, and methods of construction from those required by the Contract Documents and proposed by Contractor:
    - a. Substitutions for Cause: Changes proposed by Contractor that are required due to changed Project conditions, such as unavailability of product, regulatory changes, or unavailability of required warranty terms.
    - b. Substitutions for Convenience: Changes proposed by Contractor or Owner that are not required in order to meet other Project requirements but may offer advantage to Contractor or Owner.

#### **1.4 SUBMITTALS**

- A. Substitution Requests:
  - 1. Submit three (3) copies of each request for consideration. Identify product or fabrication or installation method to be replaced. Include Specification Section number and title and Drawing numbers and titles:
    - a. Substitution Request Form: Use facsimile of form provided in Project manual.
    - b. Documentation:
      - 1) Show compliance with requirements for substitutions and the following, as applicable:
        - a) Statement indicating why specified product or fabrication or installation cannot be provided, if applicable.
        - b) Coordination information, including a list of changes or revisions needed to other parts of the Work and to construction performed by Owner and separate contractors, which are necessary to accommodate proposed substitution.
        - c) Detailed comparison of significant qualities of proposed substitution with those of the Work specified. Include annotated copy of applicable Specification Section. Significant qualities may include attributes such as performance, weight, size, durability, visual effect, sustainable design characteristics, warranties, and specific features and requirements indicated. Indicate deviations, if any, from the Work specified.
        - d) Product Data, including drawings and descriptions of products and fabrication and installation procedures.
        - e) Samples, where applicable or requested.

- f) Certificates and qualification data, where applicable or requested.
  - g) List of similar installations for completed projects with project names and addresses and names and addresses of architects and owners.
  - h) Material test reports from a qualified testing agency indicating and interpreting test results for compliance with requirements indicated.
  - i) Research reports evidencing compliance with building code in effect for Project, from ICC-ES.
  - j) Detailed comparison of Contractor's Construction Schedule using proposed substitution with products specified for the Work, including effect on the overall Contract Time. If specified product or method of construction cannot be provided within the Contract Time, include letter from manufacturer, on manufacturer's letterhead, stating date of receipt of purchase order, lack of availability, or delays in delivery.
  - k) Cost information, including a proposal of change, if any, in the Contract Sum.
  - l) Contractor's certification that proposed substitution complies with requirements in the Contract Documents except as indicated in substitution request, is compatible with related materials, and is appropriate for applications indicated.
  - m) Contractor's waiver of rights to additional payment or time that may subsequently become necessary because of failure of proposed substitution to produce indicated results.
2. Architect's Action:
- a. If necessary, Architect will request additional information or documentation for evaluation within seven (7) days of receipt of a request for substitution. Architect will notify Contractor of acceptance or rejection of proposed substitution within 15 days of receipt of request, or seven (7) days of receipt of additional information or documentation, whichever is later:
    - 1) Forms of acceptance: Change Order, Construction Change Directive, or Architect's Supplemental Instructions for minor changes in the Work.
    - 2) Use product specified if Architect does not issue a decision on use of a proposed substitution within time allocated.

## 1.5 QUALITY ASSURANCE

- A. Compatibility of Substitutions: Investigate and document compatibility of proposed substitution with related products and materials. Engage a qualified testing agency to perform compatibility tests recommended by manufacturers.
- B. Coordination: Revise or adjust affected Work as necessary to integrate Work of the approved substitutions.

## PART 2 PRODUCTS

### 2.1 SUBSTITUTIONS

- A. Substitutions: Substitutions are considered as changes to the Drawings and shall be submitted to DSA.
- B. Substitutions for Cause:
  - 1. Submit requests for substitution immediately on discovery of need for change, but not later than 30 days prior to time required for preparation and review of related submittals:
    - a. Conditions:
      - 1) Architect will consider Contractor's request for substitution when the following

conditions are satisfied. If the following conditions are not satisfied, Architect will return requests without action, except to record noncompliance with these requirements:

- a) Requested substitution is consistent with the Contract Documents and will produce indicated results.
- b) Substitution request is fully documented and properly submitted.
- c) Requested substitution will not adversely affect Contractor's Construction Schedule.
- d) Requested substitution has received necessary approvals of authorities having jurisdiction.
- e) Requested substitution is compatible with other portions of the Work.
- f) Requested substitution has been coordinated with other portions of the Work.
- g) Requested substitution provides specified warranty.
- h) If requested substitution involves more than one contractor, requested substitution has been coordinated with other portions of the Work, is uniform and consistent, is compatible with other products, and is acceptable to all contractors involved.

C. Substitutions for Convenience:

1. Architect will consider requests for substitution if received prior to the Award of the Contract. Requests received after that time may be considered or rejected at discretion of Architect:

a. Conditions:

- 1) Architect will consider Contractor's request for substitution when the following conditions are satisfied. If the following conditions are not satisfied, Architect will return requests without action, except to record noncompliance with these requirements:
  - a) Requested substitution offers Owner a substantial advantage in cost, time, energy conservation, or other considerations, after deducting additional responsibilities Owner must assume. Owner's additional responsibilities may include compensation to Architect for redesign and evaluation services, increased cost of other construction by Owner, and similar considerations.
  - b) Requested substitution does not require extensive revisions to the Contract Documents.
  - c) Requested substitution is consistent with the Contract Documents and will produce indicated results.
  - d) Substitution request is fully documented and properly submitted.
  - e) Requested substitution will not adversely affect Contractor's Construction Schedule.
  - f) Requested substitution has received necessary approvals of authorities having jurisdiction.
  - g) Requested substitution is compatible with other portions of the Work.
  - h) Requested substitution has been coordinated with other portions of the Work.
  - i) Requested substitution provides specified warranty.
  - j) If requested substitution involves more than one contractor, requested substitution has been coordinated with other portions of the Work, is uniform and consistent, is compatible with other products, and is acceptable to all contractors involved.

**PART 3 EXECUTION (NOT USED)**

**REQUEST FOR SUBSTITUTION**

Contract Award Date:

---

To:

---

Substitution Requested By:

---

Project Name and Number:

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We submit for consideration the following product in lieu of the specified item for the above Project:

Drawing No.	Specification Section	Paragraph	Specified Item
-------------	-----------------------	-----------	----------------

<hr/>	<hr/>	<hr/>	<hr/>
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Proposed Substitution:

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Request is made during \_\_\_\_ bidding \_\_\_\_ construction period.

Submit in accordance with Section 01 33 00: Submittal Procedures.

1. Technical data, cost, and time information relating to changes to Construction Documents required by proposed substitution.
2. Detailed comparison of proposed substitution and specified product including but not limited to warranty, significant variations, qualifications of manufacturers, and maintenance.
3. Complete technical data, detailed shop drawings, samples, installation procedures, warranty, and substantiating data marked to indicate equivalent quality and performance to that specified. Manufacturer sell sheets are not acceptable submittals.

Cause for Request:

---

Cost saving realized by Owner:

---

Does substitution affect adjacent Work, Construction Documents, cost, schedule, quality, and related submittals?

Yes \_\_\_\_ No \_\_\_\_ On separate sheet, explain affects to the Work, documents, schedule, and submittals.

Contractor is responsible for associated costs and additional time of the proposed substitution including costs incurred by the Architect for evaluation of substitution and changes to the documents. Describe costs for changes to design, including engineering and detailing costs caused by the requested substitution.

---

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Warranty: Is the warranty for the requested substitution the same or different? Yes \_\_\_\_ No \_\_\_\_

Explain Differences:

---

**Contractor Certification:**

In making a request for substitution, Contractor certifies that:

1. The proposed substitution has been thoroughly researched and evaluated and determined as equivalent or superior to specified product or material, will fit into space provided, and is compatible with adjacent materials.
2. It will provide the same or better warranty for the proposed substitution at no additional cost to the Owner.
3. Cost data is complete and includes related costs under the Contract. Claims for additional costs related to the proposed substitution that may subsequently become apparent are waived.
4. It will assume the responsibility for delays and costs caused by the proposed substitution, if approved, are accepted by Contractor unless delays are and costs are specifically mentioned and approved in writing by the Owner and the Architect.
5. It will assume the liability for the performance of the substitution and its performance.
6. The installation of the proposed substitution is coordinated with the Work and with changes required for the Work.
7. It will reimburse the Owner and Architect for evaluation and redesign services associated with the substitution request and, when required, by approval by governing authorities.

\_\_\_\_ Has the substituted manufacturer/product been installed on previous PBK projects?\_

**If so, list project(s):** (List projects within the last two years)

1. \_\_\_\_\_

District: \_\_\_\_\_

Contact: \_\_\_\_\_

2. \_\_\_\_\_

District \_\_\_\_\_

Contact: \_\_\_\_\_

---

Submitted by:

---

Signature of Contractor		Title
Firm	Telephone	Date

Signature shall be by the individual authorized to legally bind Contractor to the above terms. Failure to provide legally binding signature will result in retraction of approval.

**FOR USE BY ARCHITECT:**

Accepted       Accepted as Noted  
 Not Accepted       Received Too Late

**FOR USE BY OWNER:**

Accepted     Not Accepted

By: \_\_\_\_\_

By: \_\_\_\_\_

Date: \_\_\_\_\_

By: \_\_\_\_\_

Remarks: \_\_\_\_\_

Remarks: \_\_\_\_\_

**END OF SECTION 01 25 00**

## **SECTION 01 25 13 PRODUCT SUBSTITUTION PROCEDURES**

### **PART 1 GENERAL**

#### **1.1 RELATED DOCUMENTS**

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

#### **1.2 SUMMARY**

- A. Section Includes:
  - 1. Specified product compliance, and product quality assurance.
  - 2. Specific administrative and procedural requirements for handling requests for substitutions made prior to award of Contract.
  - 3. Requirements for product delivery, storage, and handling.
- B. Related Requirements:
  - 1. Instructions to Offerors:
    - a. Product options and procedures for submittal of requests for substitutions during the Proposal period.

#### **1.3 DEFINITIONS**

- A. Definitions used in this Section are not intended to negate the meaning of other terms used in the Contract Documents, including such terms as "specialties," "systems," "structure," "finishes," "accessories," "furnishings," "special construction," and similar terms. Such terms are self-explanatory and have recognized meanings in the construction industry:
  - 1. Equipment: Product with operational parts, regardless of whether motorized or manually operated, and in particular, a product that requires service connections such as wiring or piping.
  - 2. Materials: Products that must be substantially cut, shaped, worked, mixed, finished, refined, or otherwise fabricated, processed, or installed to form units of work.
  - 3. Products:
    - a. Items purchased for incorporation in the Work, regardless of whether they were specifically purchased for the Project or taken from Contractor's previously purchased stock. The term "product" as used herein includes the terms "material", "equipment", "system", and other terms of similar intent:
      - 1) Named products: Identified by the use of the manufacturer's name for a product, including such items as a make or model designation as recorded in published product literature of the latest issue as of the date of the Contract Documents.
      - 2) Specified products: Same as Named Products.

#### **1.4 QUALITY ASSURANCE**

- A. Source Limitations:
  - 1. To the fullest extent possible, provide products of the same generic kind from a single source for each unit of work:
    - a. When it is discovered that specific products are available only from sources that do not or cannot produce an adequate quantity to complete Project requirements in a timely manner, consult with the Architect/Engineer for a determination of what product quantities are most important before proceeding. The Architect/Engineer will designate those qualities, such as visual, structural, durability, or compatibility

that are most important. When the Architect/Engineer's determination has been made, select products from those sources that produce products that possess the most important qualities to the fullest extent possible.

- B. Compatibility of Options:
  - 1. Compatibility of products is a basic requirement of product selection. When Contractor is given the option of selecting between two (2) or more products for use on the Project, the product selected must be compatible with other products previously selected, even if the products previously selected were also Contractor options. The complete compatibility between the various choices available to Contractor is not assured by the various requirements of the Contract Documents but must be provided by Contractor.
- C. Or Equal:
  - 1. Where the phrase "or equal," "or equivalent," "or Architects approved equal," or similar phrasing occurs in the Proposal Documents, do not assume that materials, equipment, or methods of construction will be approved by the Architect unless the item has been specifically approved for this Work by the Architect.
  - 2. The decision of the Architect shall be final.
- D. Where a proposed substitution involves the work of more than one (1) contractor, each contractor involved shall cooperate and coordinate the work with all other contractors involved, so as to provide uniformity and consistency and to assure the compatibility of products.
- E. Foreign Product Limitations:
  - 1. "Foreign products" as distinguished from "domestic products" are defined as products that are either manufactured substantially (50 percent or more of value) outside of the United States and its possessions, or produced or supplied by entities known to be substantially owned (more than 50 percent) by persons who are not citizens of, nor living within the United States and its possessions.
  - 2. Except under one (1) of the following conditions, select and provide domestic, not foreign, products for inclusion in the Work:
    - a. There is no domestic product available that complies with the requirements of the Contract Documents.
    - b. Available domestic products that comply with the requirements of the Contract Documents are available only at prices or other procurement terms that are substantially higher (25 percent or more) than for available foreign products that comply with the requirements of the Contract Documents.
    - c. At the discretion of Architect or Owner.
  - 3. Final determination and acceptance will be the responsibility of Architect.

## **1.5 SUBSTITUTIONS OF PRODUCTS**

- A. The products described in the Proposal Documents establish a standard of required function, dimension, appearance, and quality to be met by any proposed substitution. The materials and equipment named in, and the procedures covered by these Specifications have been selected as a standard because of quality, particular suitability, or record of satisfactory performance. It is not intended to preclude the use of equal or better materials or equipment, provided that same meets the requirements of the Project and is approved in an Addendum as a substitution prior to the submission of proposals.
- B. No substitution will be considered prior to receipt of proposals unless written request for approval has been received by the Architect at least seven (7) days prior to the date for receipt of proposals. Each such request shall include the name of the material or equipment for which it is to be substituted and a complete description of the proposed substitute



including Drawings, cuts, performance and test data, and any other information necessary for an evaluation. The Architect's decision of approval or disapproval of a proposed substitution shall be final.

- C. If the Architect approves any proposed substitution prior to receipt of proposals, such approval will be set forth in an Addendum. Offerors shall not rely upon approvals made in any other manner.
- D. The Architect and Owner reserve the right to disapprove the use of any manufacturer who in their judgment is unsuitable for use on the Project and that decision will be final.
- E. The following are not considered as substitutions:
  - 1. Revisions to the Contract Documents, when requested by Owner, Architect, or any of their consultants are considered as changes, not substitutions.
  - 2. Specified Contractor options on products and construction methods included in Contract Documents are choices made available to Contractor and are not subject to the requirements specified in this Section for substitutions.
  - 3. Except as otherwise provided in the Contract Documents, Contractor's determination of and compliance with governing authorities does not constitute substitutions, nor does it constitute a basis for change orders.
- F. The following may be considered as a reason for a request for substitution:
  - 1. The request is directly related to an "or approved equal" clause or similar language in the Contract Documents.
  - 2. The specified product or method of construction cannot be provided within the Contract Time in accordance with the paragraph below concerning availability of specified items.
  - 3. The specified product or method of construction cannot receive necessary approval by a governing authority, but the requested substitution can be approved.
  - 4. A substantial advantage is offered to Owner, in terms of cost, time, energy conservation, or other consideration of merit, after deducting offsetting responsibilities Owner may be required to bear. These additional responsibilities may include such considerations as additional compensation to Architect/Engineer for redesign and evaluation services, the increased cost of other work by Owner or separate contractors, and similar considerations.
  - 5. The specified product or method of construction cannot be provided in a manner that is compatible with other materials, but Contractor certifies that the substitution will overcome the incompatibility.
  - 6. The specified product or method of construction cannot be coordinated with other materials, but Contractor certifies that the proposed substitution can be coordinated with them.
  - 7. The specified product or method of construction cannot provide a warranty required by the Contract Documents, but Contractor certifies that the proposed substitution provides the required warranty.
- G. Availability of Specified Items:
  - 1. Verify prior to submittal of Proposal that all specified items will be available in time for installation during orderly and timely progress of the Work:
    - a. In the event specified items will not be so available, notify the Architect prior to receipt of Proposals. Submit Request for Substitutions in accordance with this Section.
    - b. The request will not be considered if the product or method cannot be provided as a result of Contractor's failure to pursue the Work promptly or coordinate activities properly.
  - 2. Costs of delays because of non-availability of specified items, when such delays could have been avoided by Contractor, will be back-charged as necessary and shall not be borne by Owner.

- H. A request constitutes a representation that Offeror:
  - 1. Has investigated proposed product and determined that it meets or exceeds quality level of specified product.
  - 2. Will provide same warranty for substitution as for specified product, except when inability to provide specified warranty is reason for request for substitution as described above.
  - 3. Will coordinate installation and make changes to other work that may be required for the Work to be complete with no additional cost to Owner.
  - 4. Waives claims for additional costs or time extension that may subsequently become apparent.
  - 5. Will reimburse Owner and pay for all costs, including Architect/Engineer's redesign and evaluation costs resulting from the use of the proposed substitution, or for review or redesign of services associated with re-approval by authorities having jurisdiction.
  
- I. No substitutions will be considered after the Award of Contract.

## **1.6 SUBSTITUTION REQUEST SUBMITTAL**

- A. Requests for Substitutions:
  - 1. Submit three (3) copies of each request for substitution. In each request, identify the product or fabrication or installation method to be replaced by the substitution. Include related Specifications Section and Drawing numbers, and complete documentation showing compliance with the requirements for substitutions. Include, as appropriate, with each request, the following information:
    - a. Product data, drawings, and descriptions of products, fabrication, and installation procedures.
    - b. Samples, where applicable or requested.
    - c. A detailed comparison of the significant qualities of the proposed substitution with those of the Work originally specified. Significant qualities may include elements such as size, weight, durability, performance, and visual effect, where applicable.
    - d. Coordination information, including a list of changes or modifications needed by other parts of the Work and to construction performed by Owner and separate contractors that will become necessary to accommodate the proposed substitution.
    - e. A statement indicating the effect the substitution will have on the Contractor's Construction Schedule compared to the schedule without approval of the substitution. Indicate the effect of the proposed substitution on overall Contract Time.
    - f. Cost information, including a proposal of the net change, if any, in the Contract Sum.
    - g. Certification by Contractor to the effect that, in Contractor's opinion, after thorough evaluation, the proposed substitution will result in work that in every significant respect is equal to, or better than, the Work required by the Contract Documents, and that it will perform adequately in the application indicated. Include Contractor's waiver of rights to additional payment or time that may subsequently become necessary because of the failure of the substitution to perform adequately.
    - h. A statement indicating that Contractor will reimburse Owner and pay for all costs, including Architect/Engineer's re-design and evaluation costs resulting from the use of the proposed substitution.
  
- B. Work-Related Submittals: Contractor's submittal of, and Architect/Engineer's acceptance of, shop drawings, product data, or samples related to work not complying with the Contract Documents, does not constitute an acceptance or valid request for a substitution, nor approval thereof.

## **1.7 DELIVERY, STORAGE, AND HANDLING**

- A. General:
1. Deliver, store, and handle products in accordance with manufacturer's recommendations, using means and methods that will prevent damage, deterioration, and loss, including theft. Control to prevent overcrowding of construction spaces or overloading of structure. In particular, coordinate delivery and installation to ensure minimum holding or storage times for items known or recognized to be flammable, hazardous, easily damaged, or sensitive to deterioration, theft, and other sources of loss:
    - a. Deliver products to the site in the manufacturer's sealed containers or other packaging system, complete with labels intact, and instructions for handling, storage, unpacking, installing, cleaning, and protecting.
    - b. Cover products subject to deterioration with impervious sheet covering. Provide ventilation to avoid condensation or potential degradation of product.
    - c. Store loose granular materials on solid flat surfaces in a well-drained area. Prevent mixing with foreign matter.
    - d. Store products at the site or in a bonded and insured off-site storage facility or warehouse in a manner that will facilitate inspection and measurement of quantity or counting of units. Periodically inspect to verify products are undamaged and are maintained in acceptable condition.
    - e. Store heavy materials away from the Project structure or in a manner that will not endanger the supporting construction.

## **PART 2 PRODUCTS**

### **2.1 GENERAL PRODUCT COMPLIANCE**

- A. General:
1. Requirements for individual products are indicated in the Contract Documents; compliance with these requirements is in itself a Contract requirement. These requirements may be specified in any one (1) of several different specifying methods, or in any combination of these methods. These methods include the following:
    - a. Proprietary.
    - b. Descriptive.
    - c. Performance.
    - d. Compliance with Reference Standards.
  2. Compliance with codes, compliance with graphic details, allowances, and similar provisions of the Contract Documents also have a bearing on the selection process.
- B. Procedures for Selecting Products:
1. Contractor's options in selecting products are limited by requirements of the Contract Documents and governing regulations. They are not controlled by industry traditions or procedures experienced by Contractor on previous construction projects. Required procedures include, but are not limited to, the following for the various indicated methods of specifying:
    - a. Proprietary and semi-proprietary Specification requirements:
      - 1) Single product name: Where only a single product or manufacturer is named, provide the product indicated, unless the Specification indicates the possible consideration of other products. Advise Architect/Engineer before proceeding, when it is discovered that the named product is not a reasonable or feasible solution.
      - 2) Two (2) or more product names: Where two (2) or more products or manufacturers are named, provide one (1) of the products named, at Contractor's option. Exclude products that do not comply with Specification requirements. Do not provide or offer to provide an unnamed product, unless the Specification indicates the possible consideration of other products.

Advise Architect/Engineer before proceeding where none of the named products comply with Specification requirements or are not feasible for use. Where products or manufacturers are specified by name, accompanied by the term "or approved equal" or similar language, comply with this Section regarding substitutions to obtain approval from Architect/Engineer for the use of an unnamed product.

- b. Nonproprietary Specification requirements: Where the Specifications name products or manufacturers that are available and may be incorporated in the Work, but do not restrict Contractor to the use of these products only, Contractor may, at his option, use any available product that complies with the Contract requirements.
  - c. Descriptive Specification requirements: Where the Specifications describe a product or assembly generically, in detail, listing the exact characteristics required, but without use of a brand name, provide products or assemblies that provide the characteristics indicated and otherwise comply with Contract requirements.
  - d. Performance Specification requirements: Where the Specifications require compliance with indicated performance requirements, provide products that comply with the specific performance requirements indicated, and that are recommended by the manufacturer for the application indicated. The manufacturer's recommendations may be contained in published product literature, or by the manufacturer's individual certification of performance. General overall performance of a product is implied where the product is specified for specific performances.
  - e. Compliance with standards, codes, and regulations: Where the Specifications require only compliance with an imposed standard, code, or regulation, Contractor has the option of selecting a product that complies with Specification requirements, including standards, codes, and regulations.
  - f. Visual matching: Where matching an established sample is required, the final judgement of whether a product proposed by Contractor matches the sample satisfactorily will be determined by Architect. Where there is no product available within the specified product category that matches the sample satisfactorily and also complies with other specified requirements, comply with the provisions of this Section regarding substitutions and other Contract Documents for change orders for the selection of a matching product in another product category, or for noncompliance with specified requirements.
  - g. Visual selection: Except as otherwise indicated, where specified product requirements include the phrase "...as selected from the manufacturer's standard colors, patterns, textures..." or similar phrases, Contractor has the option of selecting the product and manufacturer, provided the selection complies with other specified requirements. Architect is subsequently responsible for selecting the color, pattern, and texture from the product line selected by Contractor.
  - h. Allowances: Refer to individual Sections of the Specifications for an indication of product selections that are controlled by established allowances, and for the procedures required for processing such selections.
- C. Producer's Statement of Applicability: Where individual Specification Sections indicate products that require a "Statement of Applicability" from the manufacturer or other producer, submit a written certified statement from the producer stating that the producer has reviewed the proposed application of the product on the Project. This statement shall affirm that the producer agrees with, or does not object to, Architect/Engineer's Specification, and that Contractor's selection of the product on the Project is suitable and proper.

## 2.2 SUBSTITUTIONS

- A. Condition: Contractor's request for substitution will be received and considered when extensive revisions to Contract Documents are not required, when the proposed changes are in keeping with the general intent of the Contract Documents, when the request is timely, fully documented and properly submitted, and when one (1) or more of the above

conditions are satisfied, all as judged and determined by Architect/Engineer; otherwise, the requests will be returned without action except to record noncompliance with these requirements.

### **PART 3 EXECUTION**

#### **3.1 INSTALLATION OF PRODUCTS**

- A. General: Except as otherwise indicated in individual Sections of these Specifications, comply with the manufacturer's instructions and recommendations for installation of the products in the applications indicated.
- B. Anchor each product securely in place, accurately located, and aligned with other work.
- C. Clean exposed surfaces and protect surfaces as necessary to ensure freedom from damage and deterioration at time of acceptance.
- D. Products and assemblies shall be installed complete, in-place, watertight, and structurally sound.

#### **3.2 INSTALLATION OF APPROVED SUBSTITUTIONS**

- A. Coordinate all approved substitutions with adjacent work.
- B. Comply with the manufacturer's and/or supplier's instructions and recommendations for installation of the products in the applications indicated.
- C. Provide all items required by manufacturer and/or supplier regarding installation, i.e. supplemental supports, anchors, fasteners, painting, etc., whether or not indicated or specified.

**END OF SECTION 01 25 13**

## **SECTION 01 26 00 CONTRACT MODIFICATION PROCEDURES**

### **PART 1 GENERAL**

#### **1.1 RELATED DOCUMENTS**

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

#### **1.2 SUMMARY**

- A. Section includes administrative and procedural requirements for handling and processing Contract modifications.
- B. Related Section:
  - 1. Section 01 25 00: Substitution Procedures and Form.
- C. Minor Changes in the Work:
  - 1. Architect will issue supplemental instructions authorizing minor changes in the Work, not involving adjustment to the Contract Sum or the Contract Time, on AIA Document G710 *Architect's Supplemental Instructions*.

#### **1.3 PROPOSAL REQUESTS**

- A. Owner Initiated Proposal Requests:
  - 1. Architect will issue a detailed description of proposed changes in the Work that may require adjustment to the Contract Sum or the Contract Time. If necessary, the description will include supplemental or revised Drawings and Specifications:
    - a. Work Change Proposal Requests issued by Architect are not instructions either to stop Work in progress or to execute the proposed change.
    - b. Within time specified in Proposal Request after receipt of Proposal Request, submit quotation estimating cost adjustments to the Contract Sum and the Contract Time necessary to execute the change:
      - 1) Include list of quantities of products required or eliminated and unit costs, with total amount of purchases and credits to be made. If requested, furnish survey data to substantiate quantities.
      - 2) Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
      - 3) Include costs of labor and supervision directly attributable to the change.
      - 4) Include an updated Contractor's Construction Schedule that indicates the effect of the change, including, but not limited to, changes in activity duration, start and finish times, and activity relationship. Use available total float before requesting an extension of the Contract Time.
- B. Contractor Initiated Proposals:
  - 1. If latent or changed conditions require modifications to the Contract, Contractor may initiate a claim by submitting a request for a change to Architect:
    - a. Include statement outlining reasons for the change and the effect of the change on the Work. Provide complete description of the proposed change. Indicate the effect of the proposed change on the Contract Sum and the Contract Time.
    - b. Include list of quantities of products required or eliminated and unit costs, with total amount of purchases and credits to be made. If requested, furnish survey data to substantiate quantities.
    - c. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade

discounts.

- d. Include costs of labor and supervision directly attributable to the change.
- e. Include an updated Contractor's Construction Schedule that indicates the effect of the change, including, but not limited to, changes in activity duration, start and finish times, and activity relationship. Use available total float before requesting an extension of the Contract Time.
- f. Comply with requirements in Section 01 25 00: Substitution Procedures and Form if the proposed change requires substitution of one product or system for product or system specified.
- g. Proposal Request Form: Use AIA Document G709.

#### **1.4 CHANGE ORDER PROCEDURES**

- A. On Owner's approval of a Work Changes Proposal Request, Architect will issue a Change Order for signatures of Owner and Contractor on AIA Document G701.

#### **1.5 CONSTRUCTION CHANGE DIRECTIVE**

- A. Construction Change Directive:
  - 1. Architect may issue a Construction Change Directive on AIA Document G714. Construction Change Directive instructs Contractor to proceed with a change in the Work, for subsequent inclusion in a Change Order:
    - a. Construction Change Directive contains a complete description of change in the Work and designates the method to determine change in the Contract Sum or the Contract Time.
- B. Documentation: Maintain detailed records on a time and material basis of Work required by the Construction Change Directive. After completion of change, submit an itemized account and supporting data necessary to substantiate cost and time adjustments to the Contract.

#### **PART 2 PRODUCTS (NOT USED)**

#### **PART 3 EXECUTION (NOT USED)**

**END OF SECTION 01 26 00**

## **SECTION 01 26 13 REQUEST FOR INFORMATION**

### **PART 1 GENERAL**

#### **1.1 RELATED DOCUMENTS**

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

#### **1.2 SUMMARY**

- A. Section includes administrative and procedural provisions for preparation, submittal and response to Contractor's Request for Information (RFI's) during construction of project.
- B. Related Sections:
  - 1. General Conditions of the Contract.

#### **1.3 DEFINITIONS**

- A. PDF, Portable Document Format: An open standard file format licensed by Adobe Systems used for representing documents in a device-independent and display resolution-independent fixed-layout document format.
- B. RFI, Request for Information: Request from Contractor seeking information required by or clarification of the Contract Documents.

#### **1.4 SUBMITTAL PROCEDURES**

- A. General Submittal Procedure Requirements: Submit RFI's via email as PDF electronic files. Architect will not act on any RFI's until 7 days following the submission of the Schedule of Values per Division 01 Section "Payment Procedures."
  - 1. RFI Form: Use RFI form included at end of this Section or form acceptable to Architect. Upon request from the Contractor, the form at the end of this section will be made available in WORD format from the Architect.
  - 2. Attachments: Attachments shall be in PDF electronic file format.

#### **1.5 REQUESTS FOR INFORMATION (RFIS)**

- A. General: Immediately on discovery of the need for additional information or interpretation of the Contract Documents, Contractor shall prepare and submit an RFI in the form specified.
  - 1. Architect will return RFIs submitted to Architect by other entities controlled by Contractor with no response.
  - 2. Coordinate and submit RFIs in a prompt manner so as to avoid delays in Contractor's work or work of subcontractors.
- B. Content of the RFI: Include a detailed, legible description of item needing information or interpretation and the following:
  - 1. Project name.
  - 2. Project number.
  - 3. Date.
  - 4. Name of Contractor.
  - 5. Name of Architect
  - 6. RFI number, numbered sequentially.
  - 7. RFI subject.



8. Specification Section number and title and related paragraphs, as appropriate.
  9. Drawing number and detail references, as appropriate.
  10. Field dimensions and conditions, as appropriate.
  11. Contractor's suggested resolution. If Contractor's solution(s) impacts the Contract Time or the Contract Sum, Contractor shall state impact in the RFI.
  12. Contractor's signature.
  13. Attachments: Include sketches, descriptions, measurements, photos, Product Data, Shop Drawings, coordination drawings, and other information necessary to fully describe items needing interpretation.
    - a. Include dimensions, thicknesses, structural grid references, and details of affected materials, assemblies, and attachments on attached sketches.
- C. Architect's Action: Architect will review each RFI, determine action required, and respond. Allow 10 working days for Architect's response for each RFI. RFIs received by Architect after 1:00 p.m. will be considered as received the following working day.
1. The following RFIs will be returned without action:
    - a. Requests for approval of submittals.
    - b. Requests for approval of substitutions.
    - c. Requests for approval of Contractor's means and methods.
    - d. Requests for coordination information already indicated in the Contract Documents.
    - e. Requests for adjustments in the Contract Time or the Contract Sum.
    - f. Requests for interpretation of Architect's actions on submittals.
    - g. Incomplete RFIs or inaccurately prepared RFIs.
  2. Architect's action may include a request for additional information, in which case Architect's time for response will date from time of receipt of additional information.
  3. Architect's action on RFIs that may result in a change to the Contract Time or the Contract Sum may be eligible for Contractor to submit Change Proposal according to Division 01 Section "Contract Modification Procedures."
    - a. If Contractor believes the RFI response warrants change in the Contract Time or the Contract Sum, notify Architect in writing within 10 days of receipt of the RFI response.
  4. Distribution: One electronic copy of each completed RFI review shall be distributed by the Architect to the Contractor and the Owner.
- D. RFI Log: Prepare, maintain, and submit a tabular log of RFIs organized by the sequential RFI number. Submit log weekly unless otherwise directed in writing by Architect. Include the following:
1. Project name.
  2. Name and address of Contractor.
  3. Name and address of Architect.
  4. RFI number including RFIs that were returned without action or withdrawn.
  5. RFI description.
  6. Date the RFI was submitted.
  7. Date Architect's response was received.
- E. On receipt of Architect's action, update the RFI log and immediately distribute the RFI response to affected parties. Review response and notify Architect within 7 days if Contractor disagrees with response.
- F. Contractor's Expense for RFI's: Architect will review and respond to legitimate RFI's at no additional cost to the Contractor. RFI's determined by the Architect to be flagrant or unnecessary will have the expense for the Architect's time paid by the Owner with the amount being deducted from the Contract Sum. The expense will be based on an hourly rate in accordance with the Architect's standard hourly rate schedule in effect at the time the work is performed with a minimum of one hour for each flagrant or unnecessary RFI.

PBK Architects  
Project No. 220394

Parker Whitney Elementary School - Replace Existing Fire Alarm System  
Rocklin Unified School District

**PART 2 PRODUCTS (NOT USED)**

**PART 3 EXECUTION (NOT USED)**

**END OF SECTION 01 26 13**

**CONTRACTOR'S REQUEST FOR INFORMATION**

**RFI #**

From: \_\_\_Project Number:\_\_\_\_\_ Date:

To: Project: \_\_\_\_\_

---

---

Disciplines Impacted: Architectural []    Structural []    Mechanical []    Electrical []  
                                 Civil []                    Landscape []    Kitchen []

---

Reference: \_\_\_\_\_ Drawing(s) \_\_\_\_\_ Spec. Section(s) \_\_\_\_\_

Other

---

---

Please clarify or provide the following information:

\_\_\_\_\_

Contractor's Suggestions: \_\_\_\_\_

\_\_\_\_\_

---

---

Possible Cost Impact: Unknown []    Increase []    Decrease []    No Change [

Possible Time Impact: Unknown []    Increase []    Decrease []    No Change [

This information is required as soon as possible,  
but no later than \_\_\_\_\_

**[ ] PRIORITY ATTENTION  
REQUIRED**

---

---

Contractor's Representative:

\_\_\_\_\_

---

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**Architect's Response:**

Date: \_\_\_\_\_

PBK Architects

Copies \_\_\_\_\_

\_\_\_\_\_

## **SECTION 01 29 00 PAYMENT PROCEDURES**

### **PART 1 GENERAL**

#### **1.1 RELATED DOCUMENTS**

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

#### **1.2 SUMMARY**

- A. Section includes administrative and procedural requirements necessary to prepare and process Applications for Payment.

#### **1.3 DEFINITIONS**

- A. Pencil Copy: A copy submitted prior to a final/official.
- B. Schedule of Values: A statement furnished by Contractor allocating portions of the Contract Sum to various portions of the Work and used as the basis for reviewing Contractor's Applications for Payment.

#### **1.4 SCHEDULE OF VALUES**

- A. Coordination:
  - 1. Coordinate preparation of the schedule of values with preparation of Contractor's Construction Schedule:
    - a. Coordinate line items in the schedule of values with administrative forms and schedules, including the following:
      - 1) Application for Payment forms with continuation sheets.
      - 2) Updated submittal schedule.
      - 3) Items required to be indicated as separate activities in updated Contractor's Construction Schedule.
    - b. Submit the schedule of values to Architect at earliest possible date, but no later than seven (7) days before the date scheduled for submittal of initial Applications for Payment. Contractor's standard form or electronic media printout will be considered but must be approved by Owner.
- B. Format and Content:
  - 1. Use Project manual table of contents as a guide to establish line items for the schedule of values. Provide at least one (1) line item for each Specification Section:
    - a. Identification:
      - 1) Include the following Project identification on the schedule of values:
        - a) Project name and location.
        - b) Name of Architect.
        - c) Architect's Project number.
        - d) Contractor's name and address.
        - e) Date of submittal.
  - 2. Arrange schedule of values consistent with format of AIA Documents G702/G703.
  - 3. Arrange the schedule of values in tabular form with separate columns to indicate the following for each item listed:
    - a. Related Specification Section or Division.
    - b. Description of the Work.
    - c. Name of Subcontractor.

- d. Name of manufacturer or fabricator.
- e. Name of supplier.
- f. Change Orders (numbers) that affect value.
- g. Dollar value of the following, as a percentage of the Contract Sum to nearest one-hundredth percent (.01%), adjusted to total 100 percent:
  - 1) Labor.
  - 2) Materials.
  - 3) Equipment rentals.
  - 4) General Conditions:
    - a) Supervisor.
    - b) Submittals.
    - c) Closeout.
    - d) Field Engineering.
    - e) Daily Clean-up.
    - f) Final Clean-up.
4. Round amounts to nearest whole dollar; total shall equal the Contract Sum.
5. Provide separate line item in the schedule of values for each part of the Work where Applications for Payment may include materials or equipment purchased or fabricated and stored, but not yet installed:
  - a. Differentiate between items stored on site and items stored off site. Include evidence of insurance.
6. Allowances: Provide a separate line item in the schedule of values for each allowance. Show line item value of unit cost allowances, as a product of the unit cost, multiplied by measured quantity. Use information indicated in the Contract Documents to determine quantities.
7. Each item in the schedule of values and Applications for Payment shall be complete. Include total cost and proportionate share of general overhead and profit for each item:
  - a. Temporary facilities and other major cost items that are not direct cost of actual Work in place may be shown either as separate line items in the schedule of values or distributed as general overhead expense.
8. Schedule updating: Update and resubmit the schedule of values before the next Applications for Payment when Change Orders or Construction Change Directives result in a change in the Contract Sum.

## 1.5 APPLICATION FOR PAYMENT

- A. Submit preliminary (pencil) copy of proposed values to PBK Construction Field Representative and Owner for review by the 20<sup>th</sup> of the month. Allow four (4) days for comments. Schedule review of the pencil copy during bi-monthly site visits.
- B. Once preliminary (pencil) approved, submit four (4) notarized originals of each application on AIA Form G702 - Application and Certificate for Payment and AIA G703 - Continuation Sheet for G702 or other similar form approved by Owner.
- C. Content and Format: Utilize schedule of values for listing items in Application for Payment.
- D. Submit updated construction or recovery schedule with each Application for Payment.
- E. Payment Period: Submit at intervals stipulated in Owner/Contractor Agreement. Include Supplementary Conditions of the Contract.
- F. Only materials stored on the Project site shall be paid for unless the materials are stored in a bonded warehouse agreed upon by Owner. Periodic review of stored item will be required by the inspector of record.
- G. Substantiating Data:

1. When Architect/Engineer requires substantiating information, submit data justifying dollar amounts in question. Items that may be requested by Architect or Owner to substantiate costs include, but are not limited to the following:
  - a. Current Record Documents as specified in Section 01 77 00: Closeout Procedures.
  - b. Labor time sheets, purchase orders, or similar documentation.
  - c. Affidavits attesting to products stored off-site.

**PART 2 PRODUCTS (NOT USED)**

**PART 3 EXECUTION (NOT USED)**

**END OF SECTION 01 29 00**

## **SECTION 01 29 73 SCHEDULE OF VALUES - SAMPLE**

### **PART 1 GENERAL**

#### **1.1 RELATED DOCUMENTS**

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

#### **1.2 SUMMARY**

- A. Section Includes: Schedule of values listing to be edited by Contractor of description of Work, not scheduled value, Work completed, stored materials, total complete, percentage, balance to finish, and retainage. These parts must remain intact.
- B. Related Sections:
  - 1. Section 01 29 00: Payment Procedures.

#### **1.3 DEFINITIONS**

- A. Pencil Copy: A copy submitted prior to a final/official submission on a monthly basis.
- B. Schedule of Values: A statement furnished by Contractor allocating portions of the Contract Sum to various portions of the Work and used as the basis for reviewing Contractor's Applications for Payment.

#### **1.4 SCHEDULE OF VALUES**

**MATRIX TO START ON NEXT PAGE:**

This is a sample illustration:

Item No.	Description of Work	Scheduled Value	Work Completed		Stored Materials	Total Completed	%	Balance To Finish	Retainage
			Previous App.	This App.					
	<b>Div. 1 - General Reqs.</b> Site Work General Conditions Supervision Mobilization Bonds & Insurance Permits Contractor's Fee Closeout Documents								
	<b>Div. 1 - Total</b>								
	<b>Div. 2 - Existing Conditions</b> Demolition (As applicable) Erosion Control <b>Div. 2 - Total</b>								
	<b>Div. 3 - Concrete</b> Drill Piers Caps & Beams Slab on Grade Cooling Tower Basin Misc Bldg Conc Floor Sealer Rebar Matl Rebar Labor Lt.Wt.Insul Fill - Materials  Lt.Wt.Insul Fill - Labor Submittals/Closeout Documents Supervision Clean-up								
	<b>Div. 3 - Total</b> <b>Div 4 - Masonry</b> Brickwork - Labor Brickwork - Matls Concrete Masonry - Labor Concrete Masonry - Materials Str. Glazed Tile-Labor Str. Glazed Tile-Materials Submittals/Closeout Documents Supervision Clean-up								
	<b>Div. 4 - Total</b>								
	<b>Div 5 - Metals</b> Structural Steel - Labor Structural Steel - Materials Alternating Stairs Misc. Steel - Materials Steel Joists - Materials Lt. Gauge Steel Framing-Labor Lt. Gauge Steel Framing-Matls Metal Decking - Labor Expansion Joint Covers								



Item No.	Description of Work	Scheduled Value	Work Completed		Stored Materials	Total Completed	%	Balance To Finish	Retainage
			Previous App.	This App.					
	Detailing Submittals/Closeout Documents Supervision Clean-up								
	<b>Div. 5 - Total</b>								
	<b>Div. 6 - Wood &amp; Plastics</b> Rough Carpentry - Labor Rough Carpentry - Materials Millwork - Labor Millwork - Materials Submittals/Closeout Documents								
	<b>Div. 6 - Total</b>								
	<b>Div. 7 - Thermal and Moisture Protection</b> Waterpfng / Dampprfng-Matls Waterpfng / Dampprfng-Labor Building Insulation - Labor Building Insulation - Materials Fireproofing - Labor Fireproofing - Materials Metal Roof - Labor Metal Roof - Materials Metal Roof Guarantee Built-up Roofing-Labor Built-up Roofing-Materials Built-up Roofing Guarantee Roof Accessories Building Sheet Metal - Labor Building Sheet Metal - Matls Bldg. Sheet Metal Guarantee Roof Curbs Roof Hatches Sealants Submittals/Closeout Documents Supervision Clean-up								
	<b>Div. 7 - Total</b>								
	<b>Div. 8 - Doors and Frames</b> Finish Carpentry/Door - Labor Finish Hardware - Matls Thresholds & Seals - Matls+B66 Hollow Metal Doors & Frames - Matls Plastic Faced Doors-Matls Overhead Doors & Grilles-Labor Overhead Doors & Grilles - Matls Alum. Entrances & Storefronts - Labor								

Item No.	Description of Work	Scheduled Value	Work Completed		Stored Materials	Total Completed	%	Balance To Finish	Retainage
			Previous App.	This App.					
	fronts - Matls Alum. Windows - Labor Alum Windows - Matls Glass & Glazing-Labor Glass & Glazing-Matls Submittals/Closeout Documents Supervision Clean-up								
	<b>Div. 8 - Total</b>								
	<b>Div. 9 - Finishes</b> Lath & Plaster-Labor Lath & Plaster-Matls Gypsum Wallboard Systems - Labor Gypsum Wallboard Systems - Matls Ceramic Tile - Labor Ceramic Tile - Matls Quarry Tile - Labor Quarry Tile - Matls Terrazzo-Labor Terrazzo-Matls Acoustic Clg. - Labor Acoustic Clg. - Matls Acoustic Wall Panels Resilient Flooring - Labor Resilient Flooring - Matls Carpet - Labor Carpet - Matls Athletic Flooring - Materials Athletic Flooring - Labor Floor Sealer Painting - Labor Painting - Mtls Submittals/Closeout Documents Supervision Clean-up								
	<b>Div. 9 - Total</b>								
	<b>Div. 10 - Specialties</b> Visual Display Boards & Tackboards - Materials Visual Display Boards & Tackboards - Labor Toilet Partitions - Labor Toilet Partitions - Matls Louvers Aluminum Flag Pole Graphics Lockers Cubicle Curtains & Track Fire Extinguisher Cabinets Demountable Partitions-Labor								

Item No.	Description of Work	Scheduled Value	Work Completed		Stored Materials	Total Completed	%	Balance To Finish	Retainage
			Previous App	This App					
	Demountable Partitions-Matls Shelving Toilet Room Accessories-Matls Toilet Room Accessories-Lbr Submittals/Closeout Documents Supervision Clean-up								
	<b>Div. 10 - Total</b>								
	<b>Div. 11 - Equipment</b> Stage Curtains Misc. Appliances Food Service Eqpt-Labor Food Service Eqpt-Matls Submittals/Closeout Documents Supervision Clean-up								
	<b>Div. 11 - Total</b>								
	<b>Div. 12 - Furnishings</b> Horizontal Blinds Projection Screens Casework - Labor Casework - Matls Science Casework - Labor Science Casework - Matls Submittals/Closeout Documents Supervision Clean-up								
	<b>Div. 12 - Total</b>								
	<b>Div. 13 - Specialties</b> Stage Curtains and Draperies Music Instrument Storage Bleachers Press Box Pre-eng. Metal Bldg. Stadium Seating Submittals/Closeout Documents Supervision Clean-up								
	<b>Div. 13 - Total</b>								
	<b>Div. 14 - Conveying Systems</b> Platform Lifts Elevators Submittals/Closeout Documents Supervision Clean-up								
	<b>Div. 14 - Total</b>								
	<b>Div. 21, 22 - Plumbing</b> Shop Drawings As-Builts/Closeout/ O&M Manuals Sanitary Underground - Labor								
Item No.	Description of Work	Scheduled Value	Work Completed		Stored Materials	Total Completed	%	Balance To Finish	Retainage
			Previous	This					

		App.	App.				
Sanitary Underground - Matts							
Storm Underground - Labor							
Storm Underground - Matts							
Domestic Water - Labor							
Domestic Water - Matts							
Plumbing Insulation - Matts							
Plumbing Insulation - Labor							
Gas Piping - Matts							
Gas Piping - Labor							
Grease Trap							
Plumbing Fixtures - Matts							
Plumbing Fixtures - Labor							
Coordination Drawings							
Submittals/Closeout Documents							
Supervision Clean-up							
<b>Div. 21, 22 Plumbing - Total</b>							
<b>Div. 23 - Mechanical</b>							
Shop Drawings							
As-Builts/Closeout/ O&M Manuals							
Chillers - Matts							
Chillers - Labor							
Cooling Towers - Matts							
Cooling Towers - Labor							
Boilers - Matts							
Boilers - Labor							
AHU's - Matts							
AHU's - Labor							
Fans - Matts							
Fans - Labor							
Grilles - Matts							
Grilles - Labor							
Ductwork - Matts							
Ductwork - Labor							
Pumps - Mtls							
Pumps - Labor							
Water Treatment - Labor							
Water Treatment - Matts							
Isolation - Labor							
Isolation - Matts							
Pipe Flex - Matts							
Pipe Flex - Labor							
Connections							
Sheet Metal - Matts							
Sheet Metal - Labor							
Duct Insulation - Matts							
Duct Insulation - Labor							

Item No.	Description of Work	Scheduled Value	Work Completed		Stored Materials	Total Completed	%	Balance To Finish	Retainage
			Previous App.	This App.					
	Pipe Insulation - Mats Pipe Insulation - Labor VAV Boxes - Materials VAV Boxes - Labor Refrigerant Monitor - Mats Refrigerant Monitor - Labor Unit Heaters - Materials Unit Heaters - Labor Startup Controls - Mats Control - Labor Engineer / Submittals Modules / End Devices Low Voltage Wiring Startup Closeout Documents Fire Sprinkler Engineer / Submittals Piping - Materials Piping - Labor Equipment - Materials Equipment - Labor Trimout - Materials Trimout - Labor Pipe, Valves, Fittings - Labor Pipe, Valves, Fittings - Mats Misc. - Mats Insulation - Mats Insulation - Labor Sanitary Above Slab-Labor Sanitary Above Slab-Mats Storm Above Slab - Labor Storm Above Slab - Mats Gas - Labor Gas - Mats Fixtures - Labor Fixtures - Mats Permits Coordination Drawings Submittals/Closeout Documents Supervision Clean-up								
	<b>Div. 23 Mechanical - Total</b>								
	<b>Div. 26 - Electrical</b> Mobilization+B220 Shop Drawings As-Builts/Closeout/ O&M Manuals Underground Conduit - Labor Conduit - Matl Wire - Labor								

Item No.	Description of Work	Scheduled Value	Work Completed		Stored Materials	Total Completed	%	Balance To Finish	Retainage
			Previous App.	This App.					
	Wire - Mats Feeder Wire - Labor Feeder Wire - Mats Switches/Recpt. Switchgear - Labor Switchgear - Mats Temporary - Materials Temporary - Labor Gas Generator - Materials Gas Generator - Labor Fixtures - Labor Fixtures - Mats Communications - Labor Communications - Mats Fire Alarm - Labor Fire Alarm - Mats Security - Labor Security - Mats Low Voltage Ltng Sys-Mats Low Voltage Ltng Sys-Labor Voice System - Materials Voice System - Labor Video System - Materials Video System - Labor Data System - Materials Data System - Labor Master Clock - Materials Master Clock - Labor+B277 Coordination Drawings Submittals/Closeout Documents Supervision Clean-up								
	<b>Div. 26 - Total</b>								
	<b>Divs. 31, 32 and 33 - Earthwork, Exterior Improvements and Utilities</b>								
	Site Clearing & Grubbing Building Pad - Materials Building Pad - Labor Paving Subgrade Signage / Striping Bike Racks Landscaping - Materials Landscaping - Labor Hydro Mulch - Materials Hydro Mulch - Labor Irrigation - Materials Irrigation - Labor Earthwork Finish Grading Stabilization - Materials Stabilization - Labor Site Drainage - Materials Site Drainage - Labor								

Item No.	Description of Work	Scheduled Value	Work Completed		Stored Materials	Total Completed	%	Balance To Finish	Retainage
			Previous App.	This App.					
	Chain Link Fence-Materials Chain Link Fence-Labor Paving - Labor Paving - Materials Sidewalks Submittals/Closeout Documents Supervision Clean-up								
<b>Div. 31, 32 and 33 - Total</b>									
	<b>General Conditions</b> Mobilization Temp. Facilities Final Cleaning Record Documents/Closeout/ O&M Manuals Supervision Permits Bonds Insurance Allowances Alternates (list) Change Orders A. PR# B. PR# C. PR#								

**END OF SECTION 01 29 73**

## **SECTION 01 31 00 PROJECT MANAGEMENT AND COORDINATION**

### **PART 1 GENERAL**

#### **1.1 RELATED DOCUMENTS**

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

#### **1.2 SUMMARY**

- A. Section Includes:
  - 1. Administrative provisions for coordinating construction operations on Project including, but not limited to, the following:
    - a. General coordination procedures.
    - b. Coordination drawings.
    - c. Pre-installation meetings.
- B. Each contractor shall participate in coordination requirements. Certain areas of responsibility are assigned to a specific contractor.
- C. Contractor shall make a reasonable attempt to interpret the Contract Documents before asking the Architect for assistance in interpretation. Requests for Information (RFI) will not be allowed from Sub-Contractors. The Contractor is to evaluate the Sub-Contractor's request and respond if the Contractor deems necessary the RFI will be forwarded to the Architect for a evaluation and response. The Contractor shall arrange the necessary meeting in the field with appropriate Architect's field representative(s) to obtain clarification as needed on items that may need interpretation, clarification and respond appropriately.

#### **1.3 SUBMITTALS**

- A. Subcontract List:
  - 1. Prepare a written summary identifying individuals or firms proposed for each portion of the Work, including those who are to furnish products or equipment fabricated to a special design. Include the following information in tabular form:
    - a. Name, address, and telephone number of entity performing subcontract or supplying products.
    - b. Number and title of related Specification Section(s) covered by subcontract.
    - c. Drawing number and detail references, as appropriate, covered by subcontract.
- B. Key Personnel Names:
  - 1. Within 15 days of starting construction operations, submit a list of key personnel assignments, including superintendent and other personnel in attendance at Project site. Identify individuals and the duties and responsibilities; list address, telephone numbers (home, office, and cellular), and email addresses. Provide names, addresses, and telephone numbers of individuals assigned as alternates in the absence of individuals assigned to Project:
    - a. Post copies of list in Project meeting room, in temporary field office, and by each temporary telephone. Keep list current at all times.

#### **1.4 COORDINATION PROCEDURES**

- A. Coordinate construction operations to ensure efficient and orderly installation of each part of the Work. Coordinate construction operations that depend on each other for proper



installation, connection, and operation:

1. Schedule construction operations in sequence required to obtain the best results where installation of one part of the Work depends on installation of other components, before or after its own installation.
  2. Coordinate installation of different components to ensure maximum performance and accessibility for required maintenance, service, and repair.
  3. Make adequate provisions to accommodate items scheduled for later installation.
- B. Prepare memoranda for distribution to each party involved, outlining special procedures required for coordination. Include items as required notices, reports, and list of attendees at meetings:
1. Prepare similar memoranda for Owner and separate contractors if coordination of the Work is required.
- C. Administrative Procedures:
1. Coordinate scheduling and timing of required administrative procedures with other construction activities to avoid conflicts and to ensure orderly progress of the Work. Administrative activities include, but are not limited to, the following:
    - a. Preparation of Contractor's Construction Schedule.
    - b. Preparation of the schedule of values.
    - c. Installation and removal of temporary facilities and controls.
    - d. Delivery and processing of submittals.
    - e. Progress meetings.
    - f. Pre-installation conferences.
    - g. Project closeout activities.
    - h. Startup and adjustment of systems.
    - i. Coordinating inspections and other jurisdictional requirements.
    - j. Coordinate OFCI equipment.
    - k. Action items and issue logs.
- D. Conservation:
1. Coordinate construction activities to ensure that operations are carried out with consideration given to conservation of energy, water, and materials. Coordinate use of temporary utilities to minimize waste:
    - a. Salvage materials and equipment involved in performance of, but not actually incorporated into, the Work. Refer to the Specifications Sections for disposition of salvaged materials that are designated as Owner's property.

## 1.5 COORDINATION DRAWINGS

- A. Coordination Drawings, General:
1. Prepare coordination drawings according to requirements in individual Sections, and additionally where installation is not completely shown on shop drawings, where limited space availability necessitates coordination, or if coordination is required to facilitate integration of products and materials fabricated or installed by more than one entity:
    - a. Content:
      - 1) Project-specific information, drawn accurately to a scale large enough to indicate and resolve conflicts. Do not base coordination drawings on standard printed data. Include the following information, as applicable:
        - a) Use applicable Drawings as a basis for preparation of coordination drawings. Prepare sections, elevations, and details as needed to describe relationship of various systems and components.
        - b) Coordinate the addition of trade specific information to the coordination drawings by multiple contractors in sequence that best provides for coordination of the information and resolution of conflicts between installed components before submitting for review.

- c) Indicate functional and spatial relationships of components of architectural, structural, civil, mechanical, and electrical systems.
  - d) Indicate space requirements for routine maintenance and for anticipated replacement of components during the life of the installation.
  - e) Show location and size of access doors required for access to concealed dampers, valves, and other controls.
  - f) Indicate required installation sequences.
  - g) Indicate dimensions shown on the Drawings. Specifically note dimensions that appear to be in conflict with submitted equipment and minimum clearance requirements. Provide alternate sketches to Architect indicating proposed resolution of such conflicts. Minor dimension changes and difficult installations will not be considered changes to the Contract.
- B. Coordination Drawing Organization:
1. Floor plans and reflected ceiling plans: Show architectural and structural elements, and mechanical, plumbing, fire-protection, fire-alarm, and electrical work. Show locations of visible ceiling-mounted devices relative to acoustical ceiling grid. Supplement plan Drawings with section drawings where required to adequately represent the Work.
  2. Plenum space: Indicate subframing for support of ceiling and wall systems, mechanical and electrical equipment, and related work. Locate components within ceiling plenum to accommodate layout of light fixtures indicated on Drawings. Indicate areas of conflict between light fixtures, ductwork, piping, and other components.
  3. Mechanical rooms: Provide coordination drawings for mechanical rooms showing plans and elevations of mechanical, plumbing, fire protection, fire-alarm, and electrical equipment.
  4. Structural penetrations: Indicate penetrations and openings required for all disciplines.
  5. Slab edge and embedded items: Indicate slab edge locations and sizes, and locations of embedded items for metal fabrications, sleeves, anchor bolts, bearing plates, angles, door floor closers, slab depressions for floor finishes, curbs and housekeeping pads, and similar items.
  6. Mechanical and plumbing work - Show the following:
    - a. Sizes and bottom elevations of ductwork, piping, and conduit runs, including insulation, bracing, flanges, and support systems.
    - b. Dimensions of major components, such as dampers, valves, diffusers, access doors, cleanouts, and electrical distribution equipment.
    - c. Fire-rated enclosures around ductwork.
  7. Electrical work - Show the following:
    - a. Runs of vertical and horizontal conduit 1-1/4 inches (32 mm) in diameter and larger.
    - b. Light fixture, exit light, emergency battery pack, smoke detector, and other fire alarm locations.
    - c. Panel board, switch board, switchgear, transformer, busway, generator, and motor control center locations.
    - d. Location of pull boxes and junction boxes, dimensioned from column center lines.
    - e. Floor boxes.
  8. Fire protection system - Show the following:
    - a. Locations of standpipes, mains piping, branch lines, pipe drops, sprinkler heads, and inspector test locations.
  9. IDF/MDF rooms: Communications and low voltage (security, data, phone, etc.) audio.
  10. Review: Architect will review coordination drawings to confirm that the Work is being coordinated, but not for the details of the coordination, which are Contractor's responsibility. If Architect determines that coordination drawings are not being prepared in sufficient scope or detail, or are otherwise deficient, Architect will so inform Contractor, who shall make changes as directed and resubmit.
  11. Coordination drawing prints: Prepare coordination drawing prints according to

requirements in Section 01 33 00: Submittal Procedures.

- C. Coordination Digital Data Files:
  - 1. Prepare coordination digital data files according to the following requirements:
    - a. File preparation format: Same digital data software program, version, and operating system as original Drawings.
    - b. File submittal format: Submit or post coordination drawing files using same format as file preparation.
    - c. BIM file incorporation:
      - 1) Develop and incorporate coordination drawing files into Building Information Model established for Project:
        - a) Perform three-dimensional component conflict analysis as part of preparation of coordination drawings. Resolve component conflicts prior to submittal. Indicate where conflict resolution requires modification of design requirements by Architect.
    - d. Architect will furnish Contractor one set of digital data files of Drawings for use in preparing coordination digital data files:
      - 1) Architect makes no representations as to the accuracy or completeness of digital data files as they relate to Drawings.
      - 2) Digital data software program: Drawings are available in Revit.
      - 3) Contractor shall execute a data licensing agreement in the form of AIA Document C106.

## 1.6 PROJECT MEETINGS

- A. Schedule and conduct meetings and conferences at Project site unless otherwise indicated:
  - 1. Attendees: Inform participants and others involved, and individuals whose presence is required, of date and time of each meeting. Notify Owner and Architect of scheduled meeting dates and times.
  - 2. Agenda: Architect to prepare the meeting agenda and distribute the agenda to all invited attendees.
  - 3. Minutes: Entity responsible for conducting meeting will record significant discussions and agreements achieved. Distribute the meeting minutes to everyone concerned, including Owner and Architect, within three days of the meeting.
  - 4. Action items: An element of work, design, research, or other task to be completed before a specific date or time, such as before a subsequent meeting of involved parties.
  - 5. Issue logs: Documentation element of software project management and contains a list of ongoing and closed issues of the Project.
- B. Kick-off and Preconstruction Conference:
  - 1. Architect will schedule and conduct a preconstruction conference before starting construction, at a time convenient to Owner and Architect:
    - a. Conduct the conference to review responsibilities and personnel assignments.
    - b. Attendees: Authorized representatives of Owner, Architect, and their consultants; Contractor and its superintendent; major subcontractors; suppliers; and other concerned parties shall attend the conference. Participants at the conference shall be familiar with the Project and authorized to conclude matters relating to the Work.
    - c. Agenda: Discuss items of significance that affect progress.
    - d. Minutes: Entity responsible for conducting meeting will record and distribute meeting minutes.
    - e. Action items: An element of work, design, research, or other task to be completed before a specific date or time, such as before a subsequent meeting of involved parties.

- C. Pre-Installation Conferences:
1. Conduct a pre-installation trade conference at site before each construction activity that requires coordination with other construction trades:
    - a. Attendees: Installer and representatives of manufacturers and fabricators involved in or affected by the installation and its coordination or integration with other materials and installations that have preceded or will follow, shall attend the meeting. Advise Architect and Engineer of Record of scheduled meeting dates.
    - b. Agenda: Contractor to review progress of other construction activities and preparations for the particular activity under consideration.
    - c. Contractor to record significant conference discussions, agreements, and disagreements, including required corrective measures and actions.
    - d. Reporting: Contractor to distribute minutes of the meeting to each party present and to other parties requiring information.
    - e. Do not proceed with installation if the conference cannot be successfully concluded. Initiate whatever actions are necessary to resolve impediments to performance of the Work and reconvene the conference at earliest feasible date.
    - f. Action items: An element of work, design, research, or other task to be completed before a specific date or time, such as before a subsequent meeting of involved parties.
- D. Project Closeout Conference:
1. Schedule and conduct a Project closeout conference, at a time convenient to Owner and Architect, but no later than 90 days prior to the scheduled date of Substantial Completion:
    - a. Conduct the conference to review requirements and responsibilities related to Substantial Completion.
    - b. Attendees: Authorized representatives of Owner, Architect, and their consultants; Contractor and its superintendent; major subcontractors; suppliers; and other concerned parties shall attend the meeting. Participants at the meeting shall be familiar with the Project and authorized to conclude matters relating to the Work.
    - c. Agenda: Discuss items of significance that could affect or delay Project closeout.
    - d. Minutes: Entity conducting meeting will record and distribute meeting minutes.
    - e. Action items: An element of work, design, research, or other task to be completed before a specific date or time, such as before a subsequent meeting of involved parties.
- E. Progress Meetings:
1. Conduct progress meetings at weekly intervals:
    - a. Coordinate dates of meetings with preparation of payment requests.
    - b. Attendees: In addition to representatives of Owner and Architect, each contractor, subcontractor, supplier, and other entity concerned with current progress or involved in planning, coordination, or performance of future activities shall be represented at these meetings. All participants at the meeting shall be familiar with the Project and authorized to conclude matters relating to the Work.
    - c. Agenda:
      - 1) Review and correct or approve minutes of previous progress meeting. Review other items of significance that could affect progress. Include topics for discussion as appropriate to status of the Project:
        - a) Contractor's Construction Schedule: Review progress since the last meeting. Determine whether each activity is on time, ahead of schedule, or behind schedule, in relation to Contractor's Construction Schedule. Determine how construction behind schedule will be expedited; secure commitments from parties involved to do so. Discuss whether schedule revisions are required to ensure that current and subsequent activities will be completed within the Contract Time.
    - d. Minutes:

- 1) Entity responsible for conducting the meeting will record and distribute the meeting minutes to each party present and to parties requiring information:
    - a) Schedule updating: Revise Contractor's Construction Schedule after each progress meeting where revisions to the schedule have been made or recognized. Issue revised schedule concurrently with the report of each meeting.
    - b) Six (6) week look-ahead schedules. This may be altered to three (3) week look-ahead as part of an action item when Architect/District request:
      - i. Action items: An element of work, design, research, or other task to be completed before a specific date or time, such as before a subsequent meeting of involved parties.
- F. Coordination Meetings:
1. Conduct coordination meetings at weekly intervals. Project coordination meetings are in addition to specific meetings held for other purposes, such as progress meetings and pre-installation conferences:
    - a. Attendees: In addition to representatives of Owner and Architect, each contractor, subcontractor, supplier, and other entity concerned with current progress or involved in planning, coordination, or performance of future activities shall be represented at these meetings. All participants at the meetings shall be familiar with the Project and authorized to conclude matters relating to the Work.
    - b. Agenda:
      - 1) Review and correct or approve minutes of the previous coordination meeting. Review other items of significance that could affect progress. Include topics for discussion as appropriate to status of the Project:
        - a) Combined Contractor's Construction Schedule: Review progress since the last coordination meeting. Determine whether each contract is on time, ahead of schedule, or behind schedule, in relation to combined Contractor's Construction Schedule. Determine how construction behind schedule will be expedited; secure commitments from parties involved to do so. Discuss whether schedule revisions are required to ensure that current and subsequent activities will be completed within the Contract Time.
        - b) Schedule updating: Revise combined Contractor's Construction Schedule after each coordination meeting where revisions to the schedule have been made or recognized. Issue revised schedule concurrently with report of each meeting.
        - c) Review present and future needs of each contractor present.
    - c. Reporting: Record meeting results and distribute copies to everyone in attendance and to others affected by decisions or actions resulting from each meeting.
    - d. Action items: An element of work, design, research, or other task to be completed before a specific date or time, such as before a subsequent meeting of involved parties.

**PART 2 PRODUCTS (NOT USED)**

**PART 3 EXECUTION (NOT USED)**

**END OF SECTION 01 31 00**

## **SECTION 01 32 00 CONSTRUCTION PROGRESS DOCUMENTATION**

### **PART 1 GENERAL**

#### **1.1 RELATED DOCUMENTS**

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

#### **1.2 SUMMARY**

- A. Section includes administrative and procedural requirements for documenting the progress of construction during performance of the Work, including the following:
  1. Startup construction schedule.
  2. Contractor's Construction Schedule.
  3. Construction schedule updating reports.
  4. Daily construction reports.
  5. Material location reports.
  6. Site condition reports.
  7. Special reports.

#### **1.3 DEFINITIONS**

- A. Activity:
  1. A discrete part of a project that can be identified for planning, scheduling, monitoring, and controlling the construction project. Activities included in a construction schedule consume time and resources:
    - a. Critical activity: An activity on the critical path that must start and finish on the planned early start and finish times.
    - b. Predecessor activity: An activity that precedes another activity in the network.
    - c. Successor activity: An activity that follows another activity in the network.
- B. Cost Loading: The allocation of the schedule of values for the completion of an activity as scheduled. The sum of costs for all activities must equal the total Contract Sum unless otherwise approved by Architect.
- C. CPM: Critical path method, which is a method of planning and scheduling a construction project where activities are arranged based on activity relationships. Network calculations determine when activities can be performed and the critical path of the project.
- D. Critical Path: The longest connected chain of interdependent activities through the network schedule that establishes the minimum overall Project duration and contains no float.
- E. Float:
  1. The measure of leeway in starting and completing an activity:
    - a. Float time is not for the exclusive use or benefit of either Owner or Contractor, but is a jointly owned, expiring Project resource available to both parties as needed to meet schedule milestones and Contract completion date.
    - b. Free float is the amount of time an activity can be delayed without adversely affecting the early start of the successor activity.
    - c. Total float is the measure of leeway in starting or completing an activity without adversely affecting the planned Project completion date.
- F. Look-ahead Schedule: Schedule indicating activities scheduled to occur or commence prior

to submittal of next schedule update.

- G. Milestones: Measurable, observable, and serve as progress markers (flags) but, by definition, are independent of time (have zero durations); therefore, no Work or consumption of resources is associated with them.
- H. Recovery Schedule: Submittal of a revised CPM schedule and a written plan.
- I. Resource Loading: The allocation of manpower and equipment necessary for completion of an activity as scheduled.

#### **1.4 SUBMITTALS**

- A. Submittal Format:
  - 1. Submit required submittals in the following format:
    - a. Working electronic copy of schedule file, where indicated.
    - b. PDF electronic file.
- B. Startup Diagram: Of size necessary to display entire network for entire construction period. Show logic relationship ties for all activities.
- C. Contractor's Construction Schedule:
  - 1. Initial schedule, of size required to display entire schedule for entire construction period:
    - a. Submit a working electronic copy of schedule labeled to comply with requirements for submittals. Include type of schedule (initial or updated) and date on label.
- D. CPM Reports:
  - 1. Concurrent with CPM schedule, submit each of the following reports. Format for each activity in reports shall contain activity number, activity description, cost and resource loading, original duration, remaining duration, early start date, early finish date, late start date, late finish date, and total float in calendar days:
    - a. Activity Report: List of activities sorted by activity number and then early start date, or actual start date if known.
    - b. Logic Report: List of preceding and succeeding activities for all activities, sorted in ascending order by activity number and then early start date, or actual start date if known.
    - c. Total Float Report: List of all activities sorted in ascending order of total float.
    - d. Earnings Report: Compilation of Contractor's total earnings from commencement of the Work until most recent Application for Payment.
- E. Construction Schedule Updating Reports: Submit with Applications for Payment.
- F. Daily Construction Reports: Submit at monthly intervals.
- G. Material Location Reports: Submit at monthly intervals.
- H. Site Condition Reports: Submit at time of discovery of differing conditions.
- I. Special Reports: Submit at time of unusual event.

#### **1.5 QUALITY ASSURANCE**

- A. Pre-Scheduling Conference:
  - 1. Conduct conference at site. Review methods and procedures related to the preliminary

construction schedule and Contractor's Construction Schedule, including, but not limited to, the following:

- a. Review software limitations and content and format for reports.
  - b. Verify availability of qualified personnel needed to develop and update schedule.
  - c. Discuss constraints, including phasing, Work stages, area separations, interim milestones, and partial Owner occupancy.
  - d. Review delivery dates for Owner furnished products.
  - e. Review schedule for work of Owner's separate contracts, if any.
  - f. Review submittal requirements and procedures.
  - g. Review time required for review of submittals and resubmittals.
  - h. Review requirements for tests and inspections by independent testing and inspecting agencies.
  - i. Review time required for Project closeout and Owner startup procedures.
  - j. Review and finalize list of construction activities to be included in schedule.
  - k. Review procedures for updating schedule.
- B. Coordination:
1. Coordinate Contractor's Construction Schedule with the schedule of values, list of subcontracts, submittal schedule, progress reports, payment requests, and other required schedules and reports:
    - a. Secure time commitments for performing critical elements of the Work from entities involved.
    - b. Coordinate each construction activity in the network with other activities and schedule them in proper sequence.

## **PART 2 PRODUCTS (NOT USED)**

## **PART 3 EXECUTION**

### **3.1 CONTRACTOR'S CONSTRUCTION SCHEDULE**

- A. Time is of the essence to Owner. Commence Work immediately upon issuance of the Notice to Proceed. There is a critical need for the Work to be substantially complete within the time frame identified in the Agreement.
- B. Time Frame:
1. Extend schedule from date established for commencement of the Work to date of Substantial Completion and date of final completion:
    - a. Contract completion date shall not be changed by submission of schedule that shows an early completion date, unless specifically authorized by Change Order.
- C. Activities:
1. Treat each separate area or story as a separate numbered activity for each main element of the Work. Comply with the following:
    - a. Activity duration: Define activities in terms of number of days anticipated.
    - b. Procurement activities: Include procurement process activities for long lead items and major items requiring a cycle of more than 60 days as separate activities in schedule. Procurement cycle activities include, but are not limited to, submittals, approvals, purchasing, fabrication, and delivery.
    - c. Submittal review time: Include review and resubmittal times indicated in Section 01 33 00: Submittal Procedures in schedule. Coordinate submittal review times in Contractor's Construction Schedule with submittal schedule.
    - d. Startup and testing time: Include number of days anticipated for startup and testing.
    - e. Substantial Completion: Indicate completion of all conditions as in advance of date



- established for Substantial Completion and allow time for Architect's administrative procedures necessary for certification of Substantial Completion.
- f. Punch list and final completion: Include a maximum of 30 days for completion of punch list items and final completion.
  - g. Inspections required by Authorities Having Jurisdiction (AHJ).
- D. Constraints:
1. Include constraints and Work restrictions indicated in the Contract Documents and show how the sequence of the Work is affected:
    - a. Work restrictions:
      - 1) Show the effect of the following items on the schedule:
        - a) Coordination with existing construction.
        - b) Limitations of continued occupancies.
        - c) Uninterruptible services.
        - d) Partial occupancy before Substantial Completion.
        - e) Use of premises restrictions.
        - f) Provisions for future construction.
        - g) Seasonal variations.
        - h) Environmental control.
        - i) Rain days as indicated in Section 01 10 00: Summary.
      - b. Work stages:
        - 1) Indicate important stages of construction for each major portion of the Work, including, but not limited to, the following:
          - a) Submittals.
          - b) Mockups.
          - c) Fabrication.
          - d) Installation.
          - e) Tests and inspections.
          - f) Adjusting.
          - g) Curing.
  - E. Cost Correlation: Superimpose a cost correlation timeline, indicating planned and actual costs. On the line, show planned and actual dollar volume of the Work performed as of planned and actual dates used for preparation of payment requests.
  - F. Six (6) Week Look-Ahead Schedule:
    1. Prepare schedule indicating activities scheduled to occur or commence prior to submittal of next schedule update. Summarize the following issues:
      - a. Unresolved issues.
      - b. Unanswered Requests for Information.
      - c. Rejected or unreturned submittals.
      - d. Notations on returned submittals.
      - e. Pending modifications affecting the Work and Contract Time.
      - f. Inspections by AHJ.
      - g. Trade pre-installation conference.
  - G. Recovery Schedule: When periodic update indicates the Work is 14 or more calendar days behind the current approved schedule, submit a separate recovery schedule indicating means by which Contractor intends to regain compliance with the schedule. Indicate changes to working hours, working days, crew sizes, and equipment required to achieve compliance, and date by which recovery will be accomplished.
  - H. Computer Scheduling Software: Prepare schedules using current version of a program that has been developed specifically to manage construction schedules.
  - I. Contract Modifications: For each proposed Contract modification and concurrent with its

submission, prepare a time impact analysis to demonstrate the effect of the proposed change on the overall Project schedule.

- J. Schedule Updating:
1. Concurrent with making revisions to the schedule, prepare tabulated reports showing the following:
    - a. Identification of activities that have changed.
    - b. Changes in early and late start dates.
    - c. Changes in early and late finish dates.
    - d. Changes in activity durations in workdays.
    - e. Changes in the critical path.
    - f. Changes in total float or slack time.
    - g. Changes in Contract Time.

### 3.2 REPORTS

- A. Daily Construction Reports:
1. Prepare a daily construction report recording information concerning events at the site and submit each month to Architect:
    - a. List of subcontractors at the Project site.
    - b. List of separate contractors at the Project site.
    - c. Approximate count of personnel at the Project site.
    - d. Rental equipment at the Project site.
    - e. Material deliveries.
    - f. High and low temperatures and general weather conditions, including presence of rain or snow.
    - g. Accidents.
    - h. Meetings and significant decisions.
    - i. Unusual events (see special reports).
    - j. Stoppages, delays, shortages, and losses.
    - k. Meter readings and similar recordings.
    - l. Emergency procedures.
    - m. Orders and requests of AHJ.
    - n. Change Orders received and implemented.
    - o. Construction Change Directives received and implemented.
    - p. Services connected and disconnected.
    - q. Equipment or system tests and startups.
    - r. Partial completions and occupancies.
    - s. Substantial Completions authorized.
- B. Material Location Reports:
1. At monthly intervals, prepare and submit a comprehensive list of materials delivered to and stored at site. List shall be cumulative, showing materials previously reported plus items recently delivered. Include with list a statement of progress on and delivery dates for materials or items of equipment fabricated or stored away from the Project site. Indicate the following categories for stored materials:
    - a. Material stored prior to previous report and remaining in storage.
    - b. Material stored prior to previous report and since removed from storage and installed.
    - c. Material stored following previous report and remaining in storage.
- C. Site Condition Reports: Immediately on discovery of a difference between site conditions and the Contract Documents, prepare and submit a detailed report and contact Architect's field representative. Include a detailed description of the differing conditions, together with recommendations for changing the Contract Documents to Architect's field representative.

- D. Special Reports:
1. Submit special reports directly to Owner within 24 hours of an occurrence. Distribute copies of report to parties affected by the occurrence:
    - a. Reporting unusual events: When an event of an unusual and significant nature occurs at site, whether or not related directly to the Work, prepare and submit a special report. List chain of events, persons participating, and response by Contractor's personnel, evaluation of results or effects, and similar pertinent information. Advise Owner and Architect in advance when these events are known or predictable.

### **3.3 CONTRACTOR'S CONSTRUCTION SCHEDULE**

- A. Contractor's Construction Schedule Updating:
1. At monthly intervals, update schedule to reflect actual construction progress and activities. Issue schedule with a pencil copy of pay application:
    - a. Revise schedule immediately after each meeting or other activity where revisions have been recognized or made. Issue updated schedule concurrently with the report of each such meeting.
    - b. Include a report with updated schedule that indicates every change, including, but not limited to, changes in logic, durations, actual starts and finishes, and activity durations.
    - c. As the Work progresses, indicate final completion percentage for each activity.
- B. Distribution:
1. Distribute copies of approved schedule to Architect, Owner, separate contractors, testing and inspecting agencies, and interested parties identified by Contractor with a need-to-know schedule responsibility:
    - a. Post copies in Project meeting rooms and temporary field offices.
    - b. When revisions are made, distribute updated schedules to the same parties and post in the same locations. Delete parties from distribution when they have completed their assigned portion of the Work and are no longer involved in performance of construction activities.

**END OF SECTION 01 32 00**

## **SECTION 01 33 00 SUBMITTAL PROCEDURES**

### **PART 1 GENERAL**

#### **1.1 RELATED DOCUMENTS**

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

#### **1.2 SUMMARY**

- A. Section Includes:
  - 1. Requirements for the submittal schedule and administrative and procedural requirements for submitting shop drawings, product data, samples, and other submittals.
- B. Related Section:
  - 1. Section 01 25 00: Substitution Procedures and Form.

#### **1.3 DEFINITIONS**

- A. File Transfer Protocol (FTP): Communications protocol that enables transfer of files to and from another computer over a network and that serves as the basis for standard Internet protocols. An FTP site is a portion of a network located outside of network firewalls within which internal and external users are able to access files.
- B. Portable Document Format (PDF): An open standard file format used for representing documents in a device and display resolution independent fixed layout document format.
- C. Submittals: Written and graphic information and physical samples that require Architect's responsive action, or are for information and do not require Architect's action.

#### **1.4 SUBMITTALS**

- A. Submit a schedule of submittals, arranged in chronological order by dates required by construction schedule. Include time required for review, ordering, manufacturing, fabrication, and delivery when establishing dates. Include additional time required for making corrections or revisions to submittals noted by Architect and additional time for handling and reviewing submittals required by those corrections:
  - 1. Coordinate submittal schedule with list of subcontracts, the schedule of values, and Contractor's Construction Schedule.
  - 2. Initial submittal: Submit concurrently with construction schedule. Include submittals required during the first 60 days of construction. List those submittals required to maintain orderly progress of the Work and those required early because of long lead time for manufacture or fabrication.
  - 3. Final submittal: Submit concurrently with the first complete submittal of Contractor's Construction Schedule. Submit revised submittal schedule to reflect changes in current status and timing for submittals.

#### **1.5 SUBMITTAL ADMINISTRATIVE REQUIREMENTS**

- A. Architect's Digital Data Files:
  - 1. Electronic digital data files of the Contract Drawings will be provided by Architect for Contractor's use in preparing submittals:

- a. Upon request, Architect will furnish Contractor one set of digital data drawing files of the Contract Drawings for use in preparing shop drawings and Project record drawings:
  - 1) Architect makes no representations as to the accuracy or completeness of digital data drawing files as they relate to the Contract Drawings.
  - 2) Digital drawing software program: The Contract Drawings are available in Revit.
  - 3) Contractor shall execute a data licensing agreement in the form of AIA Document C106, Digital Data Licensing Agreement.
  - 4) The following digital data files will be furnished for each appropriate discipline:
    - a) Floor plans.
    - b) Reflected ceiling plans.
- B. Coordination:
  1. Coordinate preparation and processing of submittals with performance of construction activities:
    - a. Coordinate each submittal with fabrication, purchasing, testing, delivery, other submittals, and related activities that require sequential activity.
    - b. Submit submittal items required for each Specification Section concurrently unless partial submittals for portions of the Work are indicated on approved submittal schedule.
    - c. Submit action submittals and informational submittals required by the same Specification Section as separate packages under separate transmittals.
    - d. Coordinate transmittal of different types of submittals for related parts of the Work so processing will not be delayed because of need to review submittals concurrently for coordination:
      - 1) Architect reserves the right to withhold action on a submittal requiring coordination with other submittals until related submittals are received.
- C. Processing Time:
  1. Allow time for submittal review, including time for resubmittals. Time for review shall commence on Architect's receipt of submittal. No extension of the Contract Time will be authorized because of failure to transmit submittals enough in advance of the Work to permit processing, including resubmittals:
    - a. Initial review: Allow 15 days for initial review of each submittal. Allow additional time if coordination with subsequent submittals is required. Architect will advise Contractor when a submittal being processed must be delayed for coordination.
    - b. Intermediate review: If intermediate submittal is necessary, process in same manner as initial submittal.
    - c. Resubmittal review: Allow 15 days for review of each resubmittal.
    - d. Sequential review: Where sequential review of submittals by Architect's consultants, Owner, or other parties is indicated, allow 21 days for initial review of each submittal.
    - e. Concurrent consultant review: Where the Contract Documents indicate that submittals may be transmitted simultaneously to Architect and to Architect's consultants, allow 15 days for review of each submittal. Submittal will be returned to Architect before being returned to Contractor.
- D. Electronic Submittals:
  1. Identify and incorporate information in each electronic submittal file:
    - a. Assemble complete submittal package into a single indexed file incorporating submittal requirements of a single Specification Section and transmittal form with links enabling navigation to each item.
    - b. Name file with submittal number or other unique identifier, including revision identifier:

- 1) File name shall use Project identifier and Specification Section number followed by a decimal point and then a sequential number (e.g., SLOHSM-06 10 00.01). Resubmittals shall include an alphabetic suffix after another decimal point (e.g., SLOHSM-06 10 00.01.A).
  - c. Provide means for insertion to permanently record Contractor's review and approval markings and action taken by Architect.
  - d. Transmittal form for electronic submittals:
    - 1) Use software generated form from electronic project management software acceptable to Owner, containing the following information:
      - a) Project name.
      - b) Date.
      - c) Name and address of Architect.
      - d) Name of Construction Manager.
      - e) Name of Contractor.
      - f) Name of firm or entity that prepared submittal.
      - g) Names of Subcontractor, manufacturer, and supplier.
      - h) Category and type of submittal.
      - i) Submittal purpose and description.
      - j) Specification Section number and title.
      - k) Specification paragraph number or Drawing designation and generic name for each of multiple items.
      - l) Drawing number and detail references, as appropriate.
      - m) Location(s) where product is to be installed, as appropriate.
      - n) Related physical samples submitted directly.
      - o) Indication of full or partial submittal.
      - p) Transmittal number, numbered consecutively.
      - q) Submittal and transmittal distribution record.
      - r) Other necessary identification.
      - s) Remarks.
  - e. Metadata:
    - 1) Include the following information as keywords in the electronic submittal file metadata:
      - a) Project name.
      - b) Number and title of appropriate Specification Section.
      - c) Manufacturer name.
      - d) Product name.
- E. Options: Identify options requiring selection by Architect.
- F. Deviations and Additional Information: On an attached separate sheet, prepared on Contractor's letterhead, record relevant information, requests for data, revisions other than those requested by Architect on previous submittals, and deviations from requirements in the Contract Documents, including minor variations and limitations. Include same identification information as related submittal.
- G. Resubmittals:
  1. Make resubmittals in same form and number of copies as initial submittal:
    - a. Note date and content of previous submittal.
    - b. Note date and content of revision in label or title block and clearly indicate extent of revision.
    - c. Resubmit submittals until they are marked with approval notation from Architect's action stamp.
- H. Distribution: Furnish copies of final submittals to manufacturers, subcontractors, suppliers, fabricators, installers, authorities having jurisdiction, and others as necessary for performance of construction activities. Show distribution on transmittal forms.

- I. Use for Construction: Retain complete copies of submittals on the Project site. Use only final action submittals that are marked with approval notation from Architect's action stamp.

## **PART 2 PRODUCTS**

### **2.1 SUBMITTAL PROCEDURES**

- A. Submittal Procedure Requirements:
  1. Prepare and submit submittals required by individual Specification Sections:
    - a. Submit electronic submittals via email as PDF electronic files:
      - 1) Architect will return annotated file. Annotate and retain one copy of file as an electronic Project record document file.
    - b. Submittals: Submit three (3) paper copies of each submittal unless otherwise indicated. Architect will return two (2) copies.
    - c. Certificates and certifications submittals:
      - 1) Provide statement that includes signature of entity responsible for preparing certification. Certificates and certifications shall be signed by an officer or other individual authorized to sign documents on behalf of that entity:
        - a) Provide a digital signature with digital certificate on electronically submitted certificates and certifications where indicated.
        - b) Provide a notarized statement on original paper copy certificates and certifications where indicated.
- B. Product Data:
  1. Collect information into a single submittal for each element of construction and type of product or equipment:
    - a. If information must be specially prepared for submittal because standard published data are not suitable for use, submit as shop drawings, not as product data.
    - b. Mark each copy of each submittal to show which products and options are applicable.
    - c. Include the following information, as applicable:
      - 1) Manufacturer's catalog cuts.
      - 2) Manufacturer's product specifications.
      - 3) Standard color charts.
      - 4) Statement of compliance with specified referenced standards.
      - 5) Testing by recognized testing agency.
      - 6) Application of testing agency labels and seals.
      - 7) Notation of coordination requirements.
      - 8) Availability and delivery time information.
    - d. For equipment, include the following in addition to the above, as applicable:
      - 1) Wiring diagrams showing factory installed wiring.
      - 2) Printed performance curves.
      - 3) Operational range diagrams.
      - 4) Clearances required to other construction, if not indicated on accompanying shop drawings.
    - e. Submit product data before or concurrent with samples.
    - f. Submit product data in PDF electronic file.
- C. Shop Drawings:
  1. Prepare Project specific information, drawn accurately to scale. Do not base shop drawings on reproductions of the Contract Documents or standard printed data:
    - a. Preparation:
      - 1) Fully illustrate requirements in the Contract Documents. Include the following information, as applicable:
        - a) Identification of products.

- b) Schedules.
  - c) Compliance with specified standards.
  - d) Notation of coordination requirements.
  - e) Notation of dimensions established by field measurement.
  - f) Relationship and attachment to adjoining construction clearly indicated.
  - g) Seal and signature of professional Engineer if specified.
- b. Sheet size: Except for templates, patterns, and similar full-size drawings, submit shop drawings on sheets size indicated in Specification Section.
  - c. Submit shop drawings in PDF electronic file.
- D. Samples:
- 1. Submit samples for review of kind, color, pattern, and texture for a check of characteristics with other elements and for a comparison of these characteristics between submittal and actual component as delivered and installed:
    - a. Transmit samples that contain multiple related components, such as accessories, together in one submittal package.
    - b. Identification:
      - 1) Attach label on unexposed side of samples that includes the following:
        - a) Generic description of sample.
        - b) Product name and name of manufacturer.
        - c) Sample source.
        - d) Number and title of applicable Specification Section.
        - e) Specification paragraph number and generic name of each item.
    - c. For projects where electronic submittals are required, provide corresponding electronic submittal of sample transmittal, digital image file illustrating sample characteristics, and identification information for record:
      - 1) Disposition: Maintain sets of approved samples at the Project site, available for quality-control comparisons throughout the course of construction activity. Sample sets may be used to determine final acceptance of construction associated with each set.
      - 2) Samples that may be incorporated into the Work are indicated in individual Specification Sections. Such samples must be in an undamaged condition at time of use.
      - 3) Samples not incorporated into the Work, or otherwise designated as Owner's property, are the property of Contractor.
    - d. Submit full size units or samples of size indicated, prepared from same material to be used for the Work, cured and finished in manner specified, and physically identical with material or product proposed for use, and that show full range of color and texture variations expected. Samples include, but are not limited to, the following:
      - 1) Partial sections of manufactured or fabricated components.
      - 2) Small cuts or containers of materials.
      - 3) Complete units of repetitively used materials.
      - 4) Swatches showing color, texture, and pattern.
      - 5) Color range sets.
      - 6) Components used for independent testing and inspection:
        - a) Number of samples - Submit three (3) sets of samples. Architect will retain two (2) sample sets; remainder will be returned:
          - i. Submit a single sample where assembly details, workmanship, fabrication techniques, connections, operation, and other similar characteristics are to be demonstrated.
          - ii. If variation in color, pattern, texture, or other characteristic is inherent in material or product represented by a sample, submit at least three (3) sets of paired units that show approximate limits of variations.
- E. Product Schedule:



1. As required in individual Specification Section, prepare a written summary indicating types of products required for the Work and their intended locations. Include the following information in tabular form:
  - a. Type of product. Include unique identifier for each product indicated in the Contract Documents or assigned by Contractor if none is indicated.
  - b. Manufacturer, product name, and model number if applicable.
  - c. Number and name of room or space.
  - d. Location within room or space.
  - e. Submit product schedule in PDF electronic file.
- F. Coordination Drawing Submittals: Comply with requirements specified in Section 01 31 00: Project Management and Coordination.
- G. Application for Payment and Schedule of Values: Comply with requirements specified in Section 01 29 00: Payment Procedures.
- H. Test and Inspection Reports and Schedule of Tests and Inspections Submittals: Comply with requirements specified in Division 01: General Requirements.
- I. Closeout Submittals required for Substantial Completion: Comply with requirements specified in Section 01 77 00: Closeout Procedures.
- J. Maintenance Data: Comply with requirements specified in Section 01 78 23: Operation and Maintenance Data.
- K. Qualification Data: Prepare written information that demonstrates capabilities and experience of firm or person. Include lists of completed projects with project names and addresses, contact information of architects and owners, and other information specified.
- L. Welding Certificates: Prepare written certification that welding procedures and personnel comply with requirements in the Contract Documents. Submit record of Welding Procedure Specification and Procedure Qualification Record on AWS forms. Include names of firms and personnel certified.
- M. Installer Certificates: Submit written statements on manufacturer's letterhead certifying that the installer complies with requirements in the Contract Documents and, where required, is authorized by manufacturer for this specific Project.
- N. Manufacturer Certificates: Submit written statements on manufacturer's letterhead certifying that manufacturer complies with requirements in the Contract Documents. Include evidence of manufacturing experience where required.
- O. Product Certificates: Submit written statements on manufacturer's letterhead certifying that product complies with requirements in the Contract Documents.
- P. Material Certificates: Submit written statements on manufacturer's letterhead certifying that material complies with requirements in the Contract Documents.
- Q. Material Test Reports: Submit reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting test results of material for compliance with requirements in the Contract Documents.
- R. Product Test Reports: Submit written reports indicating that current product produced by manufacturer complies with requirements in the Contract Documents. Base reports on evaluation of tests performed by manufacturer and witnessed by a qualified testing agency,

or on comprehensive tests performed by a qualified testing agency.

- S. Research Reports:
  - 1. Submit written evidence, from a model code organization acceptable to authorities having jurisdiction, that product complies with the building code in effect for the Project. Include the following information:
    - a. Name of evaluation organization.
    - b. Date of evaluation.
    - c. Time period when report is in effect.
    - d. Product and manufacturers' names.
    - e. Description of product.
    - f. Test procedures and results.
    - g. Limitations of use.
- T. Pre-Construction Test Reports: Submit reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of tests performed before installation of product for compliance with performance requirements in the Contract Documents.
- U. Compatibility Test Reports: Submit reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of compatibility tests performed before installation of product. Include written recommendations for primers and substrate preparation needed for adhesion.
- V. Field Test Reports: Submit written reports indicating and interpreting results of field tests performed either during installation of product or after product is installed in its final location for compliance with requirements in the Contract Documents.
- W. Design Data: Prepare and submit written and graphic information, including, but not limited to, performance and design criteria, list of applicable codes and regulations, and calculations. Include list of assumptions and other performance and design criteria and a summary of loads. Include load diagrams if applicable. Provide name and version of software, if any, used for calculations. Include page numbers.

## **2.2 DELEGATED DESIGN SERVICES**

- A. Performance and Design Criteria:
  - 1. Where professional design services or certifications by a design professional are specifically required of Contractor by the Contract Documents, provide products and systems complying with specific performance and design criteria indicated:
    - a. If criteria indicated are not sufficient to perform services or certification required, submit a written request for additional information to Architect.
- B. Delegated Design Services Certification:
  - 1. In addition to shop drawings, product data, and required submittals, submit digitally signed PDF electronic file and three (3) paper copies of certificate, signed and sealed by the responsible design professional, for each product and system specifically assigned to Contractor to be designed or certified by a design professional:
    - a. Indicate that products and systems comply with performance and design criteria in the Contract Documents. Include list of codes, loads, and other factors used in performing these services.

## **PART 3 EXECUTION**

### **3.1 CONTRACTOR'S REVIEW**

- A. Action and Informational Submittals: Review each submittal and check for coordination with other Work of the Contract and for compliance with the Contract Documents. Note corrections and field dimensions. Mark with approval stamp before submitting to Architect.
- B. Approval Stamp: Stamp each submittal with a uniform, approval stamp. Include Project name and location, submittal number, Specification Section title and number, name of reviewer, date of Contractor's approval, and statement certifying that submittal has been reviewed, checked, and approved for compliance with the Contract Documents.

### **3.2 ARCHITECT'S ACTION**

- A. Submittals: Architect will review each submittal, make marks to indicate corrections or revisions required, and return it. Architect will stamp each submittal with an action stamp and will mark stamp appropriately to indicate action.
  - 1. Reviewed: Indicates the Architect has reviewed the submittal and takes no exceptions as submitted.
  - 2. Furnish as Corrected: Submittal is approved, provided modifications noted are properly incorporated. Resubmission is not usually necessary.
  - 3. Revised and Resubmit: Modifications are required prior to approval. Work cannot proceed until the submittal is revised and resubmitted for further review.
  - 4. Rejected: Work covered by the submittal is not complete or does not conform the contract documents and cannot proceed. A new submittal needs to be made according to the notations and resubmitted for approval prior to fabrication or construction.
- B. Partial submittals prepared for a portion of the Work will be reviewed when use of partial submittals has received prior approval from Architect.
- C. Incomplete submittals are not permitted, will be considered nonresponsive, and will be returned for resubmittal without review.
- D. Submittals not required by the Contract Documents will be returned by Architect without action.

**END OF SECTION 01 33 00**

## **SECTION 01 40 00 QUALITY REQUIREMENTS**

### **PART 1 GENERAL**

#### **1.1 RELATED DOCUMENTS**

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

#### **1.2 SUMMARY**

- A. Section includes administrative and procedural requirements for quality assurance and quality control.
- B. Testing and inspecting services are required to verify compliance with requirements specified or indicated and paid by the District (or refer to Division 01: General Requirements). These services do not relieve Contractor of responsibility for compliance with the Contract Document requirements:
  - 1. Specific quality assurance and quality control requirements for individual construction activities are specified in the Sections that specify those activities. Requirements in those Sections may also cover production of standard products.
  - 2. Specified tests, inspections, and related actions do not limit Contractor's other quality assurance and quality control procedures that facilitate compliance with Contract Document requirements.
  - 3. Requirements for Contractor to provide quality assurance and quality control services required by Architect, Owner, or authorities having jurisdiction are not limited by provisions.
  - 4. Specific test and inspection requirements are not specified in this Section.

#### **1.3 DEFINITIONS**

- A. Experienced: When used with an entity or individual, experienced means having successfully completed a minimum of five (5) years' documented experience with projects similar in nature, size, and extent; being familiar with special requirements indicated; and having complied with requirements of authorities having jurisdiction.
- B. Field Quality Control Testing: Tests and inspections performed onsite for installation of the Work and for completed Work.
- C. Installer/Applicator/Erector:
  - 1. Contractor or another entity engaged by Contractor as an employee, Subcontractor, or Sub-subcontractor, to perform particular construction operations, including installation, erection, application, and similar operations:
    - a. Use of trade specific terminology in referring to a trade or entity does not require that certain construction activities be performed by accredited or unionized individuals, or that requirements specified apply exclusively to specific trade(s).
- D. Mockups:
  - 1. Full size physical assemblies that are constructed onsite. Mockups are constructed to verify selections made under sample submittals; to demonstrate aesthetic effects and, where indicated, qualities of materials and execution; to review coordination, testing, or operation; to show interface between dissimilar materials; and to demonstrate compliance with specified installation tolerances. Mockups are not samples. Unless otherwise indicated, approved mockups establish the standard by which the Work will

be judged:

- a. Laboratory mockups: Full size physical assemblies constructed at testing facility to verify performance characteristics.
  - b. Integrated exterior mockups: Mockups of exterior envelope erected separately from the building but on the Project site, consisting of multiple products, assemblies, and subassemblies.
  - c. Room mockups: Mockups of typical interior spaces complete with wall, floor, and ceiling finishes, doors, windows, millwork, casework, specialties, furnishings and equipment, and lighting.
- E. Pre-Construction Testing: Tests and inspections performed specifically for the Project before products and materials are incorporated into the Work, to verify performance or compliance with specified criteria.
- F. Product Testing: Tests and inspections that are performed by an NRTL, an NVLAP, or a testing agency qualified to conduct product testing and acceptable to authorities having jurisdiction, to establish product performance and compliance with specified requirements.
- G. Quality Assurance Services: Activities, actions, and procedures performed before and during execution of the Work to guard against defects and deficiencies and substantiate that proposed construction will comply with requirements.
- H. Quality Control Services: Tests, inspections, procedures, and related actions during and after execution of the Work to evaluate that actual products incorporated into the Work and completed construction comply with requirements. Services do not include Contract enforcement activities performed by Architect.
- I. Source Quality Control Testing: Tests and inspections that are performed at the source, e.g., plant, mill, factory, or shop.
- J. Testing Agency: An entity engaged to perform specific tests, inspections, or both. Testing laboratory shall mean the same as testing agency.
- K. IR. Inspector of Record. District to employ or contract with a DSA Certified Inspector of Record for this project.

#### **1.4 CONFLICTING REQUIREMENTS**

- A. Referenced Standards: If compliance with two (2) or more standards is specified and the standards establish different or conflicting requirements for minimum quantities or quality levels, comply with the most stringent requirement. Refer conflicting requirements that are different, but apparently equal, to Architect for a decision before proceeding.
- B. Minimum Quantity or Quality Levels: The quantity or quality level shown or specified shall be the minimum provided or performed. The actual installation may comply exactly with the minimum quantity or quality specified, or it may exceed the minimum within reasonable limits. To comply with these requirements, indicated numeric values are minimum or maximum, as appropriate, for the context of requirements. Refer uncertainties to Architect for a decision before proceeding.

#### **1.5 SUBMITTALS**

- A. Shop Drawings:
  1. Submit Plans, Sections, and elevations, indicating materials and size of mockup construction:

- a. Indicate manufacturer and model number of individual components.
  - b. Provide axonometric drawings for conditions difficult to illustrate in two dimensions.
- B. Contractor's Statement of Responsibility:
1. When required by authorities having jurisdiction, submit copy of written statement of responsibility sent to authorities having jurisdiction before starting work on the following systems:
    - a. Seismic force resisting system, designated seismic system, or component listed in the designated seismic system quality assurance plan prepared by Architect.
    - b. Main wind force resisting system or wind resisting component listed in the wind force resisting system quality assurance plan prepared by Architect.
- C. Schedule of Tests and Inspections:
1. Prepare in tabular form and include the following:
    - a. Specification Section number and title.
    - b. Entity responsible for performing tests and inspections.
    - c. Description of test and inspection.
    - d. Identification of applicable standards.
    - e. Identification of test and inspection methods.
    - f. Number of tests and inspections required.
    - g. Time schedule or time span for tests and inspections.
    - h. Requirements for obtaining samples.
    - i. Unique characteristics of each quality control service.

## 1.6 REPORTS AND DOCUMENTS

- A. Test and Inspection Reports:
1. Prepare and submit certified written reports specified. Include the following:
    - a. Date of issue.
    - b. Project title and number.
    - c. Name, address, and telephone number of testing agency.
    - d. Dates and locations of samples and tests or inspections.
    - e. Names of individuals making tests and inspections.
    - f. Description of the Work and test and inspection method.
    - g. Identification of product and Specification Section.
    - h. Complete test or inspection data.
    - i. Test and inspection results and an interpretation of test results.
    - j. Record of temperature and weather conditions at time of sample taking and testing and inspecting.
    - k. Comments or professional opinion on whether tested or inspected Work complies with the Contract Document requirements.
    - l. Name and signature of laboratory inspector.
    - m. Recommendations on retesting and reinspecting.
- B. Manufacturer's Technical Representative's Field Reports:
1. Prepare written information documenting manufacturer's technical representative's tests and inspections specified in other Sections. Include the following:
    - a. Name, address, and telephone number of technical representative making report.
    - b. Statement on condition of substrates and their acceptability for installation of product.
    - c. Statement that products at site comply with requirements.
    - d. Summary of installation procedures being followed, whether they comply with requirements and, if not, what corrective action was taken.
    - e. Results of operational and other tests and a statement of whether observed performance complies with requirements.
    - f. Statement whether conditions, products, and installation will affect warranty.

- g. Other required items indicated in individual Specification Sections.
- C. Factory Authorized Service Representative's Reports:
  - 1. Prepare written information documenting manufacturer's factory authorized service representative's tests and inspections specified in other Sections. Include the following:
    - a. Name, address, and telephone number of factory authorized service representative making report.
    - b. Statement that equipment complies with requirements.
    - c. Results of operational and other tests and a statement of whether observed performance complies with requirements.
    - d. Statement whether conditions, products, and installation will affect warranty.
    - e. Other required items indicated in individual Specification Sections.
- D. Permits, Licenses, and Certificates: For Owner's records, submit copies of permits, licenses, certifications, inspection reports, releases, jurisdictional settlements, notices, receipts for fee payments, judgments, correspondence, records, and similar documents, established for compliance with standards and regulations bearing on performance of the Work.
- E. Trade Pre-Installation Conferences: Meeting minutes to be Contractor provided.

## 1.7 QUALITY ASSURANCE

- A. Qualifications establish the minimum qualification levels required; refer to individual Specification Sections for additional requirements.
- B. Manufacturer Qualifications: A firm experienced in manufacturing products or systems similar to those indicated and sufficient production capacity to produce required units.
- C. Fabricator Qualifications: A firm experienced in producing products similar to those indicated and with record of successful in-service performance, as well as sufficient production capacity to produce required units.
- D. Installer Qualifications: A firm or individual experienced in installing, erecting, or assembling work similar in material, design, and extent to that indicated for this Project, whose work has resulted in construction with a record of successful in-service performance.
- E. Professional Engineer Qualifications: A professional engineer who is legally qualified to practice in the State of California and is experienced in providing engineering services of the kind indicated. Engineering services are defined as those performed for installations of the system, assembly, or product that are similar in material, design, and extent to those indicated.
- F. Specialists:
  - 1. Certain Specification Sections require that specific construction activities shall be performed by entities who are recognized experts in those operations. Specialists shall satisfy qualification requirements indicated and shall be engaged for the activities indicated:
    - a. Requirements of authorities having jurisdiction supersede requirements for specialists.
- G. Testing Agency Qualifications:
  - 1. A NRTL, a NVLAP, or an independent agency with the experience and capability to conduct testing and inspecting indicated, documented according to ASTM E329; with additional qualifications specified in individual Sections; and, where required by authorities having jurisdiction, that is acceptable to authorities:

- a. NRTL: A nationally recognized testing laboratory according to 29 CFR 1910.7.
  - b. NVLAP: A testing agency accredited according to NIST's National Voluntary Laboratory Accreditation Program.
- H. Manufacturer's Technical Representative Qualifications: An authorized representative of the manufacturer who is trained and approved by the manufacturer to observe and inspect installation of the manufacturer's products.
- I. Factory Authorized Service Representative Qualifications: An authorized representative of the manufacturer who is trained and approved by the manufacturer to inspect installation of the manufacturer's products.
- J. Pre-Construction Testing:
1. Where testing agency is indicated to perform pre-construction testing for compliance with specified requirements for performance and test methods, comply with the following:
    - a. Contractor responsibilities include the following:
      - 1) Provide test specimens representative of proposed products and construction.
      - 2) Submit specimens with sufficient time for testing and analyzing results to prevent delaying the Work.
      - 3) Provide sizes and configurations of test assemblies, mockups, and laboratory mockups to adequately demonstrate capability of products to comply with performance requirements.
      - 4) Build site assembled test assemblies and mockups using installers who will perform same tasks for the Project.
      - 5) Build laboratory mockups at testing facility using personnel, products, and methods of construction indicated for the completed Work.
      - 6) When testing is complete, remove test specimens, assemblies, mockups, and laboratory mockups; do not reuse products on the Project.
    2. Testing agency responsibilities: Submit certified written report of each test, inspection, and similar quality assurance service to Architect, with copy to Contractor. Interpret tests and inspections and state in each report whether tested and inspected Work complies with or deviates from the Contract Documents.
- K. Mockups:
1. Before installing portions of the Work requiring mockups, build mockups for each form of construction and finish required to comply with the following requirements, using materials indicated for the completed Work:
    - a. Build mockups in location and of size indicated, or if not indicated, as directed by Architect.
    - b. Notify Architect a minimum of seven (7) days in advance of dates and times when mockups will be constructed.
    - c. Employ supervisory personnel who will oversee mockup construction. Employ workers that will be employed during the construction.
    - d. Demonstrate the proposed range of aesthetic effects and workmanship.
    - e. Obtain Architect's approval of mockups before starting Work, fabrication, or construction. Allow seven (7) days for initial review and each re-review of each mockup.
    - f. Maintain mockups during construction in an undisturbed condition as a standard for judging the completed Work.
    - g. Demolish and remove mockups when directed unless otherwise indicated.
- L. Integrated Exterior Mockups: Mockup of the exterior envelope erected separately from the building but on the Project site, consisting of multiple products, assemblies, and subassemblies. Mockup, if not specifically shown on the Drawings, shall be minimum eight



feet by eight feet (8'x8'). Mockup shall include all major façade elements and at least one (1) window a minimum of two feet by two feet (2'x2') in size. Prior to constructing mockup, verify requirements with Architect. Pre-installation conferences for trades involved in integrated exterior mockup shall be held after mockup is completed.

- M. Laboratory Mockups: Comply with requirements of pre-construction testing and those specified in individual Specification Sections.
- N. Trade Pre-Installation Conferences: Meeting minutes to be Contractor provided.

## 1.8 QUALITY CONTROL

- A. Owner Responsibilities:
  - 1. Where quality control services are indicated as Owner's responsibility, Owner will engage a qualified testing agency to perform the services:
    - a. Owner will furnish Contractor with names, addresses, and telephone numbers of testing agencies engaged and a description of types of testing and inspecting they are engaged to perform.
    - b. Costs for retesting and re-inspecting construction that replaces or is necessitated by Work that failed to comply with the Contract Documents will be charged to Contractor, and the Contract Sum will be adjusted by Change Order.
- B. Contractor Responsibilities:
  - 1. Tests and inspections not explicitly assigned to Owner are Contractor's responsibility. Perform additional quality control activities required to verify that the Work complies with requirements, whether specified or not:
    - a. Unless otherwise indicated, provide quality control services specified and those required by authorities having jurisdiction. Perform quality control services required of Contractor by authorities having jurisdiction, whether specified or not.
    - b. Where services are indicated as Contractor's responsibility, engage a qualified testing agency to perform the quality control services. Contractor shall not employ same entity engaged by Owner, unless agreed to in writing by Owner.
    - c. Notify testing agencies at least 24 hours in advance of time when Work that requires testing or inspecting will be performed.
    - d. Where quality control services are indicated as Contractor's responsibility, submit a certified written report, in duplicate, of each quality control service.
    - e. Testing and inspecting requested by Contractor and not required by the Contract Documents are Contractor's responsibility.
    - f. Submit additional copies of each written report directly to authorities having jurisdiction when they so direct.
    - g. Provide documentation for construction safety as required by CBC Chapter 33 and CFC Chapter 33. Show representation for construction safeguards through the life of the Project.
- C. Manufacturer's Field Services: Where indicated, engage a factory authorized service representative to inspect field assembled components and equipment installation, including service connections. Report results in writing as specified in Section 01 33 00: Submittal Procedures.
- D. Manufacturer's Technical Services: Where indicated, engage a manufacturer's technical representative to observe and inspect the Work. Manufacturer's technical representative's services include participation in pre-installation conferences, examination of substrates and conditions, verification of materials, observation of installer activities, inspection of completed portions of the Work, and submittal of written reports.
- E. Retesting/Re-Inspecting: Regardless of whether original tests or inspections were

Contractor's responsibility, provide quality control services, including retesting and re-inspecting, for construction that replaced Work that failed to comply with the Contract Documents.

- F. Testing Agency Responsibilities:
  - 1. Cooperate with Architect and Contractor in performance of duties. Provide qualified personnel to perform required tests and inspections:
    - a. Notify Architect and Contractor promptly of irregularities or deficiencies observed in the Work during performance of its services.
    - b. Determine the location from which test samples will be taken and in which in-situ tests are conducted.
    - c. Conduct and interpret tests and inspections and state in each report whether tested and inspected Work complies with or deviates from requirements.
    - d. Submit a certified written report, in duplicate, of each test, inspection, and similar quality control service through Contractor.
    - e. Do not release, revoke, alter, or increase the Contract Document requirements or approve or accept any portion of the Work.
    - f. Do not perform any duties of Contractor.
  
- G. Associated Services:
  - 1. Cooperate with agencies performing required tests, inspections, and similar quality control services, and provide reasonable auxiliary services as requested. Notify agency sufficiently in advance of operations to permit assignment of personnel. Provide the following:
    - a. Access to the Work.
    - b. Incidental labor and facilities necessary to facilitate tests and inspections.
    - c. Adequate quantities of representative samples of materials that require testing and inspecting. Assist agency in obtaining samples.
    - d. Facilities for storage and field curing of test samples.
    - e. Delivery of samples to testing agencies.
    - f. Preliminary design mix proposed for use for material mixes that require control by testing agency.
    - g. Security and protection for samples and for testing and inspecting equipment at the Project site.
  
- H. Coordination:
  - 1. Coordinate sequence of activities to accommodate required quality assurance and quality control services with a minimum of delay and to avoid necessity of removing and replacing construction to accommodate testing and inspecting:
    - a. Schedule times for tests, inspections, obtaining samples, and similar activities.
  
- I. Schedule of Tests and Inspections:
  - 1. Prepare a schedule of tests, inspections, and similar quality control services required by the Contract Documents. Coordinate and submit concurrently with Contractor's Construction Schedule. Update as the Work progresses:
    - a. Distribution: Distribute schedule to Owner, Architect, testing agencies, and each party involved in performance of portions of the Work where tests and inspections are required.

## 1.9 SPECIAL TESTS AND INSPECTIONS

- A. Special Tests and Inspections:
  - 1. Owner will engage a qualified testing agency or special inspector to conduct special tests and inspections, as required by authorities having jurisdiction, as the responsibility of Owner, and as indicated in individual Specification Sections:
    - a. Verifying that manufacturer maintains detailed fabrication and quality control

procedures, and reviews the completeness and adequacy of those procedures to perform the Work.

- b. Notifying Architect and Contractor promptly of irregularities and deficiencies observed in the Work during performance of its services.
- c. Submitting a certified written report of each test, inspection, and similar quality control service to Architect with copy to Contractor and to authorities having jurisdiction.
- d. Submitting a final report of special tests and inspections at Substantial Completion, which includes a list of unresolved deficiencies.
- e. Interpreting tests and inspections and stating in each report whether tested and inspected Work complies with or deviates from the Contract Documents.
- f. Retesting and re-inspecting corrected Work.

## **PART 2 PRODUCTS (NOT USED)**

## **PART 3 EXECUTION**

### **3.1 TEST AND INSPECTION LOG**

- A. Test and Inspection Log:
  1. Prepare a record of tests and inspections. Include the following:
    - a. Date test or inspection was conducted.
    - b. Description of the Work tested or inspected.
    - c. Date test or inspection results were transmitted to Architect.
    - d. Identification of testing agency or special inspector conducting test or inspection.
- B. Maintain log at site. Post changes and revisions as they occur. Provide access to test and inspection log for Architect's reference during normal working hours.

### **3.2 REPAIR AND PROTECTION**

- A. On completion of testing, inspecting, sample taking, and similar services, repair damaged construction and restore substrates and finishes:
  1. Provide materials and comply with installation requirements specified in other Specification Sections or matching existing substrates and finishes. Restore patched areas and extend restoration into adjoining areas with durable seams that are as invisible as possible. Comply with the Contract Document requirements for cutting and patching in Section 01 73 29: Cutting and Patching.
- B. Protect construction exposed by or for quality control service activities.
- C. Repair and protection are Contractor's responsibility, regardless of the assignment of responsibility for quality control services.

**END OF SECTION 01 40 00**

## **SECTION 01 42 00 REFERENCES**

### **PART 1 GENERAL**

#### **1.1 RELATED DOCUMENTS**

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

#### **1.2 SUMMARY**

- A. General: This Section specifies procedural and administrative requirements for compliance with governing regulations and codes and standards imposed upon the Work. These requirements include the obtaining of permits, licenses, inspections, releases, and similar statements, as well as payments, associated with regulations, codes, and standards.
- B. Governing Regulations:
  - 1. Refer to General and Supplementary Conditions for requirements related to compliance with governing regulations:
    - a. The Division of the State Architect (DSA), State of California provides design and construction oversight for this Project and as such is subject to the rules and regulations.

#### **1.3 DEFINITIONS**

- A. Approved: When used to convey Architect's action on Contractor's submittals, applications, and requests, approved is limited to Architect's duties and responsibilities as stated in the Conditions of the Contract.
- B. Basic Contract: Definitions are included in the Conditions of the Contract.
- C. Directed: A command or instruction by Architect. Other terms including requested, authorized, selected, required, and permitted have the same meaning as directed.
- D. Furnish: Supply and deliver to the Project site, ready for unloading, unpacking, assembly, installation, and similar operations.
- E. Indicated: Requirements expressed by graphic representations or in written form on Drawings, in Specifications, and in other Contract Documents. Other terms including shown, noted, scheduled, and specified have the same meaning as indicated.
- F. Install: Operations at the Project site including unloading, temporarily storing, unpacking, assembling, erecting, placing, anchoring, applying, working to dimension, finishing, curing, protecting, cleaning, and similar operations.
- G. Project Site: Space available for performing construction activities. The extent of the Project site is shown on Drawings and may or may not be identical with the description of the land on which the Project is to be built.
- H. Provide: Furnish and install, complete and ready for the intended use.
- I. Regulations: Includes laws, statutes, ordinances, and lawful orders issued by governing authorities, as well as those rules, conventions, and agreements within the construction industry that effectively control the performance of the Work regardless of whether they are

lawfully imposed by a governing authority or not.

- J. Testing Agencies: An independent entity engaged to perform specific inspections or tests, either at the Project site or elsewhere, to report on and, if required, to interpret results of those inspections or tests.

#### 1.4 INDUSTRY STANDARDS

- A. Applicability of Standards: Unless the Contract Documents include more stringent requirements, applicable construction industry standards have the same force and effect as if bound or copied directly into the Contract Documents to the extent referenced. Such standards are made a part of the Contract Documents by reference. Individual Specification Sections indicate which codes and standards Contractor must keep available at the Project site for reference.
- B. Publication Dates: Comply with standards in effect as of date of the Contract Documents unless otherwise indicated.
- C. Conflicting Requirements: Where compliance with two (2) or more standards is specified, and where these standards establish different or conflicting requirements for minimum quantities or quality levels, the most stringent requirement will be enforced, unless the Contract Documents specifically indicate a less stringent requirement. Refer requirements that are different, but apparently equal, and uncertainties as to which quality level is more stringent to Architect/Engineer for a decision before proceeding.
- D. Minimum Quantities or Quality Levels: In every instance the quantity or quality level shown or specified is intended to be the minimum for the Work to be provided or performed. Unless otherwise indicated, the actual Work may either comply exactly, within specified tolerances, with the minimum quantity or quality specified, or may exceed that minimum within reasonable limits. In complying with these requirements, the indicated numeric values are either minimum or maximum values, as noted, or as appropriate for context of the requirements. Refer instances of uncertainty to Architect/Engineer for decision before proceeding.

#### 1.5 ABBREVIATIONS AND ACRONYMS

- A. Industry Organizations - Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the trade association, standards-producing organization, authorities having jurisdiction, or other entity applicable to the context of the text provision:
  1. AABC - Associated Air Balance Council; [www.aabc.com](http://www.aabc.com).
  2. AAMA - American Architectural Manufacturers Association; [www.aamanet.org](http://www.aamanet.org).
  3. AASHTO - American Association of State Highway and Transportation Officials; [www.transportation.org](http://www.transportation.org).
  4. AATCC - American Association of Textile Chemists and Colorists; [www.aatcc.org](http://www.aatcc.org).
  5. ABMA - American Bearing Manufacturers Association; [www.americanbearings.org](http://www.americanbearings.org).
  6. ACI - American Concrete Institute (formerly ACI International); [www.concrete.org](http://www.concrete.org).
  7. ACPA - American Concrete Pipe Association; [www.concrete-pipe.org](http://www.concrete-pipe.org).
  8. AEIC - Association of Edison Illuminating Companies, Inc. (The); [www.aeic.org](http://www.aeic.org).
  9. AGA - American Gas Association; [www.aga.org](http://www.aga.org).
  10. AHRI - Air-Conditioning, Heating, and Refrigeration Institute (The); [www.ahrinet.org](http://www.ahrinet.org).
  11. AI - Asphalt Institute; [www.asphaltinstitute.org](http://www.asphaltinstitute.org).
  12. AIA - American Institute of Architects (The); [www.aia.org](http://www.aia.org).
  13. AISC - American Institute of Steel Construction; [www.aisc.org](http://www.aisc.org).
  14. AISI - American Iron and Steel Institute; [www.steel.org](http://www.steel.org).

15. AITC - American Institute of Timber Construction; [www.aitc-glulam.org](http://www.aitc-glulam.org).
16. AMCA - Air Movement and Control Association International, Inc.; [www.amca.org](http://www.amca.org).
17. ANSI - American National Standards Institute; [www.ansi.org](http://www.ansi.org).
18. APA - The Engineered Wood Association; [www.apawood.org](http://www.apawood.org).
19. APA - Architectural Precast Association; [www.archprecast.org](http://www.archprecast.org).
20. API - American Petroleum Institute; [www.api.org](http://www.api.org).
21. ARMA - Asphalt Roofing Manufacturers Association; [www.asphaltroofing.org](http://www.asphaltroofing.org).
22. ASCE - American Society of Civil Engineers; [www.asce.org](http://www.asce.org).
23. ASCE/SEI - American Society of Civil Engineers/Structural Engineering Institute; (See ASCE).
24. ASHRAE - American Society of Heating, Refrigerating and Air-Conditioning Engineers; [www.ashrae.org](http://www.ashrae.org).
25. ASME - ASME International (American Society of Mechanical Engineers); [www.asme.org](http://www.asme.org).
26. ASSE - American Society of Sanitary Engineering; [www.asse-plumbing.org](http://www.asse-plumbing.org).
27. ASSP - American Society of Safety Professionals (The); [www.assp.org](http://www.assp.org).
28. ASTM - ASTM International (American Society for Testing and Materials International); [www.astm.org](http://www.astm.org).
29. ATIS - Alliance for Telecommunications Industry Solutions; [www.atis.org](http://www.atis.org).
30. AWI - Architectural Woodwork Institute; [www.awinet.org](http://www.awinet.org).
31. AWMAC - Architectural Woodwork Manufacturers Association of Canada; [www.awmac.com](http://www.awmac.com).
32. AWPA - American Wood Protection Association (formerly American Wood-Preservers' Association); [www.awpa.com](http://www.awpa.com).
33. AWS - American Welding Society; [www.aws.org](http://www.aws.org).
34. AWWA - American Water Works Association; [www.awwa.org](http://www.awwa.org).
35. BHMA - Builders Hardware Manufacturers Association; [www.buildershardware.com](http://www.buildershardware.com).
36. BIA - Brick Industry Association (The); [www.gobrick.com](http://www.gobrick.com).
37. BICSI - BICSI, Inc.; [www.bicsi.org](http://www.bicsi.org).
38. BIFMA - BIFMA International (Business and Institutional Furniture Manufacturer's Association); [www.bifma.com](http://www.bifma.com).
39. BOCA - BOCA (Building Officials and Code Administrators International Inc.); (See ICC).
40. CEA - Consumer Electronics Association; [www.ce.org](http://www.ce.org).
41. CFFA - Chemical Fabrics & Film Association, Inc.; [www.chemicalfabricsandfilm.com](http://www.chemicalfabricsandfilm.com).
42. CFSEI - Cold-Formed Steel Engineers Institute; [www.cfsei.org](http://www.cfsei.org).
43. CGA - Compressed Gas Association; [www.cganet.com](http://www.cganet.com).
44. CIMA - Cellulose Insulation Manufacturers Association; [www.cellulose.org](http://www.cellulose.org).
45. CISCA - Ceilings & Interior Systems Construction Association; [www.cisca.org](http://www.cisca.org).
46. CISPI - Cast Iron Soil Pipe Institute; [www.cispi.org](http://www.cispi.org).
47. CLFMI - Chain Link Fence Manufacturers Institute; [www.chainlinkinfo.org](http://www.chainlinkinfo.org).
48. CPA - Composite Panel Association; [www.pbmdf.com](http://www.pbmdf.com).
49. CRI - Carpet and Rug Institute (The); [www.carpet-rug.org](http://www.carpet-rug.org).
50. CRRC - Cool Roof Rating Council; [www.coolroofs.org](http://www.coolroofs.org).
51. CRSI - Concrete Reinforcing Steel Institute; [www.crsi.org](http://www.crsi.org).
52. CSA - Canadian Standards Association; [www.csa.ca](http://www.csa.ca).
53. CSA - CSA International (formerly IAS - International Approval Services); [www.csa-international.org](http://www.csa-international.org).
54. CSI - Construction Specifications Institute (The); [www.csinet.org](http://www.csinet.org).
55. CTI - Cooling Technology Institute (formerly Cooling Tower Institute); [www.cti.org](http://www.cti.org).
56. CWC - Composite Wood Council; (See CPA).
57. DASMA - Door and Access Systems Manufacturers Association; [www.dasma.com](http://www.dasma.com).
58. DHI - Door and Hardware Institute; [www.dhi.org](http://www.dhi.org).
59. DSA – Division of the State Architect, State of California.

60. ECA - Electronic Components Association; [www.ec-central.org](http://www.ec-central.org).
61. ECAMA - Electronic Components Assemblies & Materials Association; (See ECA).
62. EIA - Electronic Industries Alliance; (See TIA).
63. EIMA - EIFS Industry Members Association; [www.eima.com](http://www.eima.com).
64. EJMA - Expansion Joint Manufacturers Association, Inc.; [www.ejma.org](http://www.ejma.org).
65. ESD - ESD Association (Electrostatic Discharge Association); [www.esda.org](http://www.esda.org).
66. ESTA - Entertainment Services and Technology Association; (See PLASA).
67. EVO - Efficiency Valuation Organization; [www.evo-world.org](http://www.evo-world.org).
68. FM Approvals - FM Approvals LLC; [www.fmglobal.com](http://www.fmglobal.com).
69. FM Global - FM Global (formerly FMG - FM Global); [www.fmglobal.com](http://www.fmglobal.com).
70. FSC - Forest Stewardship Council U.S.; [www.fscus.org](http://www.fscus.org).
71. GA - Gypsum Association; [www.gypsum.org](http://www.gypsum.org).
72. GANA - Glass Association of North America; [www.glasswebsite.com](http://www.glasswebsite.com).
73. GS - Green Seal; [www.greenseal.org](http://www.greenseal.org).
74. HMMA - Hollow Metal Manufacturers Association; (See NAAMM).
75. HPVA - Hardwood Plywood & Veneer Association; [www.hpva.org](http://www.hpva.org).
76. HPW - H.P. White Laboratory, Inc.; [www.hpwhite.com](http://www.hpwhite.com).
77. ICBO - International Conference of Building Officials; (See ICC).
78. ICC - International Code Council; [www.iccsafe.org](http://www.iccsafe.org).
79. ICEA - Insulated Cable Engineers Association, Inc.; [www.icea.net](http://www.icea.net).
80. ICPA - International Cast Polymer Alliance; [www.icpa-hq.org](http://www.icpa-hq.org).
81. ICRI - International Concrete Repair Institute, Inc.; [www.icri.org](http://www.icri.org).
82. IEC - International Electrotechnical Commission; [www.iec.ch](http://www.iec.ch).
83. IEEE - Institute of Electrical and Electronics Engineers, Inc. (The); [www.ieee.org](http://www.ieee.org).
84. IES - Illuminating Engineering Society (formerly Illuminating Engineering Society of North America); [www.ies.org](http://www.ies.org).
85. IESNA - Illuminating Engineering Society of North America; (See IES).
86. IEST - Institute of Environmental Sciences and Technology; [www.iest.org](http://www.iest.org).
87. IGMA - Insulating Glass Manufacturers Alliance; [www.igmaonline.org](http://www.igmaonline.org).
88. IGSHPA - International Ground Source Heat Pump Association;  
[www.igshpa.okstate.edu](http://www.igshpa.okstate.edu).
89. Intertek - Intertek Group (formerly ETL SEMCO; Intertek Testing Service NA);  
[www.intertek.com](http://www.intertek.com).
90. ISA - International Society of Automation (The) (formerly Instrumentation, Systems,  
and Automation Society); [www.isa.org](http://www.isa.org).
91. ISAS - Instrumentation, Systems, and Automation Society (The); (See ISA).
92. ISFA - International Surface Fabricators Association (formerly International Solid  
Surface Fabricators Association); [www.isfanow.org](http://www.isfanow.org).
93. ISO - International Organization for Standardization; [www.iso.org](http://www.iso.org).
94. ISSFA - International Solid Surface Fabricators Association; (See ISFA).
95. ITU - International Telecommunication Union; [www.itu.int/home](http://www.itu.int/home).
96. KCMA - Kitchen Cabinet Manufacturers Association; [www.kcma.org](http://www.kcma.org).
97. LMA - Laminating Materials Association; (See CPA).
98. LPI - Lightning Protection Institute; [www.lightning.org](http://www.lightning.org).
99. MBMA - Metal Building Manufacturers Association; [www.mbma.com](http://www.mbma.com).
100. MCA - Metal Construction Association; [www.metalconstruction.org](http://www.metalconstruction.org).
101. MFMA - Metal Framing Manufacturers Association, Inc.; [www.metalframingmfg.org](http://www.metalframingmfg.org).
102. MHIA - Material Handling Industry of America; [www.mhia.org](http://www.mhia.org).
103. MIA - Marble Institute of America; [www.marble-institute.com](http://www.marble-institute.com).
104. MMPA - Moulding & Millwork Producers Association (formerly Wood Moulding &  
Millwork Producers Association); [www.wmmpa.com](http://www.wmmpa.com).
105. MPI - Master Painters Institute; [www.paintinfo.com](http://www.paintinfo.com).
106. MSS - Manufacturers Standardization Society of The Valve and Fittings Industry  
Inc.; [www.mss-hq.org](http://www.mss-hq.org).
107. NAAMM - National Association of Architectural Metal Manufacturers;  
[www.naamm.org](http://www.naamm.org).

108. NACE - NACE International (National Association of Corrosion Engineers International); [www.nace.org](http://www.nace.org).
109. NADCA - National Air Duct Cleaners Association; [www.nadca.com](http://www.nadca.com).
110. NAIMA - North American Insulation Manufacturers Association; [www.naima.org](http://www.naima.org).
111. NBGQA - National Building Granite Quarries Association, Inc.; [www.nbgqa.com](http://www.nbgqa.com).
112. NCAA - National Collegiate Athletic Association (The); [www.ncaa.org](http://www.ncaa.org).
113. NCMA - National Concrete Masonry Association; [www.ncma.org](http://www.ncma.org).
114. NEBB - National Environmental Balancing Bureau; [www.nebb.org](http://www.nebb.org).
115. NECA - National Electrical Contractors Association; [www.necanet.org](http://www.necanet.org).
116. NeLMA - Northeastern Lumber Manufacturers Association; [www.nelma.org](http://www.nelma.org).
117. NEMA - National Electrical Manufacturers Association; [www.nema.org](http://www.nema.org).
118. NETA - InterNational Electrical Testing Association; [www.netaworld.org](http://www.netaworld.org).
119. NFHS - National Federation of State High School Associations; [www.nfhs.org](http://www.nfhs.org).
120. NFPA - NFPA (National Fire Protection Association); [www.nfpa.org](http://www.nfpa.org).
121. NFPA - NFPA International; (See NFPA).
122. NFRC - National Fenestration Rating Council; [www.nfrc.org](http://www.nfrc.org).
123. NHLA - National Hardwood Lumber Association; [www.nhla.com](http://www.nhla.com).
124. NLGA - National Lumber Grades Authority; [www.nlga.org](http://www.nlga.org).
125. NOMMA - National Ornamental & Miscellaneous Metals Association; [www.nomma.org](http://www.nomma.org).
126. NRCA - National Roofing Contractors Association; [www.nrca.net](http://www.nrca.net).
127. NRMCA - National Ready Mixed Concrete Association; [www.nrmca.org](http://www.nrmca.org).
128. NSF - NSF International (National Sanitation Foundation International); [www.nsf.org](http://www.nsf.org).
129. NSPE - National Society of Professional Engineers; [www.nspe.org](http://www.nspe.org).
130. NSSGA - National Stone, Sand & Gravel Association; [www.nssga.org](http://www.nssga.org).
131. NTMA - National Terrazzo & Mosaic Association, Inc. (The); [www.ntma.com](http://www.ntma.com).
132. NWFA - National Wood Flooring Association; [www.nwfa.org](http://www.nwfa.org).
133. PDI - Plumbing & Drainage Institute; [www.pdionline.org](http://www.pdionline.org).
134. RCSC - Research Council on Structural Connections; [www.boltcouncil.org](http://www.boltcouncil.org).
135. RFCI - Resilient Floor Covering Institute; [www.rfci.com](http://www.rfci.com).
136. RIS - Redwood Inspection Service; [www.redwoodinspection.com](http://www.redwoodinspection.com).
137. SCTE - Society of Cable Telecommunications Engineers; [www.scte.org](http://www.scte.org).
138. SDI - Steel Deck Institute; [www.sdi.org](http://www.sdi.org).
139. SDI - Steel Door Institute; [www.steeldoor.org](http://www.steeldoor.org).
140. SEFA - Scientific Equipment and Furniture Association; [www.sefalabs.com](http://www.sefalabs.com).
141. SEI/ASCE - Structural Engineering Institute/American Society of Civil Engineers; (See ASCE).
142. SIA - Security Industry Association; [www.siaonline.org](http://www.siaonline.org).
143. SJI - Steel Joist Institute; [www.steeljoist.org](http://www.steeljoist.org).
144. SMA - Screen Manufacturers Association; [www.smainfo.org](http://www.smainfo.org).
145. SMACNA - Sheet Metal and Air Conditioning Contractors' National Association; [www.smacna.org](http://www.smacna.org).
146. SMPTE - Society of Motion Picture and Television Engineers; [www.smpte.org](http://www.smpte.org).
147. SPFA - Spray Polyurethane Foam Alliance; [www.sprayfoam.org](http://www.sprayfoam.org).
148. SPIB - Southern Pine Inspection Bureau; [www.spib.org](http://www.spib.org).
149. SPRI - Single Ply Roofing Industry; [www.spri.org](http://www.spri.org).
150. SRCC - Solar Rating and Certification Corporation; [www.solar-rating.org](http://www.solar-rating.org).
151. SSINA - Specialty Steel Industry of North America; [www.ssina.com](http://www.ssina.com).
152. SSPC - SSPC: The Society for Protective Coatings; [www.sspc.org](http://www.sspc.org).
153. STI - Steel Tank Institute; [www.steeltank.com](http://www.steeltank.com).
154. SWI - Steel Window Institute; [www.steelwindows.com](http://www.steelwindows.com).
155. SWPA - Submersible Wastewater Pump Association; [www.swpa.org](http://www.swpa.org).
156. TCA - Tilt-Up Concrete Association; [www.tilt-up.org](http://www.tilt-up.org).
157. TCNA - Tile Council of North America, Inc. (formerly Tile Council of America); [www.tileusa.com](http://www.tileusa.com).



158. TEMA - Tubular Exchanger Manufacturers Association, Inc.; [www.tema.org](http://www.tema.org).
  159. TIA - Telecommunications Industry Association (formerly TIA/EIA - Telecommunications Industry Association/Electronic Industries Alliance); [www.tiaonline.org](http://www.tiaonline.org).
  160. TIA/EIA - Telecommunications Industry Association/Electronic Industries Alliance; (See TIA).
  161. TMS - The Masonry Society; [www.masonrysociety.org](http://www.masonrysociety.org).
  162. TPI - Truss Plate Institute; [www.tpinst.org](http://www.tpinst.org).
  163. TPI - Turfgrass Producers International; [www.turfgrasssod.org](http://www.turfgrasssod.org).
  164. TRI - Tile Roofing Institute; [www.tilerroofing.org](http://www.tilerroofing.org).
  165. UBC - Uniform Building Code; (See ICC).
  166. UL - Underwriters Laboratories Inc.; [www.ul.com](http://www.ul.com).
  167. UNI - Uni-Bell PVC Pipe Association; [www.uni-bell.org](http://www.uni-bell.org).
  168. USAV - USA Volleyball; [www.usavolleyball.org](http://www.usavolleyball.org).
  169. USGBC - U.S. Green Building Council; [www.usgbc.org](http://www.usgbc.org).
  170. USITT - United States Institute for Theatre Technology, Inc.; [www.usitt.org](http://www.usitt.org).
  171. WASTEC - Waste Equipment Technology Association; [www.wastec.org](http://www.wastec.org).
  172. WCLIB - West Coast Lumber Inspection Bureau; [www.wclib.org](http://www.wclib.org).
  173. WCMA - Window Covering Manufacturers Association; [www.wcmanet.org](http://www.wcmanet.org).
  174. WDMA - Window & Door Manufacturers Association; [www.wdma.com](http://www.wdma.com).
  175. WI - Woodwork Institute (formerly WIC - Woodwork Institute of California); [www.wicnet.org](http://www.wicnet.org).
  176. WMMPA - Wood Moulding & Millwork Producers Association; (See MMPA).
  177. WSRCA - Western States Roofing Contractors Association; [www.wsrca.com](http://www.wsrca.com).
  178. WPA - Western Wood Products Association; [www.wwpa.org](http://www.wwpa.org).
- B. Standards and Regulations - Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the standards and regulations:
1. CFR - Code of Federal Regulations; Available from Government Printing Office; [www.gpo.gov/fdsys](http://www.gpo.gov/fdsys).
  2. FED-STD - Federal Standard; (See FS).
  3. USAB - United States Access Board; [www.access-board.gov](http://www.access-board.gov).
  4. USATBCB - U.S. Architectural & Transportation Barriers Compliance Board; (See USAB).
- C. Code Agencies - Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the Agency:
1. IAPMO - International Association of Plumbing and Mechanical Officials; [www.iapmo.org](http://www.iapmo.org).
  2. ICC - International Code Council; [www.iccsafe.org](http://www.iccsafe.org).
  3. ICC-ES - ICC Evaluation Service, LLC; [www.icc-es.org](http://www.icc-es.org).
- D. State Government Agencies - Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the entities in the following list. This information is subject to change and is believed to be accurate as of the date of the Contract Documents:
1. CBHF - State of California; Department of Consumer Affairs; Bureau of Electronic Appliance and Repair, Home Furnishings and Thermal Insulation; [www.bearhfti.ca.gov](http://www.bearhfti.ca.gov).
  2. CCR - California Code of Regulations; Office of Administrative Law; California Title 24 Energy Code; [www.calregs.com](http://www.calregs.com).
  3. CDHS - California Department of Health Services; (See CDPH).
  4. CDPH - California Department of Public Health; Indoor Air Quality Program; [www.cal-iaq.org](http://www.cal-iaq.org).
  5. CPUC - California Public Utilities Commission; [www.cpuc.ca.gov](http://www.cpuc.ca.gov).
  6. CBC – California Building Code (2019 Edition).

7. CEC – California Electrical Code (2019 Edition).
8. CMC – California Mechanical Code (2019 Edition).
9. CFC – California Fire Code (2019 Edition).

## **1.6 SUBMITTALS**

- A. Permits, Licenses, and Certificates: For Owner's records, submit copies of permits, licenses, certifications, inspection reports, releases, jurisdictional settlements, notices, receipts for fee payments, judgments, and similar documents, correspondence, and records established in conjunction with compliance with standards and regulations bearing upon performance of the Work.

## **PART 2 PRODUCTS (NOT USED)**

## **PART 3 EXECUTION (NOT USED)**

**END OF SECTION 01 42 00**

## **SECTION 01 50 00 TEMPORARY FACILITIES AND CONTROLS**

### **PART 1 GENERAL**

#### **1.1 RELATED DOCUMENTS**

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

#### **1.2 SUMMARY**

- A. Section includes requirements for temporary utilities, support facilities, and security and protection facilities, including but not limited to:
  - 1. Water service and distribution.
  - 2. Sanitary facilities, including toilets, wash facilities, and drinking water facilities.
  - 3. Heating and cooling facilities.
  - 4. Ventilation.
  - 5. Electric power service.
  - 6. Lighting.
  - 7. Telephone service (land line)
  - 8. Waste disposal facilities.
  - 9. Field office.
  - 10. Storage and fabrication sheds.
  - 11. Lifts and hoists.
  - 12. Construction aids and miscellaneous services and facilities.
  - 13. Environmental protection.
  - 14. Pest control.
  - 15. Enclosure fence.
  - 16. Security enclosure and lockup.
  - 17. Barricades, warning signs, and lights.
  - 18. Temporary partitions.
  - 19. Fire protection.
  - 20. Accessories necessary for a complete installation.
  - 21. Temporary signage.
- B. Use Charges:
  - 1. Installation, removal of, and use charges for temporary facilities shall be included in the Contract Sum unless otherwise indicated. Allow other entities to use temporary services and facilities without cost, including, but not limited to, Owner's construction forces, Architect, occupants of the Project, testing agencies, and authorities having jurisdiction.
  - 2. Water and sewer service: Pay sewer service use charges for water used and sewer usage by all entities for construction operations.
  - 3. Electric power service: Pay electric power service use charges for electricity used by all entities for construction operations.

#### **1.3 SUBMITTALS**

- A. Site Plan: Show temporary facilities, utility hookups, staging areas, and parking areas for construction personnel.
- B. Moisture Protection Plan:
  - 1. Describe procedures and controls for protecting materials and construction from water absorption and damage:

- a. Describe delivery, handling, and storage provisions for materials subject to water absorption or water damage.
  - b. Indicate procedures for discarding water damaged materials, protocols for mitigating water intrusion into completed Work, and replacing water damaged work.
  - c. Indicate sequencing of work that requires water, such as sprayed fire resistive materials, plastering, and tile grinding, and describe plans for dealing with water from these operations. Show procedures for verifying that wet construction has dried sufficiently to permit installation of finish materials.
- C. Dust and HVAC Control Plan:
1. Submit coordination drawing and narrative that indicates the dust and HVAC control measures proposed for use, proposed locations, and proposed time frame for their operation. Identify further options if proposed measures are later determined to be inadequate. Include the following:
    - a. HVAC system isolation schematic drawing.
    - b. Location of proposed air-filtration system discharge.
    - c. Waste handling procedures.
    - d. Other dust control measures.

#### 1.4 QUALITY ASSURANCE

- A. Regulatory Requirements:
1. Accessible Temporary Egress:
    - a. Comply with 2019 California Building Code (CBC) CCR Title 24, Part 2, (as adopted and amended by DSA).
    - b. Comply with applicable provisions in the U.S. Architectural and Transportation Barriers Compliance Board ADA-ABA Accessibility Guidelines (ADAAG), ICC/ANSI A117.1.
- B. Electric Service: Comply with NECA, NEMA, and UL standards and regulations for temporary electric service. Install service to comply with NFPA 70.
- C. Tests and Inspections: Arrange for authorities having jurisdiction to test and inspect each temporary utility before use. Obtain required certifications and permits.

### PART 2 PRODUCTS

#### 2.1 MATERIALS

- A. Provide new materials. Undamaged, previously used materials in serviceable condition may be used if approved by Architect. Provide materials suitable for use intended.
- B. Chain Link Fencing: Minimum 2 inches (50 mm), 0.148-inch (3.8 mm) thick, galvanized steel, chain link fabric fencing; minimum 6 feet (1.8 m) high with galvanized steel pipe posts; minimum 2-3/8-inch (60 mm) OD line posts and 2-7/8 inch (73 mm) OD corner and pull posts.
- C. Polyethylene Sheet: Reinforced, fire-resistive sheet, ten (10) mils (0.25 mm) minimum thickness, with flame spread rating of 15 or less per ASTM E84.
- D. Dust Control Adhesive Surface Walk-off Mats: Provide mats a minimum of 36 inches by 60 inches (914 mm x 1624 mm).
- E. Insulation: Unfaced mineral fiber blanket, manufactured from glass, slag wool, or rock wool;

with maximum flame spread and smoke developed indexes of 25 and 50, respectively.

- F. Tarpaulins: Fire resistive labeled with flame-spread rating of 15 or less.
- G. Water: Potable.

## 2.2 TEMPORARY FACILITIES

- A. Field Offices, General: Prefabricated or mobile units with serviceable finishes, temperature controls, and foundations adequate for normal loading.
- B. Common-Use Field Office: Of sufficient size to accommodate needs of Owner, Architect, and construction personnel office activities and to accommodate Project meetings specified in other Division 01 Sections. Keep office clean and orderly. Furnish and equip offices as follows:
  - 1. Furniture required for Project site documents including file cabinets, plan tables, plan racks, and bookcases.
  - 2. Conference room of sufficient size to accommodate meetings of 10 individuals. Provide electrical power service and 120-V ac duplex receptacles, with no fewer than one receptacle on each wall. Furnish room with conference table, chairs, and 4-foot-square tack and marker boards.
  - 3. Drinking water and private toilet.
  - 4. Coffee machine and supplies.
  - 5. Heating and cooling equipment necessary to maintain a uniform indoor temperature of 68 to 72 deg F
  - 6. Lighting fixtures capable of maintaining average illumination of 20 fc (215 lx) at desk height.
- C. Storage and Fabrication Sheds: Provide sheds sized, furnished, and equipped to accommodate materials and equipment for construction operations. Store combustible materials apart from building.

## 2.3 EQUIPMENT

- A. Fire Extinguishers: Portable, UL rated; with class and extinguishing agent as required by locations and classes of fire exposures.
- B. Drinking Water: Containerized, tap dispenser, bottled water drinking water units, including paper cup supply. Where power is accessible, provide electric water coolers to maintain dispensed water temperature at 45 degrees F to 55 degrees F (7.2 degrees C to 12.7 degrees C).
- C. Electrical Outlets: Properly configured, NEMA polarized outlets to prevent insertion of 110V to 120V plugs into higher voltage outlets; equipped with ground-fault circuit interrupters, reset button, and pilot light.
- D. Power Distribution System Circuits: Where permitted and overhead and exposed for surveillance, wiring circuits, not exceeding 125-V ac, 20-A rating, and lighting circuits may be nonmetallic sheathed cable.
- E. HVAC Equipment:
  - 1. Unless Owner authorizes use of permanent HVAC system, provide vented, self-contained, liquid propane gas or fuel oil heaters with individual space thermostatic control:
    - a. Heating units: Listed and labeled for type of fuel being consumed by a qualified

testing agency acceptable to authorities having jurisdiction and marked for intended location and application.

- b. Permanent HVAC system: If Owner authorizes use of permanent HVAC system for temporary use during construction, provide filter with MERV of 8 at each return air grille in system and remove at end of construction. Clean HVAC system as required in Section 01 77 00: Closeout Procedures and install new filter with MERV 11 or greater.
- F. Air Filtration Units: Primary and secondary HEPA filter equipped portable units with four-stage filtration. Provide single switch for emergency shutoff. Configure to run continuously.

## **PART 3 EXECUTION**

### **3.1 PROJECT CONDITIONS**

- A. Temporary Use of Permanent Facilities: Engage installer of each permanent service to assume responsibility for operation, maintenance, and protection of each permanent service during its use as a construction facility before Owner's acceptance, regardless of previously assigned responsibilities.

### **3.2 INSTALLATION**

- A. Locate facilities where they will serve the Project adequately and result in minimum interference with performance of the Work. Relocate and modify facilities as required by progress of the Work:
  - 1. Locate facilities to limit site disturbance as specified in Section 01 10 00: Summary.
- B. Provide each facility ready for use when needed to avoid delay. Do not remove until facilities are no longer needed or are replaced by authorized use of completed permanent facilities.

### **3.3 TEMPORARY UTILITY INSTALLATION**

- A. Install temporary service. Arrange with utility company, Owner, and existing users for time when service can be interrupted, if necessary, to make connections for temporary services.
- B. Sewers and Drainage:
  - 1. Provide temporary utilities to remove effluent lawfully:
    - a. Connect temporary sewers to municipal system as directed by authorities having jurisdiction.
- C. Water Service: Install water service and distribution piping in sizes and pressures adequate for construction.
- D. Sanitary Facilities:
  - 1. Provide temporary toilets, wash facilities, and drinking water for use of construction personnel. Comply with requirements of authorities having jurisdiction for type, number, location, operation, and maintenance of fixtures and facilities:
    - a. Disposable supplies: Provide toilet tissue, paper towels, paper cups, and similar disposable materials for each facility. Maintain adequate supply. Provide covered waste containers for disposal of used material.
    - b. Wash facilities: Install wash facilities supplied with potable water at convenient locations for personnel who handle materials that require wash up. Dispose of drainage properly. Supply cleaning compounds appropriate for each type of material handled. Provide safety showers, eyewash fountains, and similar facilities for convenience, safety, and sanitation of personnel.

- E. Heating and Cooling: Provide temporary heating and cooling required by construction activities for curing or drying of completed installations or for protecting installed construction from adverse effects of low temperatures or high humidity. Select equipment that will not have a harmful effect on completed installations or elements being installed.
  
- F. Isolation of Work Areas in Occupied Facilities:
  - 1. Prevent dust, fumes, and odors from entering occupied areas:
    - a. Prior to commencing Work, isolate the HVAC system in area where Work is to be performed according to coordination drawings:
      - 1) Disconnect supply and return ductwork in Work area from HVAC systems servicing occupied areas.
      - 2) Maintain negative air pressure within Work area using HEPA equipped air filtration units, starting with commencement of temporary partition construction and continuing until removal of temporary partitions is complete.
    - b. Maintain dust partitions during the Work. Use vacuum collection attachments on dust producing equipment. Isolate limited Work within occupied areas using portable dust containment devices.
    - c. Perform daily construction cleanup and final cleanup using approved, HEPA filter equipped vacuum equipment.
  
- G. Ventilation and Humidity Control:
  - 1. Provide temporary ventilation required by construction activities for curing or drying of completed installations or for protecting installed construction from adverse effects of high humidity. Select equipment that will not have a harmful effect on completed installations or elements being installed. Coordinate ventilation requirements to produce ambient condition required and minimize energy consumption:
    - a. Provide dehumidification systems when required to reduce substrate moisture levels to level required to allow installation or application of finishes.
  
- H. Electric Power Service:
  - 1. Provide electric power service and distribution system of sufficient size, capacity, and power characteristics required for construction operations. Install electric power service underground unless otherwise indicated:
    - a. Electric distribution - Provide receptacle outlets adequate for connection of power tools and equipment:
      - 1) Provide waterproof connectors to connect separate lengths of electrical power cords if single lengths will not reach areas where construction activities are in progress. Do not exceed safe length voltage ratio.
      - 2) Provide warning signs at power outlets other than 110 to 120-V.
      - 3) Provide metal conduit, tubing, or metallic cable for wiring exposed to possible damage. Provide rigid steel conduits for wiring exposed on grades, floors, decks, or traffic areas.
      - 4) Provide metal conduit enclosures or boxes for wiring devices.
      - 5) Provide four (4) gang outlets, spaced so 100-foot (30 m) extension cord can reach each area for power hand tools and task lighting. Provide a separate 125-V ac, 20-A circuit for each outlet.
  
- I. Lighting:
  - 1. Provide temporary lighting with local switching that provides adequate illumination for construction operations, observations, inspections, and traffic conditions:
    - a. Install and operate temporary lighting that fulfills security and protection requirements without operating entire system.
    - b. Install lighting for Project identification sign.
  
- J. Telephone Service:
  - 1. Provide temporary telephone service in common use facilities for use by construction

personnel, Architect, and inspection services. Install a minimum of one (1) telephone line(s) for each field office:

- a. Provide dedicated telephone line for each facsimile machine in each field office.
  - b. At each telephone, post a list of important telephone numbers:
    - 1) Police and fire departments.
    - 2) Ambulance service.
    - 3) Contractor's home office.
    - 4) Contractor's emergency after-hours telephone number.
    - 5) Architect's office.
    - 6) Engineers' offices.
    - 7) Owner's office.
    - 8) Principal subcontractors' field and home offices.
  - c. Provide superintendent with cellular telephone or portable two-way radio for use when away from field office.
- K. Electronic Communication Service:
1. Provide a desktop computer and printer/scanner in the primary field office adequate for use by Architect, inspection services, and Owner to access Project electronic documents and maintain electronic communications:
    - a. Internet service: Broadband modem, router, and ISP equipped with hardware firewall.
    - b. Internet security: Integrated software, providing software firewall, virus, spyware, phishing, and spam protection in a combined application.
    - c. Backup: External hard drive, minimum one (1) terabyte, with automated backup software providing daily backups.

### 3.4 SUPPORT FACILITIES INSTALLATION

- A. Provide construction for temporary offices, shops, and sheds located within construction area or within 30 feet (9 m) of building lines that is noncombustible according to ASTM E136. Comply with NFPA 241:
1. Maintain support facilities until Architect schedules Substantial Completion inspection. Remove before Substantial Completion. Personnel remaining after Substantial Completion will be permitted to use permanent facilities under conditions acceptable to Owner.
- B. Temporary Use of Permanent Roads and Paved Areas:
1. Locate temporary roads and paved areas in same location as permanent roads and paved areas. Construct and maintain temporary roads and paved areas adequate for construction operations. Extend temporary roads and paved areas, within construction limits indicated, as necessary for construction operations:
    - a. Coordinate elevations of temporary roads and paved areas with permanent roads and paved areas.
    - b. Prepare subgrade and install sub-base and base for temporary roads and paved areas.
    - c. Recondition base after temporary use, including removing contaminated material, regrading, proofrolling, compacting, and testing.
    - d. Delay installation of final course of permanent pavement until immediately before Substantial Completion.
- C. Traffic Controls:
1. Comply with requirements of authorities having jurisdiction:
    - a. Protect existing site improvements to remain including curbs, pavement, and utilities.
    - b. Maintain access for fire-fighting equipment and access to fire hydrants.



- D. Parking: Provide temporary parking areas for construction personnel.
- E. Dewatering Facilities and Drains:
  - 1. Comply with requirements of authorities having jurisdiction. Maintain Project site, excavations, and construction free of water:
    - a. Dispose of rainwater in a lawful manner that will not result in flooding the Project or adjoining properties, or endanger permanent Work or temporary facilities.
- F. Project Signs: Not listed in 3.5 Below.
  - 1. Provide Project signs as indicated. Unauthorized signs are not permitted:
    - a. Identification signs: Provide Project identification signs as indicated on Drawings.
    - b. Temporary signs:
      - 1) Provide other signs as indicated and as required to inform public and individuals seeking entrance to the Project:
        - a) Provide temporary, directional signs for construction personnel and visitors.
    - c. Maintain and touchup signs so they are legible at all times.
- G. Waste Disposal Facilities: Provide waste collection containers in sizes adequate to handle waste from construction operations. Comply with requirements of authorities having jurisdiction. Comply with progress cleaning requirements in Section 01 73 00: Execution.
- H. Lifts and Hoists:
  - 1. Provide facilities necessary for hoisting materials and personnel:
    - a. Truck cranes and similar devices used for hoisting materials are considered "tools and equipment" and not temporary facilities.
- I. Temporary Elevator Use: Use of elevators is not permitted.
- J. Temporary Stairs: Until permanent stairs are available, provide temporary stairs where ladders are not adequate.
- K. Temporary Use of Permanent Stairs: Use of new stairs for construction traffic will be permitted, provided stairs are protected and finishes restored to new condition at time of Substantial Completion.

### **3.5 SIGNS**

- A. Furnish and install a project sign 6'-0" by 8'-0" in size. Image will be provided to the graphics printing company by the Architect after Award of Contract. Contractor will be responsible for the cost of printing the image, mounting the sign on an aluminum substrate and installing the sign at the site. The sign will include the name of the project, District, name and title of Board of Trustees, District Superintendent, Contractor, Architect, and each of the project consultants.
- B. Other signs permitted at the site:
  - 1. Warning signs.
  - 2. Directional signs.
  - 3. Identification signs at field offices.
  - 4. Emergency medical services sign.
  - 5. Signs required by Authorities Having Jurisdiction
  - 6. Storm Water Pollution Prevention Plan sign (SWPPP)
- C. Contractor shall allow no other signs to be displayed at the project site, unless authorized by the Owner/District.

### 3.6 SECURITY AND PROTECTION FACILITIES INSTALLATION

- A. Protection of Existing Facilities:
  - 1. Protect existing vegetation, equipment, structures, utilities, and other improvements at Project site and on adjacent properties, except those indicated to be removed or altered. Repair damage to existing facilities to the satisfaction of Owner and Architect.
- B. Environmental Protection:
  - 1. Provide protection, operate temporary facilities, and conduct construction as required to comply with environmental regulations and that minimize possible air, waterway, and subsoil contamination or pollution or other undesirable effects.
- C. Temporary Erosion and Sedimentation Control:
  - 1. Provide measures to prevent soil erosion and discharge of soil bearing water runoff and airborne dust to undisturbed areas and to adjacent properties and walkways, according to requirements of authorities having jurisdiction:
    - a. Verify that flows of water redirected from construction areas or generated by construction activity do not enter or cross tree or plant protection zones.
    - b. Inspect, repair, and maintain erosion and sedimentation control measures during construction until permanent vegetation has been established.
    - c. Clean, repair, and restore adjoining properties and roads affected by erosion and sedimentation from Project site during the course of Project.
    - d. Remove erosion and sedimentation controls and restore and stabilize areas disturbed during removal.
- D. Stormwater Control:
  - 1. Comply with requirements of authorities having jurisdiction. Provide barriers in and around excavations and subgrade construction to prevent flooding by runoff of stormwater from heavy rains.
- E. Tree and Plant Protection:
  - 1. Install temporary fencing located as indicated or outside the drip line of trees to protect vegetation from damage from construction operations. Protect tree root systems from damage, flooding, and erosion.
- F. Pest Control:
  - 1. Engage pest control services to recommend practices to minimize attraction and harboring of rodents, roaches, and other pests and to perform extermination and control procedures at regular intervals so Project will be free of pests and their residues at Substantial Completion. Perform control operations lawfully, using environmentally safe materials.
- G. Site Enclosure Fence:
  - 1. Before construction operations begin, provide site enclosure fence to prevent people and animals from easily entering site except by entrance gates:
    - a. Extent of fence: As required to enclose entire Project site or portion determined sufficient to accommodate construction operations.
- H. Security Enclosure and Lockup:
  - 1. Install temporary enclosure around partially completed areas of construction. Provide lockable entrances to prevent unauthorized entrance, vandalism, theft, and similar violations of security. Lock entrances at end of each Work day.
- I. Barricades, Warning Signs, and Lights:
  - 1. Comply with requirements of authorities having jurisdiction for erecting structurally

adequate barricades, including warning signs and lighting.

- J. Temporary Egress:
  - 1. Maintain temporary egress from existing occupied facilities as indicated and as required by authorities having jurisdiction.
  
- K. Temporary Enclosures:
  - 1. Provide temporary enclosures for protection of construction, in progress and completed, from exposure, foul weather, other construction operations, and similar activities. Provide temporary weather-tight enclosure for building exterior:
    - a. Where heating or cooling is needed and permanent enclosure is incomplete, insulate temporary enclosures.
  
- L. Temporary Partitions:
  - 1. Provide floor-to-ceiling dustproof partitions to limit dust and dirt migration and to separate occupied areas from fumes and noise:
    - a. Construct dustproof partitions with gypsum wallboard with joints taped on occupied side and fire retardant treated plywood on construction operations side.
    - b. Construct dustproof partitions with two layers of 6-mil (0.14 mm) polyethylene sheet on each side. Cover floor with two (2) layers of 6-mil (0.14 mm) polyethylene sheet, extending sheets 18 inches (460 mm) up the sidewalls. Overlap and tape full length of joints. Cover floor with fire retardant treated plywood. Do not apply tape to finish floor surfaces:
      - 1) Construct vestibule and airlock at each entrance through temporary partition with not less than 48 inches (1219 mm) between doors. Maintain water dampened foot mats in vestibule.
    - c. Where fire resistance rated temporary partitions are indicated or are required by authorities having jurisdiction, construct partitions according to the rated assemblies.
    - d. Insulate partitions to control noise transmission to occupied areas.
    - e. Seal joints and perimeter. Equip partitions with gasketed dustproof doors and security locks where openings are required.
    - f. Protect air handling equipment.
    - g. Provide walk-off mats at each entrance through temporary partition.
  
- M. Temporary Fire Protection:
  - 1. Install and maintain temporary fire protection facilities of types needed to protect against reasonably predictable and controllable fire losses. Comply with NFPA 241; manage fire-prevention program:
    - a. Prohibit smoking in construction areas.
    - b. Supervise welding operations, combustion type, temporary heating units, and similar sources of fire ignition according to requirements of authorities having jurisdiction.
    - c. Develop and supervise an overall fire prevention and protection program for personnel at Project site. Review needs with local fire department and establish procedures to be followed. Instruct personnel in methods and procedures. Post warnings and information.
    - d. Provide temporary standpipes and hoses for fire protection. Hang hoses with a warning sign stating that hoses are for fire protection purposes only and are not to be removed. Match hose size with outlet size and equip with suitable nozzles.

### **3.7 MOISTURE AND MOLD CONTROL**

- A. Contractor's Moisture Protection Plan:
  - 1. Avoid trapping water in finished Work. Document visible signs of mold that may appear during construction.

- B. Exposed Construction Phase:
  - 1. Before installation of weather barriers, when materials are subject to wetting and exposure to airborne mold spores, protect as follows:
    - a. Protect porous materials from water damage.
    - b. Protect stored and installed material from flowing or standing water.
    - c. Keep porous and organic materials from coming into prolonged contact with concrete.
    - d. Remove standing water from decks.
    - e. Keep deck openings covered or dammed.
  
- C. Partially Enclosed Construction Phase:
  - 1. After installation of weather barriers but before full enclosure and conditioning of building, when installed materials are still subject to infiltration of moisture and ambient mold spores, protect as follows:
    - a. Do not load or install drywall or other porous materials or components, or items with high organic content, into partially enclosed building.
    - b. Keep interior spaces reasonably clean and protected from water damage.
    - c. Periodically collect and remove waste containing cellulose or other organic matter.
    - d. Discard or replace water-damaged material.
    - e. Do not install material that is wet.
    - f. Discard, replace, or clean stored or installed material that begins to grow mold.
    - g. Perform Work in a sequence that allows any wet materials adequate time to dry before enclosing the material in drywall or other interior finishes.
  
- D. Controlled Condition Phase of Construction:
  - 1. After completing and sealing of the building enclosure but prior to the full operation of permanent HVAC systems, maintain as follows:
    - a. Control moisture and humidity inside building by maintaining effective dry-in conditions.
    - b. Use permanent HVAC system to control humidity.
    - c. Comply with manufacturer's written instructions for temperature, relative humidity, and exposure to water limits and moisture control:
      - 1) Hygroscopic materials that may support mold growth, including wood and gypsum based products, which become wet during the course of construction and remain wet for 48 hours are considered defective and are to be removed and replaced.
      - 2) Measure moisture content of materials that have been exposed to moisture during construction operations or after installation. Record readings beginning at time of exposure and continuing daily for 48 hours. Identify materials containing moisture levels higher than allowed. Report findings in writing to Architect.
      - 3) Remove materials that cannot be completely restored to their manufactured moisture level within 48 hours.

### **3.8 OPERATION, TERMINATION, AND REMOVAL**

- A. Supervision:
  - 1. Enforce strict discipline in use of temporary facilities. To minimize waste and abuse, limit availability of temporary facilities to essential and intended uses.
  
- B. Maintenance:
  - 1. Maintain facilities in good operating condition until removal:
    - a. Maintain operation of temporary enclosures, heating, cooling, humidity control, ventilation, and similar facilities on a 24-hour basis where required to achieve indicated results and to avoid possibility of damage.

- C. Temporary Facility Changeover:
  - 1. Do not change over from using temporary security and protection facilities to permanent facilities until Substantial Completion unless otherwise required and approved by Owner and Architect.
  
- D. Termination and Removal:
  - 1. Remove each temporary facility when need when its service has ended, when it has been replaced by authorized use of a permanent facility, or no later than Substantial Completion. Complete or, if necessary, restore permanent construction that may have been delayed because of interference with temporary facility. Repair damaged Work, clean exposed surfaces, and replace construction that cannot be satisfactorily repaired:
    - a. Materials and facilities that constitute temporary facilities are property of Contractor. Owner reserves right to take possession of Project identification signs.
    - b. Remove temporary roads and paved areas not intended for or acceptable for integration into permanent construction. Where area is intended for landscape development, remove soil and aggregate fill that do not comply with requirements for fill or subsoil. Remove materials contaminated with road oil, asphalt and other petrochemical compounds, and other substances that might impair growth of plant materials or lawns. Repair or replace street paving, curbs, and sidewalks at temporary entrances, as required by authorities having jurisdiction.
    - c. At Substantial Completion, repair, renovate, and clean permanent facilities used during construction period. Comply with final cleaning requirements specified in Section 01 77 22: Substantial Completion Procedures.

**END OF SECTION 01 50 00**

## SECTION 01 60 00 PRODUCT REQUIREMENTS

### PART 1 GENERAL

#### 1.1 RELATED DOCUMENTS

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

#### 1.2 SUMMARY

- A. Section includes administrative and procedural requirements for selection of products, including but not limited to:
  1. Product delivery, storage, and handling.
  2. Manufacturers' written warranties on products.
  3. Special warranties.
  4. Comparable products.

#### 1.3 DEFINITIONS

- A. Basis of Design Product Specification:
  1. A Specification in which a specific manufacturer's product is named and accompanied by the words *basis of design*, including make, model number, or other designation to establish the significant qualities related to type, function, dimension, in-service performance, physical properties, appearance, and other characteristics for purposes of evaluating comparable products of additional manufacturers named in the Specification.
- B. Products:
  1. Items obtained for incorporating into the Work, whether purchased for Project or taken from previously purchased stock. The term *product* includes the terms *material*, *equipment*, *system*, *assembly*, and terms of similar intent:
    - a. Named products: Items identified by manufacturer's product name, including make, model number, or other designation shown or listed in manufacturer's published product literature current as of date of the Contract Documents.
    - b. New products: Items that have not previously been incorporated into another project or facility. Products salvaged or recycled from other projects are not considered new products.
    - c. Comparable product: Product that is demonstrated and approved through submittal process to have the indicated qualities related to type, function, dimension, in-service performance, physical properties, appearance, and other characteristics that equal or exceed those of specified product.

#### 1.4 SUBMITTALS

- A. Comparable Product Requests:
  1. Submit request for consideration of each comparable product. Identify product or fabrication or installation method to be replaced. Include Specification Section number and title, and Drawing number(s) and title(s):
    - a. Include data to indicate compliance with the specified requirements.
    - b. Architect's action: If necessary, Architect will request additional information or documentation for evaluation within one (1) week of receipt of a comparable product request. Architect will notify Contractor of approval or rejection of proposed comparable product request within 15 days of receipt of request, or seven (7) days

of receipt of additional information or documentation, whichever is later:

- 1) Form of Approval: As specified in Section 01 33 00: Submittal Procedures.
- 2) Use product specified if Architect does not issue a decision on use of a comparable product request within time allocated.

B. Basis of Design Product Specification Submittal:

1. Comply with requirements in Section 01 33 00: Submittal Procedures. Show compliance with requirements.

## 1.5 QUALITY ASSURANCE

A. Compatibility of Options:

1. If Contractor is given option of selecting between two (2) or more products for use on Project, select a product compatible with products previously selected, even if previously selected products were also options:
  - a. Each contractor is responsible for providing products and construction methods compatible with products and construction methods of other contractors.
  - b. If a dispute arises between contractors over concurrently selectable but incompatible products, Architect will determine which products shall be used.

## 1.6 WARRANTY

A. Warranties specified in other Sections shall be in addition to, and run concurrent with, other warranties required by the Contract Documents. Manufacturer's disclaimers and limitations on product warranties do not relieve Contractor of obligations under requirements of the Contract Documents:

1. Manufacturer's warranty: Written warranty furnished by individual manufacturer for a particular product and specifically endorsed by manufacturer to Owner.
2. Warranty: Written warranty required by the Contract Documents to provide specific rights for Owner.

B. Warranties:

1. Prepare a written document that contains appropriate terms and identification, ready for execution:
  - a. Specified form: When specified forms are included with the Specifications, prepare a written document using indicated form properly executed.
  - b. See other Sections for specific content requirements and particular requirements for submitting special warranties.

C. Submittal Time:

1. Comply with requirements in Section 01 77 00: Closeout Procedures.

## 1.7 DELIVERY, STORAGE, AND HANDLING

A. Deliver, store, and handle products using means and methods that will prevent damage, deterioration, and loss, including theft and vandalism. Comply with manufacturer's written instructions.

B. Delivery and Handling:

1. Schedule delivery to minimize long-term storage at site and to prevent overcrowding of construction spaces.
2. Coordinate delivery with installation time to ensure minimum holding time for items that are flammable, hazardous, easily damaged, or sensitive to deterioration, theft, and other losses.
3. Deliver products to Project site in an undamaged condition in manufacturer's original

sealed container or other packaging system, complete with labels and instructions for handling, storing, unpacking, protecting, and installing.

4. Inspect products on delivery to determine compliance with the Contract Documents, and to determine that products are undamaged and properly protected.

C. Storage:

1. Store products to allow for inspection and measurement of quantity or counting of units.
2. Store materials in a manner that will not endanger Project structure.
3. Store products that are subject to damage by the elements under cover in a weathertight enclosure above ground, with ventilation adequate to prevent condensation.
4. Protect foam plastic from exposure to sunlight, except to extent necessary for period of installation and concealment.
5. Comply with product manufacturer's written instructions for temperature, humidity, ventilation, and weather-protection requirements for storage.
6. Protect stored products from damage and liquids from freezing.
7. Provide a secure location and enclosure at site for storage of materials and equipment by Owner's construction forces. Coordinate location with Owner.

## PART 2 PRODUCTS

### 2.1 PRODUCT SELECTION PROCEDURES

A. Product Requirements:

1. Provide products that comply with the Contract Documents, are undamaged, and unless otherwise indicated, are new at time of installation:
  - a. Provide products complete with accessories, trim, finish, fasteners, and items needed for complete installation and indicated use and effect.
  - b. Standard products: If available, and unless custom products or nonstandard options are specified, provide standard products of types that have been produced and used successfully in similar situations on other projects.
  - c. Owner reserves the right to limit selection to products with warranties not in conflict with requirements of the Contract Documents.
  - d. Where products are accompanied by the phrase *as selected*, Architect will make selection.
  - e. Descriptive, performance, and reference standard requirements in the Specifications establish salient characteristics of products.

B. Product Selection Procedures:

1. Product: Where Specifications name a single manufacturer and product, provide the named product that complies with requirements. Comparable products or substitutions for Contractor's convenience will not be considered.
2. Manufacturer/Source: Where Specifications name a single manufacturer or source, provide a product by the named manufacturer or source that complies with requirements. Comparable products or substitutions for Contractor's convenience will not be considered.
3. Products: Where Specifications include a list of names of both manufacturers and products, provide one of the products listed that complies with requirements. Comparable products or substitutions for Contractor's convenience will not be considered.
4. Manufacturers: Where Specifications include a list of manufacturers' names, provide a product by one of the manufacturers listed that complies with requirements. Comparable products or substitutions for Contractor's convenience will not be considered.



5. Basis of Design Product: Where Specifications name a product, or refer to a product indicated on Drawings, and include a list of manufacturers, provide the specified or indicated product or a comparable product by one of the other named manufacturers. Drawings and Specifications indicate sizes, profiles, dimensions, and characteristics based on the product named. Comply with requirements for consideration of an unnamed product by one of the named manufacturers.
- C. Visual Matching Specification:
1. Where Specifications require *match Architect's sample*, provide a product that complies with requirements and matches Architect's sample. Architect's decision will be final on whether a proposed product matches:
    - a. If no product available within specified category matches and complies with specified requirements, comply with requirements of Section 01 25 00: Substitution Procedures and Form for proposal of product.
- D. Visual Selection Specification: Where Specifications include the phrase *selected by Architect* or similar phrase, select a product that complies with requirements. Architect will select color, gloss, pattern, density, or texture from manufacturer's product line that includes both standard and premium items.

## 2.2 COMPARABLE PRODUCTS

- A. Conditions for Consideration:
1. Architect will consider Contractor's request for comparable product when the following conditions are satisfied. If the following conditions are not satisfied, Architect may return requests without action, except to record noncompliance with these requirements:
    - a. Evidence that the proposed product does not require revisions to the Contract Documents, that it is consistent with the Contract Documents and will produce the indicated results, and that it is compatible with other portions of the Work.
    - b. Detailed comparison of significant qualities of proposed product with those named in the Specifications. Significant qualities include attributes such as performance, weight, size, durability, visual effect, and specific features and requirements indicated.
    - c. Evidence that proposed product provides specified warranty.
    - d. List of similar installations for completed projects with project names and addresses, and names and addresses of architects and owners, if requested.
    - e. Samples, if requested.

## PART 3 EXECUTION (NOT USED)

**END OF SECTION 01 60 00**

## **SECTION 01 71 23 FIELD ENGINEERING**

### **PART 1 GENERAL**

#### **1.1 RELATED DOCUMENTS**

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

#### **1.2 SUMMARY**

- A. Section Includes:
  - 1. Layout of the Work.
  - 2. Verification of Work:
    - a. Owner reserves the right to verify any Work that Inspector deems necessary.
    - b. Other Sections that require surveyor to verify or measure installed Work and related item: Surveyor shall perform such verifications or measurements at Contractor's expense. Contractor shall furnish a certification, signed by both surveyor and Contractor, to Inspector.
- B. Related Sections:
  - 1. Section 01 10 00: Summary.
  - 2. Section 01 31 00: Project Management and Coordination.
  - 3. Section 01 33 00: Submittal Procedures.

#### **1.3 SURVEY CONTROLS**

- A. Vertical control shall use same benchmark used in the preparation of topographic survey. When Work consists of both onsite and off-site, and benchmarks differ, an equation shall be indicated on Drawings.
- B. Horizontal control for existing structures shall be the property line.

#### **1.4 LAYOUT OF WORK**

- A. All work related to staking shall be by a land surveyor, or Civil Engineer, registered with the State of California to perform land surveying and employed by Contractor.
- B. Before commencement of Work, surveyor shall locate all reference points and benchmarks to be used for vertical and horizontal control.
- C. Surveyor shall lay out entire Work, set grades, lines, levels, control points, elevations, grids and positions.

#### **1.5 RECORD DOCUMENTS**

- A. Maintain complete and accurate log of all control and survey documentation as work progresses.
- B. Record, by coordinates, all utilities onsite with top of pipe elevations, at major grade and alignment changes, rim, grate, or top of curb and flow line elevations of all drainage structures and sewer manholes.
- C. Indicate reference and control points on record drawings. The basis of elevation shall be

one of the established benchmarks.

- D. Upon Beneficial Occupancy, obtain and pay for reproducible Plans. Deliver Plans to District representative. Clearly indicate all differences between original drawings and completed Work within specified tolerances.

## **1.6 SUBMITTALS**

- A. Surveyor: Submit name, address, and license number to Owner, including any changes as they occur.
- B. Field Notes: Upon request by District representative, submit copies of cut sheets, coordinate plots, data collector printouts, marked-up construction staking plans, and other documentation as available to verify accuracy of field engineering work during and at completion of Project. Submittals to Owner must be signed and sealed by surveyor and counter-signed by Contractor
- C. Statement of Compliance: Contractor shall submit a statement of certification signed and sealed by surveyor, counter-signed by Contractor, indicating compliance with grades and alignment of construction Plans at rough grade, fine grade, and top of rock stages. Inspector shall approve survey submittals for each stage of construction prior to proceeding with work.
- D. Upon Beneficial Occupancy: Contractor shall obtain and pay for reproducible survey drawings (or "As Built").
- E. Completed record drawings shall be signed and certified as correct and within specified tolerances by licensed surveyor. Originals and two (2) sets of blueprints shall be submitted to Owner.

## **PART 2 PRODUCTS (NOT USED)**

## **PART 3 EXECUTION**

### **3.1 PREPARATION**

- A. Pre-mark areas of excavation in accordance with the requirements of "Dig-Alert." Request locators two (2) days before commencing excavation.
- B. Before commencing Work, establish all horizontal and vertical reference points used in Contract Documents according to existing field conditions.
- C. Preserve established reference lines and benchmarks.
- D. Differentiate school and city datum as applicable.
- E. Relocate benchmarks that may interfere with Work.
- F. Reset and re-establish reference marks damaged or lost during construction.

### **3.2 SURVEY REQUIREMENTS GENERAL**

- A. Establish a minimum of two (2) permanent horizontal and vertical control points on Project site, remote from construction area, referenced to data established by control points.

- B. Indicate reference points, relative to benchmark elevation, on record drawings.
- C. Provide grade stakes and elevations to construct over excavation and re-compaction, rough and final grades, paved areas, curbs, gutters, sidewalks, building pads, landscaped areas, and other areas as required.
- D. Calculate and layout proposed finished elevations and intermediate controls, as required, to provide smooth transitions between spot elevations indicated on Drawings.
- E. Provide stakes and elevations for grading, fill, and topsoil placement.
- F. Provide adequate horizontal and vertical control to locate utility lines, including but not limited to, storm, sewers, water mains, gas and electric, and signal and provide vertical control in proportion to the slope of the line as required for accurate construction. Dry utilities will be based upon adequate horizontal and vertical control layout. Prior to trench closure, survey and record invert and flow line elevations. Survey and record top of curb and flow line elevations on finished concrete or asphaltic concrete (AC), and surfaces at key locations such as beginning-of-curve (BC), end-of-curve (EC), grade breaks, corners, or angle points in sufficient number to demonstrate the Work complies with the intent of the Contract Documents.
- G. Provide horizontal and vertical control for batter boards for drainage, utility, and other onsite structures as required.
- H. Furnish building corner offsets as required to adequately locate building pads. Provide cut and fill stakes within the building pad perimeter adequate to control both over excavation and re-compaction and the final sub-grade elevation of the building pad.
- I. Submit a certification signed by the surveyor confirming the elevations and locations of improvements are in conformance with the Contract Documents. The statement shall include survey notes for the finish floor and building pad, showing the actual measured elevations on the completed sub-grade, recorded to the nearest 0.01 of a foot. Building pad tolerance will be plus or minus 0.1 of a foot.
- J. Establish a minimum of two (2) permanent horizontal and vertical control points on Project site, remote from building area, referenced to data established by survey control points.
- K. Mark boundaries for rights-of-way dedications and easements for utilities prior to marking location of buildings and utilities.
- L. Layout all lines, elevations, and measurements needed for construction or installation of buildings, grading, paving, and utilities according to the following:
  - 1. Identify site boundary and property lines.
  - 2. Provide working benchmarks.
  - 3. Set stakes for Bottom of Excavated Plane (BEP).
  - 4. Set gridlines, radii, working points, etc. for foundation.
  - 5. Set and verify building pad elevations.
  - 6. Set finish floor elevations.
  - 7. Stake location and elevations for exterior ramps and stairs.
  - 8. Set gridlines, radii, working points, etc., for all floors of multi-story buildings.
  - 9. Set storm drain, sanitary sewer inverts, and other utilities as needed at five-foot (5') off-set from building lines.
  - 10. For new facilities, establish permanent onsite benchmark with two-inch (2") diameter brass disk. Location of benchmark to be determined by Owner.

### **3.3 SURVEY REQUIREMENTS FOR GRADING**

- A. Provide grade stakes and elevations as follows:
  - 1. Removal limits (cut lines).
  - 2. Rough grade staking: 60-foot maximum grid plus additional stakes at grade changes and pertinent locations. Flag all grade changes including ridges, flow lines, and grade breaks.
  - 3. Fine grade for top of dirt: 30-foot maximum grid plus additional stakes at grade changes and pertinent locations. Flag all grade changes including ridges, flow lines, and grade breaks.
  - 4. Verify fine grade for top of rock: 30-foot maximum grid plus additional stakes at grade changes and pertinent locations. Flag all grade changes including ridges, flow lines, and grade breaks.
  - 5. Finish grade marks on all buildings, structures, and at pertinent locations.
  - 6. Finish grades and offsets for all concrete work, utilities, landscape areas, and structures.
  - 7. Provide controls and baselines for playground striping.
  - 8. Off-site improvements: Set grades and provide grade sheets as required by local authorities.
- B. Provide a minimum of two (2) permanent horizontal and vertical control points onsite, remote from building area, referenced to data established by survey control points.

### **3.4 SURVEY REQUIREMENTS FOR UTILITIES**

- A. Locate “wet” utility lines and provide vertical control proportionate to slope of line as required for accurate construction. “Dry” utilities shall have adequate horizontal and vertical control layout supplied by others.
- B. Prior to back-filling trench, survey and record invert and flow line elevations. Survey and record top of curb and flow line elevations on finished surfaces at key locations (such as back of curbs, grade breaks, corners, or angle points) in sufficient number to demonstrate Work complies with intent of Contract Documents.
- C. Provide horizontal and vertical control for batter boards for drainage, utility, and other onsite structures as required:
  - 1. Set grades for vaults one inch (1”) higher than adjacent surrounding design grades, unless noted otherwise.
- D. Leave all trenches open until required inspection is completed.

### **3.5 SURVEY REQUIREMENTS FOR STRUCTURES**

- A. Furnish building corner offsets as required to adequately locate building pads. Provide cut and fill stakes within building pad perimeter adequate to control both over excavation and re-compaction and final sub-grade elevation of building pad.
- B. Submit a certification signed by surveyor confirming elevations and locations of improvements are in conformance with Contract Documents. Statement shall include survey notes for finish floor and building pad, showing actual measured elevations on completed sub-grade, recorded to nearest 0.01 of a foot. Building pad tolerance will be plus or minus 0.1 of a foot.

**END OF SECTION 01 71 23**

## **SECTION 01 73 00 EXECUTION**

### **PART 1 GENERAL**

#### **1.1 RELATED DOCUMENTS**

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

#### **1.2 SUMMARY**

- A. Section includes administrative and procedural requirements governing execution of the Work including, but not limited to, the following:
  1. Construction layout.
  2. Field engineering and surveying.
  3. Installation of the Work.
  4. Coordination of Owner-installed products.
  5. Progress cleaning.
  6. Starting and adjusting.
  7. Protection of installed construction.

#### **1.3 DEFINITIONS**

- A. Cutting: Removal of in-place construction necessary to permit installation or performance of other work.
- B. Patching: Fitting and repair work required to restore construction to original conditions after installation of other work.

#### **1.4 SUBMITTALS**

- A. Certificates: Submit certificate signed by land surveyor or professional Engineer certifying that location and elevation of improvements comply with requirements.
- B. Landfill Receipts: Submit copy of receipts issued by a landfill facility, licensed to accept hazardous materials, for hazardous waste disposal.
- C. Certified Surveys: Submit two (2) copies signed by land surveyor.
- D. Final Property Survey: Submit ten (10) copies showing the Work performed and record survey data.

#### **1.5 QUALITY ASSURANCE**

- A. Land Surveyor Qualifications: A professional land surveyor legally qualified to practice in the State of California, who is experienced in providing land surveying services of the kind indicated.
- B. Manufacturer's Installation Instructions: Obtain and maintain onsite manufacturer's written recommendations and instructions for installation of products and equipment.

### **PART 2 PRODUCTS**

#### **2.1 MATERIALS**

- A. Comply with requirements specified in other Sections.
- B. In-Place Materials:
  - 1. Use materials for patching identical to in-place materials. For exposed surfaces, use materials that visually match in-place adjacent surfaces to the fullest extent possible:
    - a. If identical materials are unavailable or cannot be used, use materials that, when installed, will provide a match acceptable to Architect for the visual and functional performance of in-place materials.

## **PART 3 EXECUTION**

### **3.1 EXAMINATION**

- A. Existing Conditions:
  - 1. The existence and location of underground and other utilities and construction indicated as existing are not warranted. Before beginning site Work, investigate and verify existence and location of underground utilities, mechanical and electrical systems, and construction affecting the Work:
    - a. Before construction, verify the location and invert elevation at points of connection of sanitary sewer, storm sewer, and water service piping, underground electrical services, and other utilities.
    - b. Furnish location data for work related to the Work that must be performed by public utilities serving the site.
- B. Examination and Acceptance of Conditions:
  - 1. Before proceeding with each component of the Work, examine substrates, areas, and conditions for compliance with requirements for installation tolerances and other conditions affecting performance. Record observations:
    - a. Examine roughing-in for mechanical and electrical systems to verify actual locations of connections before equipment and fixture installation.
    - b. Examine walls, floors, and roofs for suitable conditions where products and systems are to be installed.
    - c. Verify compatibility with and suitability of substrates, including compatibility with existing finishes or primers.
- C. Written Report:
  - 1. Where a written report listing conditions detrimental to performance of the Work is required by other Sections, include the following:
    - a. Description of the Work.
    - b. List of detrimental conditions, including substrates.
    - c. List of unacceptable installation tolerances.
    - d. Recommended corrections.
- D. Proceed with installation after correcting unsatisfactory conditions. Proceeding with the Work indicates acceptance of surfaces and conditions.

### **3.2 PREPARATION**

- A. Existing Utility Information: Furnish information to Owner necessary to adjust, move, or relocate existing utility structures, utility poles, lines, services, or other utility appurtenances located in or affected by construction. Coordinate with authorities having jurisdiction.
- B. Field Measurements: Take field measurements as required to fit the Work properly. Recheck measurements before installing each product. Where portions of the Work are indicated to fit to other construction, verify dimensions of other construction by field

measurements before fabrication. Coordinate fabrication schedule with construction progress to avoid delaying the Work.

- C. Space Requirements: Verify space requirements and dimensions of items shown diagrammatically on Drawings.
- D. Review of Contract Documents and Field Conditions: Immediately on discovery of the need for clarification of the Contract Documents caused by differing field conditions outside the control of Contractor, submit a request for information to Architect according to requirements in Section 01 31 00: Project Management and Coordination.

### 3.3 CONSTRUCTION LAYOUT

- A. Verification: Before proceeding to lay out the Work, verify layout information shown on Drawings, in relation to the property survey and existing benchmarks. If discrepancies are discovered, notify Architect promptly.
- B. Engage a land surveyor or professional Engineer to lay out the Work using accepted surveying practices:
  - 1. Establish benchmarks and control points to set lines and levels at each story of construction and elsewhere as necessary to locate each element of Project.
  - 2. Establish limits on use of site.
  - 3. Establish dimensions within tolerances indicated. Do not scale Drawings to obtain required dimensions.
  - 4. Inform installers of lines and levels to which they must comply.
  - 5. Check the location, level, and plumb of every major element as the Work progresses.
  - 6. Notify Architect when deviations from required lines and levels exceed allowable tolerances.
  - 7. Close site surveys with an error of closure equal to or less than the standard established by authorities having jurisdiction.
- C. Site Improvements: Locate and lay out site improvements, including pavements, grading, fill and topsoil placement, utility slopes, and rim and invert elevations.
- D. Building Lines and Levels: Locate and lay out control lines and levels for structures, building foundations, column grids, and floor levels, including those required for mechanical and electrical work. Transfer survey markings and elevations for use with control lines and levels. Level foundations and piers from two (2) or more locations.
- E. Record Log: Maintain a log of layout control work. Record deviations from required lines and levels. Include beginning and ending dates and times of surveys, weather conditions, name and duty of each survey party member, and types of instruments and tapes used. Make the log available for reference by Architect.

### 3.4 FIELD ENGINEERING

- A. Identification: Owner will identify existing benchmarks, control points, and property corners.
- B. Reference Points:
  - 1. Locate existing permanent benchmarks, control points, and similar reference points before beginning the Work. Preserve and protect permanent benchmarks and control points during construction operations:
    - a. Do not change or relocate existing benchmarks or control points without prior written approval of Architect. Report lost or destroyed permanent benchmarks or control points promptly. Report the need to relocate permanent benchmarks or



- control points to Architect before proceeding.
  - b. Replace lost or destroyed permanent benchmarks and control points promptly. Base replacements on the original survey control points.
- C. Benchmarks:
- 1. Establish and maintain a minimum of two (2) permanent benchmarks on site, referenced to data established by survey control points. Comply with authorities having jurisdiction for type and size of benchmark:
    - a. Record benchmark locations, with horizontal and vertical data, on Project Record Documents.
    - b. Where the actual location or elevation of layout points cannot be marked, provide temporary reference points sufficient to locate the Work.
    - c. Remove temporary reference points when no longer needed. Restore marked construction to its original condition.
- D. Certified Survey: On completion of foundation walls, major site improvements, and other work requiring field-engineering services, prepare a certified survey showing dimensions, locations, angles, and elevations of construction and sitework.
- E. Final Property Survey:
- 1. Engage a land surveyor or professional Engineer to prepare a final property survey showing significant features (real property) for Project. Include on the survey a certification, signed by land surveyor or professional Engineer, that principal metes, bounds, lines, and levels of Project are accurately positioned as shown on the survey:
    - a. Show boundary lines, monuments, streets, site improvements and utilities, existing improvements and significant vegetation, adjoining properties, acreage, grade contours, and the distance and bearing from a site corner to a legal point.
    - b. Recording: At Substantial Completion, have the final property survey recorded by or with authorities having jurisdiction as the official "property survey."

### 3.5 INSTALLATION

- A. Locate the Work and components of the Work accurately, in correct alignment and elevation, as indicated:
  - 1. Make vertical work plumb and make horizontal work level.
  - 2. Where space is limited, install components to maximize space available for maintenance and ease of removal for replacement.
  - 3. Conceal pipes, ducts, and wiring in finished areas unless otherwise indicated.
  - 4. Maintain minimum headroom clearance of 96 inches (2,440 mm) in occupied spaces and 90 inches (2,300 mm) in unoccupied spaces.
- B. Comply with manufacturer's written instructions and recommendations for installing products in applications indicated.
- C. Install products at the time and under conditions ensuring the best possible results. Maintain conditions required for product performance until Substantial Completion.
- D. Conduct construction operations so no part of the Work is subjected to damaging operations or loading in excess of that expected during normal conditions of occupancy.
- E. Sequence the Work and allow adequate clearances to accommodate movement of construction items onsite and placement in permanent locations.
- F. Tools and Equipment: Do not use tools or equipment that produce harmful noise levels.

- G. Templates: Obtain and distribute to the parties involved templates for Work specified to be factory prepared and field installed. Check shop drawings of other Work to confirm that adequate provisions are made for locating and installing products to comply with indicated requirements.
- H. Attachment:
  - 1. Provide blocking and attachment plates and anchors and fasteners of adequate size and number to securely anchor each component in place, accurately located and aligned with other portions of the Work. Where size and type of attachments are not indicated, verify size and type required for load conditions:
    - a. Mounting Heights: Where mounting heights are not indicated, mount components at heights directed by Architect.
    - b. Allow for building movement, including thermal expansion and contraction.
    - c. Coordinate installation of anchorages. Furnish setting drawings, templates, and directions for installing anchorages, including sleeves, concrete inserts, anchor bolts, and items with integral anchors, that are to be embedded in concrete or masonry. Deliver such items to Project site in time for installation.
- I. Joints: Make joints of uniform width. Where joint locations in exposed work are not indicated, arrange joints for the best visual effect. Fit exposed connections together to form hairline joints.
- J. Hazardous Materials: Use products, cleaners, and installation materials that are not considered hazardous. Materials containing asbestos and BCPs are prohibited.

### **3.6 OWNER-INSTALLED PRODUCTS**

- A. Site Access: Provide access to site for Owner's construction personnel.
- B. Coordination:
  - 1. Coordinate construction and operations of the Work with Work performed by Owner's construction personnel:
    - a. Construction schedule: Inform Owner of Contractor's preferred construction schedule for Owner's portion of the Work. Adjust construction schedule based on a mutually agreeable timetable. Notify Owner if changes to schedule are required due to differences in actual construction progress.
    - b. Pre-installation conferences: Include Owner's construction personnel at pre-installation conferences covering portions of the Work that are to receive Owner's Work. Attend pre-installation conferences conducted by Owner's construction personnel if portions of the Work depend on Owner's construction.

### **3.7 PROGRESS CLEANING**

- A. Clean site and Work areas daily, including common areas. Enforce requirements strictly. Dispose of materials lawfully:
  - 1. Comply with requirements in NFPA 241 for removal of combustible waste materials and debris.
  - 2. Do not hold waste materials more than seven (7) days during normal weather or three (3) days if the temperature is expected to rise above 80 degrees F (27 degrees C).
  - 3. Containerize hazardous and unsanitary waste materials separately from other waste. Mark containers appropriately and dispose of legally, according to regulations.
  - 4. Use containers intended for holding waste materials of type to be stored.
  - 5. Coordinate progress cleaning for joint-use areas where Contractor and other contractors are working concurrently.

- B. Site: Maintain site free of waste materials and debris.
- C. Work Areas:
  - 1. Clean areas where Work is in progress to the level of cleanliness necessary for proper execution of the Work:
    - a. Remove liquid spills promptly.
    - b. Where dust would impair proper execution of the Work, broom-clean or vacuum the entire Work area, as appropriate.
- D. Installed Work: Keep installed Work clean. Clean installed surfaces according to written instructions of manufacturer or fabricator of product installed, using only cleaning materials specifically recommended. If specific cleaning materials are not recommended, use cleaning materials that are not hazardous to health or property and that will not damage exposed surfaces.
- E. Concealed Spaces: Remove debris from concealed spaces before enclosing the space.
- F. Exposed Surfaces in Finished Areas: Clean exposed surfaces and protect as necessary to ensure freedom from damage and deterioration at time of Substantial Completion.
- G. Waste Disposal: Do not bury or burn waste materials onsite. Do not wash waste materials down sewers or into waterways. Comply with waste disposal requirements in Section 01 50 00: Temporary Facilities and Controls.
- H. During handling and installation, clean and protect construction in progress and adjoining materials already in place. Apply protective covering where required to ensure protection from damage or deterioration at Substantial Completion.
- I. Clean and provide maintenance on completed construction as frequently as necessary through the remainder of the construction period. Adjust and lubricate operable components to ensure operability without damaging effects.
- J. Limiting Exposures: Supervise construction operations to assure that no part of the construction, completed or in progress, is subject to harmful, dangerous, damaging, or otherwise deleterious exposure during the construction period.

### **3.8 STARTING AND ADJUSTING**

- A. Coordinate startup and adjusting of equipment and operating components with mechanical, plumbing, and electrical requirements.
- B. Start equipment and operating components to confirm proper operation. Remove malfunctioning units, replace with new units, and retest.
- C. Adjust equipment for proper operation. Adjust operating components for proper operation without binding.
- D. Test each piece of equipment to verify proper operation. Test and adjust controls and safeties. Replace damaged and malfunctioning controls and equipment.
- E. Manufacturer's Field Service: Comply with qualification requirements in Section 01 40 00: Quality Requirements.

### **3.9 PROTECTION OF INSTALLED CONSTRUCTION**

- A. Provide final protection and maintain conditions that ensure installed Work is without damage or deterioration at time of Substantial Completion.
- B. Comply with manufacturer's written instructions for temperature and relative humidity.

**END OF SECTION 01 73 00**

## **SECTION 01 73 29 CUTTING AND PATCHING**

### **PART 1 GENERAL**

#### **1.1 RELATED DOCUMENTS**

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

#### **1.2 SUMMARY**

- A. Section includes procedural requirements for cutting and patching.

#### **1.3 DEFINITIONS**

- A. Cutting: Removal of existing construction necessary to permit installation or performance of other work.
- B. Patching: Fitting and repair work required to restore surfaces to original conditions after installation of other work.

#### **1.4 SUBMITTALS**

- A. Cutting and Patching Plan:
  - 1. Submit plan describing procedures at least ten (10) days prior to the time cutting and patching will be performed. Include the following information:
    - a. Extent: Describe reason for and extent of each occurrence of cutting and patching.
    - b. Changes to in-place construction: Describe anticipated results. Include changes to structural elements and operating components as well as changes in building appearance and other significant visual elements.
    - c. Products: List products used for patching and firms or entities that will perform patching work.
    - d. Dates: Indicate when cutting and patching will be performed.
    - e. Utilities and mechanical and electrical systems:
      - 1) List services and systems that cutting and patching procedures will disturb or affect. List services and systems that will be relocated and those that will be temporarily out of service. Indicate length of time permanent services and systems will be disrupted:
        - a) Include description of provisions for temporary services and systems during interruption of permanent services and systems.

#### **1.5 QUALITY ASSURANCE**

- A. Cutting and Patching: Comply with requirements for and limitations on cutting and patching of construction elements.
- B. Structural Elements: When cutting and patching structural elements, notify Architect of locations and details of cutting and await directions from Architect before proceeding. Shore, brace, and support structural elements during cutting and patching. Do not cut and patch structural elements in a manner that could change their load-carrying capacity or increase deflection.
- C. Operational Elements:
  - 1. Do not cut and patch operating elements and related components that results in

reducing the capacity to perform as intended or that results in increased maintenance or decreased operational life or safety:

- a. Primary operational systems and equipment.
- b. Fire separation assemblies.
- c. Air or smoke barriers.
- d. Fire suppression systems.
- e. Mechanical systems' piping and ducts.
- f. Control systems.
- g. Communication systems.
- h. Fire detection and alarm systems.
- i. Conveying systems.
- j. Electrical wiring systems.
- k. Operating systems of special construction.

D. Miscellaneous Elements:

1. Do not cut and patch the following elements or related components that change the load bearing capacity, resulting in a reduction of capacity to perform as intended, or that results in increased maintenance or decreased operational life or safety:
  - a. Water, moisture, or vapor barriers.
  - b. Membranes and flashings.
  - c. Exterior curtain wall construction.
  - d. Equipment supports.
  - e. Piping, ductwork, vessels, and equipment.
  - f. Noise and vibration control elements and systems.
  - g. Sprayed fire resistive material.

E. Visual Requirements:

1. Do not cut and patch construction resulting in visual evidence of cutting and patching. Do not cut and patch construction exposed on the exterior or in occupied spaces in a manner that would, in Architect's opinion, reduce the building's aesthetic qualities. Remove and replace construction that has been cut and patched in a visually unsatisfactory manner:
  - a. If possible, retain original installer or fabricator to cut and patch exposed Work. If possible, engage original installer or fabricator. If original installer is not available, engage recognized, experienced, and specialized firm for the Work:
    - 1) Processed concrete finishes.
    - 2) Ornamental metal.
    - 3) Matched veneer woodwork.
    - 4) Preformed metal panels.
    - 5) Roofing.
    - 6) Firestopping.
    - 7) Window system.
    - 8) Fluid applied flooring.
    - 9) Wall covering.
    - 10) HVAC enclosures, cabinets, or covers.

- F. Cutting and Patching Conference: Before proceeding, meet at site with parties involved in cutting and patching, including mechanical and electrical trades. Review areas of potential interference and conflict. Coordinate procedures and resolve potential conflicts before proceeding.

## 1.6 WARRANTY

- A. Existing Warranties: Remove, replace, patch, and repair materials and surfaces cut or damaged during installation or cutting and patching operations, by methods and with materials so as not to void existing warranties.

## **PART 2 PRODUCTS**

### **2.1 MATERIALS**

- A. Comply with specified requirements.
- B. Existing Materials:
  - 1. Use materials identical to existing materials. For exposed surfaces, use materials that visually match existing adjacent surfaces to the fullest extent possible:
    - a. If identical materials are unavailable or cannot be used, use materials that, when installed, will match the visual and functional performance of existing materials.

## **PART 3 EXECUTION**

### **3.1 EXAMINATION**

- A. Examine surfaces to be cut and patched and conditions under which cutting and patching are to be performed:
  - 1. Compatibility: Before patching, verify compatibility with and suitability of substrates, including compatibility with existing finishes or primers.
  - 2. Proceed with installation only after unsafe or unsatisfactory conditions have been corrected.

### **3.2 PREPARATION**

- A. Temporary Support: Provide temporary support of Work to be cut.
- B. Protection: Protect existing construction during cutting and patching to prevent damage. Provide protection from adverse weather conditions for portions of Project that might be exposed during cutting and patching operations.
- C. Adjoining Areas: Avoid interference with use of adjoining areas or interruption of free passage to adjoining areas.
- D. Existing Services: Where removal, relocation, or abandonment is necessary, bypass existing services before cutting to avoid interruption of services to occupied areas.

### **3.3 CUTTING AND PATCHING**

- A. Employ skilled workers to perform cutting and patching. Proceed with cutting and patching at earliest feasible time, and complete without delay:
  - 1. Cut existing construction to provide for installation of components or performance of construction, and subsequently patch as necessary to restore surfaces to an original condition.
  - 2. Cut in place construction to provide for installation of other components or performance of other construction, and subsequently patch as required to restore surfaces to their original condition.
- B. Temporary Support: Provide temporary support of Work to be cut.
- C. Protection: Protect in place construction during cutting and patching to prevent damage. Provide protection from adverse weather conditions for portions of Project that might be exposed during cutting and patching operations.
- D. Adjacent Occupied Areas: Where interference with use of adjoining areas or interruption of

free passage to adjoining areas is unavoidable, coordinate cutting and patching according to requirements in Section 01 10 00: Summary and what is shown on Drawings.

E. Cutting:

1. Cut existing construction by sawing, drilling, breaking, chipping, grinding, and similar operations, including excavation, using methods least likely to damage elements retained or adjoining construction. If possible, review proposed procedures with original installer; comply with original installer's written recommendations:
  - a. Use hand or small power tools designed for sawing and grinding, not hammering and chopping. Cut holes and slots as small as possible, neatly to size required, and with minimum disturbance of adjacent surfaces. Temporarily cover openings when not in use.
  - b. Finished surfaces: Cut or drill from exposed or finished side into concealed surfaces.
  - c. Concrete and masonry: Cut using a cutting machine, such as an abrasive saw or a diamond-core drill.
  - d. Excavating and backfilling: Comply with requirements in applicable earthwork specifications by cutting and patching operations.
  - e. Mechanical and electrical services: Cut off pipe or conduit in walls or partitions to be removed. Cap, valve, or plug and seal remaining portion of pipe or conduit to prevent entrance of moisture or other foreign matter after cutting.
  - f. Proceed with patching after construction operations requiring cutting are complete.

F. Patching:

1. Patch construction by filling, repairing, refinishing, closing up, and similar operations following performance of other Work. Patch with durable seams that are as invisible as possible. Provide materials and comply with installation requirements specified in other Sections of these Specifications:
  - a. Inspection:
    - 1) Where feasible, test and inspect patched areas after completion to demonstrate integrity of installation.
  - b. Exposed finishes:
    - 1) Restore exposed finishes of patched areas and extend finish restoration into retained adjoining construction to eliminate evidence of patching and refinishing:
      - a) Clean piping, conduit, and similar features before applying paint or other finishing materials.
      - b) Restore damaged pipe covering to its original condition.
2. Floors and walls: Where walls or partitions are removed, extend one finished area into another, patch and repair surfaces in new space. Provide even surface of uniform finish, color, texture, and appearance. Remove existing floor and wall coverings and replace with new materials, if necessary, to achieve uniform color and appearance.
3. Where patching occurs in a painted surface, apply primer and intermediate paint coats over the patch and apply final paint coat over entire unbroken surface containing the patch. Provide additional coats until patch blends with adjacent surfaces.
4. Ceilings: Patch, repair, or rehang existing ceilings as necessary to provide an even-plane surface of uniform appearance.
5. Exterior building enclosure: Patch components and restore enclosure to a weathertight condition.

**END OF SECTION 01 73 29**



## **SECTION 01 74 19 CONSTRUCTION WASTE MANAGEMENT AND DISPOSAL**

### **PART 1 GENERAL**

#### **1.1 RELATED DOCUMENTS**

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

#### **1.2 SUMMARY**

- A. Section includes administrative and procedural requirements for the following:
  1. Salvaging nonhazardous demolition and construction waste.
  2. Recycling nonhazardous demolition and construction waste.
  3. Disposing of nonhazardous demolition and construction waste.

#### **1.3 DEFINITIONS**

- A. Construction Waste: Building and site improvement materials and other solid waste resulting from construction, remodeling, renovation, or repair operations. Construction waste includes packaging.
- B. Demolition Waste: Building and site improvement materials resulting from demolition or selective demolition operations.
- C. Disposal: Removal off-site of demolition and construction waste and subsequent sale, recycling, reuse, or deposit in landfill or incinerator acceptable to authorities having jurisdiction.
- D. Recycle: Recovery of demolition or construction waste for subsequent processing in preparation for reuse.
- E. Salvage: Recovery of demolition or construction waste and subsequent sale or reuse in another facility.
- F. Salvage and Reuse: Recovery of demolition or construction waste and subsequent incorporation into the Work.

#### **1.4 SUBMITTALS**

- A. Waste Management Plan: Submit plan within ten (10) days of date established for commencement of the Work.
- B. Waste Reduction Progress Reports:
  1. Concurrent with each Application for Payment, submit report. Use Form CWM-7 for construction waste and Form CWM-8 for demolition waste. Include the following information:
    - a. Material category.
    - b. Generation point of waste.
    - c. Total quantity of waste in tons (tonnes).
    - d. Quantity of waste salvaged, both estimated and actual in tons (tonnes).
    - e. Quantity of waste recycled, both estimated and actual in tons (tonnes).
    - f. Total quantity of waste recovered (salvaged plus recycled) in tons (tonnes).
    - g. Total quantity of waste recovered (salvaged plus recycled) as a percentage of total

waste.

- C. Waste Reduction Calculations: Before request for Substantial Completion, submit calculated end of Project rates for salvage, recycling, and disposal as a percentage of total waste generated by the Work.
- D. Records of Donations: Indicate receipt and acceptance of salvageable waste donated to individuals and organizations. Indicate whether organization is tax exempt.
- E. Records of Sales: Indicate receipt and acceptance of salvageable waste sold to individuals and organizations. Indicate whether organization is tax exempt.
- F. Recycling and Processing Facility Records: Indicate receipt and acceptance of recyclable waste by recycling and processing facilities licensed to accept them. Include manifests, weight tickets, receipts, and invoices.
- G. Landfill and Incinerator Disposal Records: Indicate receipt and acceptance of waste by landfills and incinerator facilities licensed to accept them. Include manifests, weight tickets, receipts, and invoices.
- H. Statement of Refrigerant Recovery: Signed by refrigerant recovery technician responsible for recovering refrigerant, stating that refrigerant that was present was recovered and that recovery was performed according to EPA regulations. Include name and address of technician and date refrigerant was recovered.

## 1.5 QUALITY ASSURANCE

- A. Waste Management Coordinator Qualifications: Firm having minimum ten (10) years of documented experience in specializing in waste management coordination.
- B. Refrigerant Recovery Technician Qualifications: Certified by EPA-approved certification program.
- C. Regulatory Requirements: Comply with hauling and disposal regulations of authorities having jurisdiction.
- D. Waste Management Conference:
  - 1. Conduct conference at site. Review methods and procedures related to waste management including, but not limited to, the following:
    - a. Review and discuss waste management plan including responsibilities of waste management coordinator.
    - b. Review requirements for documenting quantities of each type of waste and its disposition.
    - c. Review and finalize procedures for materials separation and verify availability of containers and bins needed to avoid delays.
    - d. Review procedures for periodic waste collection and transportation to recycling and disposal facilities.
    - e. Review waste management requirements for each trade.

## 1.6 PERFORMANCE REQUIREMENTS

- A. Conform to County regulations regarding Solid Waste Control.
- B. Achieve end of Project rates for salvage/recycling of 50 percent by weight of total nonhazardous solid waste generated by the Work. Practice efficient waste management in

the use of materials in the course of the Work. Use all reasonable means to divert construction and demolition waste from landfills and incinerators. Facilitate recycling and salvage of materials:

1. Demolition waste:
  - a. Asphalt paving.
  - b. Concrete.
  - c. Concrete reinforcing steel.
  - d. Brick.
  - e. Concrete masonry units.
  - f. Wood studs.
  - g. Wood joists.
  - h. Plywood and oriented strand board.
  - i. Wood paneling.
  - j. Wood trim.
  - k. Structural and miscellaneous steel.
  - l. Rough hardware.
  - m. Roofing.
  - n. Insulation.
  - o. Doors and frames.
  - p. Door hardware.
  - q. Windows.
  - r. Glazing.
  - s. Metal studs.
  - t. Gypsum board.
  - u. Acoustical tile and panels.
  - v. Carpet.
  - w. Carpet pad.
  - x. Demountable partitions.
  - y. Equipment.
  - z. Cabinets.
  - aa. Plumbing fixtures.
  - bb. Piping.
  - cc. Supports and hangers.
  - dd. Valves.
  - ee. Sprinklers.
  - ff. Mechanical equipment.
  - gg. Refrigerants.
  - hh. Electrical conduit.
  - ii. Copper wiring.
  - jj. Lighting fixtures.
  - kk. Lamps.
  - ll. Ballasts.
  - mm. Electrical devices.
  - nn. Switchgear and panelboards.
  - oo. Transformers.
2. Construction waste:
  - a. Masonry and CMU.
  - b. Lumber.
  - c. Wood sheet materials.
  - d. Wood trim.
  - e. Metals.
  - f. Roofing.
  - g. Insulation.
  - h. Carpet and pad.
  - i. Gypsum board.
  - j. Piping.

- k. Electrical conduit.
- l. Packaging - Regardless of salvage/recycle goal indicated in "General" Paragraph above, salvage or recycle 100 percent of the following uncontaminated packaging materials:
  - 1) Paper.
  - 2) Cardboard.
  - 3) Boxes.
  - 4) Plastic sheet and film.
  - 5) Polystyrene packaging.
  - 6) Wood crates.
  - 7) Plastic pails.

## 1.7 WASTE MANAGEMENT PLAN

- A. Develop a waste management plan and requirements. Plan shall consist of waste identification, waste reduction work plan, and cost/revenue analysis. Distinguish between demolition and construction waste. Indicate quantities by weight or volume but use same units of measure throughout waste management plan.
- B. Waste Identification: Indicate anticipated types and quantities of demolition site clearing and construction waste generated by the Work. Use Form CWM-1 for construction waste and Form CWM-2 for demolition waste. Include estimated quantities and assumptions for estimates.
- C. Waste Reduction Work Plan:
  - 1. List each type of waste and whether it will be salvaged, recycled, or disposed of in landfill or incinerator. Use Form CWM-3 for construction waste and Form CWM-4 for demolition waste. Include points of waste generation, total quantity of each type of waste, quantity for each means of recovery, and handling and transportation procedures:
    - a. Salvaged materials for reuse: For materials that will be salvaged and reused in this Project, describe methods for preparing salvaged materials before incorporation into the Work.
    - b. Salvaged materials for sale: For materials that will be sold to individuals and organizations, include list of their names, addresses, and telephone numbers.
    - c. Salvaged materials for donation: For materials that will be donated to individuals and organizations, include list of their names, addresses, and telephone numbers.
    - d. Recycled materials: Include list of local receivers and processors and type of recycled materials each will accept. Include names, addresses, and telephone numbers.
    - e. Disposed materials: Indicate how and where materials will be disposed of. Include name, address, and telephone number of each landfill and incinerator facility.
    - f. Handling and transportation procedures: Include method that will be used for separating recyclable waste including sizes of containers, container labeling, and designated location where materials separation will be performed.
- D. Cost/Revenue Analysis:
  - 1. Indicate total cost of waste disposal as if there was no waste management plan and net additional cost or net savings resulting from implementing waste management plan. Use Form CWM-5 for construction waste and Form CWM-6 for demolition waste. Include the following:
    - a. Total quantity of waste.
    - b. Estimated cost of disposal (cost per unit). Include hauling and tipping fees and cost of collection containers for each type of waste.
    - c. Total cost of disposal (with no waste management).
    - d. Revenue from salvaged materials.

- e. Revenue from recycled materials.
- f. Savings in hauling and tipping fees by donating materials.
- g. Savings in hauling and tipping fees that are avoided.
- h. Handling and transportation costs. Include cost of collection containers for each type of waste.
- i. Net additional cost or net savings from waste management plan.

## **PART 2 PRODUCTS (NOT USED)**

## **PART 3 EXECUTION**

### **3.1 PLAN IMPLEMENTATION**

- A. Implement approved waste management plan. Provide handling, containers, storage, signage, transportation, and other items as required to implement waste management plan during the entire duration of the Contract:
  - 1. Comply with operation, termination, and removal requirements in Section 01 50 00: Temporary Facilities and Controls.
- B. Waste Management Coordinator: Engage a waste management coordinator to be responsible for implementing, monitoring, and reporting status of waste management work plan.
- C. Training:
  - 1. Train workers, subcontractors, and suppliers on proper waste management procedures, as appropriate for the Work:
    - a. Distribute waste management plan to everyone concerned within three (3) days of submittal return.
    - b. Distribute waste management plan to entities when they first begin work onsite. Review plan procedures and locations established for salvage, recycling, and disposal.
- D. Site Access and Temporary Controls:
  - 1. Conduct waste management operations to ensure minimum interference with roads, streets, walks, walkways, and other adjacent occupied and used facilities:
    - a. Designate and label specific areas on Project site necessary for separating materials that are to be salvaged, recycled, reused, donated, and sold.
    - b. Comply with Section 01 50 00: Temporary Facilities and Controls for the control of dust and dirt, environmental protection, and noise control.
- E. Waste Management in Historic Zones or Areas: Hauling equipment and other materials shall be of sizes that clear surfaces within historic spaces, areas, rooms, and openings, by 12 inches (300 mm) or more.

### **3.2 SALVAGING DEMOLITION WASTE**

- A. Salvaged Items for Reuse in the Work:
  - 1. Salvage items for reuse and handle:
    - a. Clean salvaged items.
    - b. Pack or crate items after cleaning. Identify contents of containers with label indicating elements, date of removal, quantity, and location where removed.
    - c. Store items in a secure area until installation.
    - d. Protect items from damage during transport and storage.
    - e. Install salvaged items to comply with installation requirements for new materials

and equipment. Provide connections, supports, and miscellaneous materials necessary to make items functional for use indicated.

- B. Salvaged Items for Sale and Donation: Not permitted on Project site.
- C. Salvaged Items for Owner's Use:
  - 1. Salvage items for Owner's use and handle as follows:
    - a. Clean salvaged items.
    - b. Pack or crate items after cleaning. Identify contents of containers with label indicating elements, date of removal, quantity, and location where removed.
    - c. Store items in a secure area until delivery to Owner.
    - d. Transport items to Owner's storage area designated by Owner.
    - e. Protect items from damage during transport and storage.
- D. Doors and Hardware: Brace open end of door frames. Except for removing door closers, leave door hardware attached to doors, unless otherwise designated by Owner.
- E. Equipment: Drain tanks, piping, and fixtures. Seal openings with caps or plugs. Protect equipment from exposure to weather.
- F. Plumbing Fixtures: Separate by type and size.
- G. Lighting Fixtures: Separate lamps by type and protect from breakage.
- H. Electrical Devices: Separate switches, receptacles, switchgear, transformers, meters, panelboards, circuit breakers, and other devices by type.

### 3.3 RECYCLING WASTE

- A. Recycle paper and beverage containers used by onsite workers.
- B. Recycling Incentives: Revenues, savings, rebates, tax credits, and other incentives received for recycling waste materials shall accrue to Owner.
- C. Preparation of Waste: Prepare and maintain recyclable waste materials according to recycling or reuse facility requirements. Maintain materials free of dirt, adhesives, solvents, petroleum contamination, and other substances deleterious to the recycling process.
- D. Procedures:
  - 1. Separate recyclable waste from other waste materials, trash, and debris. Separate recyclable waste by type at Project site to the maximum extent practical according to approved construction waste management plan:
    - a. Provide appropriately marked containers or bins for controlling recyclable waste until removed from Project site. Include list of acceptable and unacceptable materials at each container and bin:
      - 1) Inspect containers and bins for contamination and remove contaminated materials if found.
    - b. Stockpile processed materials onsite without intermixing with other materials. Place, grade, and shape stockpiles to drain surface water. Cover to prevent windblown dust.
    - c. Stockpile materials away from construction area. Do not store within drip line of remaining trees.
    - d. Store components off the ground and protect from the weather.
    - e. Remove recyclable waste from Owner's property and transport to recycling receiver or processor.

### **3.4 DISPOSAL OF WASTE**

- A. Except for items or materials to be salvaged, recycled, or otherwise reused, remove waste materials from Project site and legally dispose of them in a landfill or incinerator acceptable to authorities having jurisdiction:
  - 1. Except as otherwise specified, do not allow waste materials that are to be disposed of to accumulate onsite.
  - 2. Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.
- B. Burning:
  - 1. Do not burn waste materials:
    - a. Burning of waste materials is permitted only at designated areas on Owner's property, provided required permits are obtained. Provide full-time monitoring for burning materials until fires are extinguished.
- C. Disposal: Remove waste materials and dispose of at designated spoil areas on Owner's property.

### **3.5 ATTACHMENTS**

- A. Form CWM-1 for construction waste identification.
- B. Form CWM-2 for demolition waste identification.
- C. Form CWM-3 for construction waste reduction work plan.
- D. Form CWM-4 for demolition waste reduction work plan.
- E. Form CWM-5 cost/revenue analysis of construction waste reduction work plan.
- F. Form CWM-6 cost/revenue analysis of demolition waste reduction work plan.
- G. Form CWM-7 for construction waste
- H. Form CWM-8 for demolition waste.

### **CWM FORMS ON FOLLOWING PAGES**

<b>FORM CWM-1: CONSTRUCTION WASTE IDENTIFICATION</b>							
<b>MATERIAL CATEGORY</b>	<b>GENERATION POINT</b>	<b>EST. QUANTITY OF MATERIALS RECEIVED* (A)</b>	<b>EST. WASTE - % (B)</b>	<b>TOTAL EST. QUANTITY OF WASTE* (C = A x B)</b>	<b>EST. VOLUME CY (CM)</b>	<b>EST. WEIGHT TONS (TONNES)</b>	<b>REMARKS AND ASSUMPTIONS</b>
Packaging: Cardboard							
Packaging: Boxes							
Packaging: Plastic Sheet or Film							
Packaging: Polystyrene							
Packaging: Pallets or Skids							
Packaging: Crates							
Packaging: Paint Cans							
Packaging: Plastic Pails							
Site-Clearing Waste							
Masonry or CMU							
Lumber: Cut-Offs							
Lumber: Warped Pieces							
Plywood or OSB (scraps)							
Wood Forms							
Wood Waste Chutes							
Wood Trim (cut-offs)							
Metals							
Insulation							
Roofing							
Joint Sealant Tubes							
Gypsum Board (scraps)							
Carpet and Pad (scraps)							
Piping							
Electrical Conduit							
Other:							



<b>FORM CWM-2: DEMOLITION WASTE IDENTIFICATION</b>				
<b>MATERIAL DESCRIPTION</b>	<b>EST. QUANTITY</b>	<b>EST. VOLUME CY (CM)</b>	<b>EST. WEIGHT TONS (TONNES)</b>	<b>REMARKS AND ASSUMPTIONS</b>
Asphaltic Concrete Paving				
Concrete				
Brick				
CMU				
Lumber				
Plywood and OSB				
Wood Paneling				
Wood Trim				
Miscellaneous Metals				
Structural Steel				
Rough Hardware				
Insulation				
Roofing				
Doors and Frames				
Door Hardware				
Windows				
Glazing				
Acoustical Tile				
Carpet				
Carpet Pad				
Demountable Partitions				
Equipment				
Cabinets				
Plumbing Fixtures				
Piping				
Piping Supports and Hangers				
Valves				
Sprinklers				
Mechanical Equipment				
Electrical Conduit				
Copper Wiring				
Light Fixtures				
Lamps				
Lighting Ballasts				
Electrical Devices				
Switchgear and Panelboards				
Transformers				
Other:				

<b>FORM CWM-3: CONSTRUCTION WASTE REDUCTION WORK PLAN</b>						
<b>MATERIAL CATEGORY</b>	<b>GENERATION POINT</b>	<b>TOTAL EST. QUANTITY OF WASTE TONS (TONNES)</b>	<b>DISPOSAL METHOD AND QUANTITY</b>			<b>HANDLING AND TRANSPORTION PROCEDURES</b>
			<b>EST. AMOUNT SALVAGED TONS (TONNES)</b>	<b>EST. AMOUNT RECYCLED TONS (TONNES)</b>	<b>EST. AMOUNT DISPOSED TO LANDFILL TONS (TONNES)</b>	
Packaging: Cardboard						
Packaging: Boxes						
Packaging: Plastic Sheet or Film						
Packaging: Polystyrene						
Packaging: Pallets or Skids						
Packaging: Crates						
Packaging: Paint Cans						
Packaging: Plastic Pails						
Site-Clearing Waste						
Masonry or CMU						
Lumber: Cut-Offs						
Lumber: Warped Pieces						
Plywood or OSB (scraps)						
Wood Forms						
Wood Waste Chutes						
Wood Trim (cut-offs)						
Metals						
Insulation						
Roofing						
Joint Sealant Tubes						
Gypsum Board (scraps)						
Carpet and Pad (scraps)						
Piping						
Electrical Conduit						
Other:						

<b>FORM CWM-4: DEMOLITION WASTE REDUCTION WORK PLAN</b>						
<b>MATERIAL CATEGORY</b>	<b>GENERATION POINT</b>	<b>TOTAL EST. QUANTITY OF WASTE TONS (TONNES)</b>	<b>DISPOSAL METHOD AND QUANTITY</b>			<b>HANDLING AND TRANSPORTION PROCEDURES</b>
			<b>EST. AMOUNT SALVAGED TONS (TONNES)</b>	<b>EST. AMOUNT RECYCLED TONS (TONNES)</b>	<b>EST. AMOUNT DISPOSED TO LANDFILL TONS (TONNES)</b>	
Asphaltic Concrete Paving						
Concrete						
Brick						
CMU						
Lumber						
Plywood and OSB						
Wood Paneling						
Wood Trim						
Miscellaneous Metals						
Structural Steel						
Rough Hardware						
Insulation						
Roofing						
Doors and Frames						
Door Hardware						
Windows						
Glazing						
Acoustical Tile						
Carpet						
Carpet Pad						
Demountable Partitions						
Equipment						
Cabinets						
Plumbing Fixtures						
Piping						
Supports and Hangers						
Valves						
Sprinklers						
Mechanical Equipment						
Electrical Conduit						
Copper Wiring						
Light Fixtures						
Lamps						
Lighting Ballasts						
Electrical Devices						
Switchgear and Panelboards						
Transformers						
Other:						

FORM CWM-5: COST/REVENUE ANALYSIS OF CONSTRUCTION WASTE REDUCTION WORK PLAN								
MATERIALS	TOTAL QUANTITY OF MATERIALS (VOL. OR WEIGHT) (A)	EST. COST OF DISPOSAL (B)	TOTAL EST. COST OF DISPOSAL (C = A x B)	REVENUE FROM SALVAGED MATERIALS (D)	REVENUE FROM RECYCLED MATERIALS (E)	LANDFILL TIPPING FEES AVOIDED (F)	HANDLING AND TRANSPORTATION COSTS AVOIDED (G)	NET COST SAVINGS OF WORK PLAN (H = D+E+F+G)
Packaging: Cardboard								
Packaging: Boxes								
Packaging: Plastic Sheet or Film								
Packaging: Polystyrene								
Packaging: Pallets or Skids								
Packaging: Crates								
Packaging: Paint Cans								
Packaging: Plastic Pails								
Site-Clearing Waste								
Masonry or CMU								
Lumber: Cut-Offs								
Lumber: Warped Pieces								
Plywood or OSB (scraps)								
Wood Forms								
Wood Waste Chutes								
Wood Trim (cut-offs)								
Metals								
Insulation								
Roofing								
Joint Sealant Tubes								
Gypsum Board (scraps)								
Carpet and Pad (scraps)								
Piping								
Electrical Conduit								
Other:								

FORM CWM-6: COST/REVENUE ANALYSIS OF DEMOLITION WASTE REDUCTION WORK PLAN								
MATERIALS	TOTAL QUANTITY OF MATERIALS (VOL. OR WEIGHT) (A)	EST. COST OF DISPOSAL (B)	TOTAL EST. COST OF DISPOSAL (C = A x B)	REVENUE FROM SALVAGED MATERIALS (D)	REVENUE FROM RECYCLED MATERIALS (E)	LANDFILL TIPPING FEES AVOIDED (F)	HANDLING AND TRANSPORTATION COSTS AVOIDED (G)	NET COST SAVINGS OF WORK PLAN (H = D+E+F+G)
Asphaltic Concrete Paving								
Concrete								
Brick								
CMU								
Lumber								
Plywood and OSB								
Wood Paneling								
Wood Trim								
Miscellaneous Metals								
Structural Steel								
Rough Hardware								
Insulation								
Roofing								
Doors and Frames								
Door Hardware								
Windows								
Glazing								
Acoustical Tile								
Carpet								
Carpet Pad								
Demountable Partitions								
Equipment								
Cabinets								
Plumbing Fixtures								
Piping								
Supports and Hangers								
Valves								
Sprinklers								
Mech. Equipment								
Electrical Conduit								
Copper Wiring								
Light Fixtures								
Lamps								
Lighting Ballasts								
Electrical Devices								
Switchgear and Panelboards								
Transformers								
Other:								

<b>FORM CWM-7: CONSTRUCTION WASTE REDUCTION PROGRESS REPORT</b>								
<b>MATERIAL CATEGORY</b>	<b>GENERATION POINT</b>	<b>TOTAL QUANTITY OF WASTE TONS (TONNES) (A)</b>	<b>QUANTITY OF WASTE SALVAGED</b>		<b>QUANTITY OF WASTE RECYCLED</b>		<b>TOTAL QUANTITY OF WASTE RECOVERED TONS (TONNES) (D = B + C)</b>	<b>TOTAL QUANTITY OF WASTE RECOVERED % (D / A x 100)</b>
			<b>ESTIMATED TONS (TONNES)</b>	<b>ACTUAL TONS (TONNES) (B)</b>	<b>ESTIMATED TONS (TONNES)</b>	<b>ACTUAL TONS (TONNES) (C)</b>		
Packaging: Cardboard								
Packaging: Boxes								
Packaging: Plastic Sheet or Film								
Packaging: Polystyrene								
Packaging: Pallets or Skids								
Packaging: Crates								
Packaging: Paint Cans								
Packaging: Plastic Pails								
Site-Clearing Waste								
Masonry or CMU								
Lumber: Cut-Offs								
Lumber: Warped Pieces								
Plywood or OSB (scraps)								
Wood Forms								
Wood Waste Chutes								
Wood Trim (cut-offs)								
Metals								
Insulation								
Roofing								
Joint Sealant Tubes								
Gypsum Board (scraps)								
Carpet and Pad (scraps)								
Piping								
Electrical Conduit								
Other:								

FORM CWM-8: DEMOLITION WASTE REDUCTION PROGRESS REPORT								
MATERIAL CATEGORY	GENERATION POINT	TOTAL QUANTITY OF WASTE TONS (TONNES) (A)	QUANTITY OF WASTE SALVAGED		QUANTITY OF WASTE RECYCLED		TOTAL QUANTITY OF WASTE RECOVERED TONS (TONNES) (D = B + C)	TOTAL QUANTITY OF WASTE RECOVERED % (D / A x 100)
			ESTIMATED TONS (TONNES)	ACTUAL TONS (TONNES) (B)	ESTIMATED TONS (TONNES)	ACTUAL TONS (TONNES) (C)		
Asphaltic Concrete Paving								
Concrete								
Brick								
CMU								
Lumber								
Plywood and OSB								
Wood Paneling								
Wood Trim								
Miscellaneous Metals								
Structural Steel								
Rough Hardware								
Insulation								
Roofing								
Doors and Frames								
Door Hardware								
Windows								
Glazing								
Acoustical Tile								
Carpet								
Carpet Pad								
Demountable Partitions								
Equipment								
Cabinets								
Plumbing Fixtures								
Piping								
Supports and Hangers								
Valves								
Sprinklers								
Mechanical Equipment								
Electrical Conduit								
Copper Wiring								
Light Fixtures								
Lamps								
Lighting Ballasts								
Electrical Devices								
Switchgear and Panelboards								
Transformers								
Other:								

END OF SECTION 01 74 19

**CLOSE-OUT FORM "A"**

**SUBCONTRACTOR'S AFFIDAVIT OF RELEASE OF LIEN**

STATE OF CALIFORNIA COUNTY OF \_\_\_\_\_

KNOW ALL MEN BY THESE PRESENTS:

\_\_\_\_\_, being first duly sworn, deposes and says:

1. That he / she is the \_\_\_\_\_ of \_\_\_\_\_, the subcontractor who supplied, installed, and /or erected the Work described below, and that, he /she is duly authorized to make this Affidavit and Subcontractor Release:

Project: Replace Existing Fire Alarm System

Owner: Rocklin Unified School District Architect:  PBK

Work Performed: \_\_\_\_\_ Specification Section(s): \_\_\_\_\_

2. That all Work required under the subject subcontractor of the subject construction project has been performed in accordance with the terms thereof, that all material men, sub-subcontractors, mechanics, and laborers have been paid and satisfied in full and that there are no outstanding claims of any character arising out of the performance of said subcontractor which have not been paid and satisfied in full.
3. That to the best of his / her knowledge and belief, there are no unsatisfied claims for damages resulting from injury or death to any employees, sub-subcontractors, or the public at large arising out of the performance of said subcontract, or any suits or claims for any other damages of any kind, nature, or description which might constitute a lien upon the property of the Owner.
4. That he / she has received full payment of all sums due him / her for materials furnished and services rendered by the undersigned in connection with the performance of said subcontract and has and does hereby release the Owner and the Architect and his consultants and the Contractor from any and all claims of any character arising out of or in any way connected with performance of said subcontract.

ATTEST (If Corporation)

\_\_\_\_\_  
Name of Subcontractor

\_\_\_\_\_  
Secretary

\_\_\_\_\_  
(By) (Title)

STATE OF \_\_\_\_\_

COUNTY OF \_\_\_\_\_

Sworn to and subscribed before me on this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_.

(Seal)

\_\_\_\_\_  
(Notary Public Signature)



**CLOSE OUT FORM "B"**

---

**1. PROJECT INFORMATION**

**Facility:**

**Address:**

**City:**

**DISTRICT:**

**ARCHITECT/ENGINEER:**

**CONTRACTOR/CM:**

**CONTRACT DATE:**

**DATE DISTRICT AUTHORIZED PROJECT:**

**BRIEF DESCRIPTION OF PROJECT:**

**(This description should match the Summary with exceptions of all change orders and Directives)**

---

**2. CERTIFICATION OF DESIGN AND CONSTRUCTION**

The intent of this document is to assure that the school district has provided to the architect/engineer the required information and the architect/engineer has reviewed the School Facilities Standards as required by the State of California, Division of the State Architect Office and used his/her reasonable professional judgment and care in the architectural/engineering design and that the contractor has constructed the project in a quality manner in general conformance with the design requirements and that the school district certifies to project completion.

**3. The District** certifies that the educational program and the educational specifications of this facility along with the identified building code to be used have been provided to the architect/engineer.

**DISTRICT:**

**BY:**

**DATE:**

**4. The Architect/Engineer** certifies the above information was received from the school district, and that the building(s) were designed in accordance with the applicable building codes. Further, the facility has been designed to meet or exceed the design criteria relating to space (minimum square footage), educational adequacy, and construction quality as contained in the School Facilities Standards as adopted by the Commissioner of Education, June 9, 2003, and as provided by the district.

**ARCHITECT/ENGINEER:**

**BY:**

**DATE:**

**5. The Contractor/CM** certifies that this project has been constructed in general conformance with the construction documents as prepared by the architect/engineer listed above.

**CONTRACTOR/CM:**

**BY:**

**DATE:**

**INSTRUCTIONS FOR CLOSE OUT FORM B:**

---

**Section 1.** Identify the following:

- name and address of the school facility
- name of the school district
- the Architect/Engineer and Contractor
- the date of execution of the construction contract
- the date that the school district authorized the superintendent to hire an architect/engineer
- scope of the project.

---

**Section 2.** This section outlines the intent of the document. No action required.

---

**Section 3.** This section is to be executed by the school district upon transmittal of the information (as listed) to the architect/engineer and is to remain in the custody of the school district throughout the entire project.

---

**Section 4.** This section is to be executed by the architect/engineer upon completion of the plans and specifications and in conjunction with the completion of the DSA plan review for code compliance and returned to the school district's files.

---

**Section 5.** This section is to be executed by the contractor upon substantial completion of the project and retained in the school district's files. Included with this document a copy of the Certificate of Substantial Completion, found in the Project Manual.

---

**Section 6.** This section is to be executed by the school district upon acceptance and occupancy of the project along with the original Certificate of Substantial Completion form..

---

**Attachment copy of: "Substantial Completion form"**

**CLOSE-OUT FORM "C"**

---

**SUBCONTRACTOR HAZARDOUS MATERIAL CERTIFICATE**

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THE STATE OF \_\_\_\_\_ PROJECT: Replace Existing Fire Alarm System

COUNTY OF \_\_\_\_\_ OWNER: Rocklin Unified School District

ARCHITECT: PBK

SPECIFICATION SECTION(S):

KNOW ALL MEN BY THESE PRESENTS:

\_\_\_\_\_, being first duly sworn, deposes and says that he / she is the \_\_\_\_\_ of \_\_\_\_\_, the subcontractor / supplier who constructed or provided the section(s) of Work referenced above, and that he / she is duly authorized to certify to the best of his / her information, knowledge, and belief no asbestos, lead or PCB containing products have been incorporated into the project.

ATTEST (If Corporation)

\_\_\_\_\_  
Name of Subcontractor / Supplier

\_\_\_\_\_  
Secretary

\_\_\_\_\_  
(By) \_\_\_\_\_ (Title)

-----  
JURAT

THE STATE OF \_\_\_\_\_

COUNTY OF \_\_\_\_\_

Sworn to and subscribed before me on this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

(Seal)

\_\_\_\_\_  
(Notary Public Signature)

**CLOSE-OUT FORM "D"**

**SUBCONTRACTOR WARRANTY**

STATE OF \_\_\_\_\_

COUNTY OF \_\_\_\_\_

KNOW ALL MEN BY THESE PRESENTS:

\_\_\_\_\_, being first duly sworn, deposes and says:

1. That he / she is the Subcontractor (or the \_\_\_\_\_ of \_\_\_\_\_ the subcontractor) who supplied, installed, and / or erected the Work described below, and that, he / she is duly authorized to make this Subcontractor Warranty:

Project: Replace Existing Fire Alarm System  
 Owner: Rocklin Unified School District Architect:  PBK   
 Work Performed: \_\_\_\_\_ Specification Section(s): \_\_\_\_\_

2. The undersigned Contractor warrants to the Owner and Architect that materials and equipment furnished under the Contract are of good quality and new except where otherwise required or permitted by the Contract Documents, that the Work is free from defects not inherent in the quality required or permitted, and that the Work conforms with the requirements of the Contract Documents. Work not conforming to these requirements, including substitutions not properly approved and authorized, may be considered defective. The Subcontractor's warranty excludes remedy for damage or defect caused by abuse, modifications not executed by the Subcontractor, improper or insufficient maintenance, improper operation, or normal wear and tear under normal usage.
3. In the event of failure of materials, products, or workmanship, during the specified warranty periods, the Subcontractor shall take appropriate measures to assure correction or replacement of the defective items, whether notified by the Contractor, Owner or Architect.
4. The Subcontractor warrants the Work performed for a period of \_\_\_\_\_ months from the date of Substantial Completion, except as follows: \_\_\_\_\_

ATTEST (If Corporation)

\_\_\_\_\_  
Name of Subcontractor

\_\_\_\_\_  
 Secretary (By) (Title)

STATE OF \_\_\_\_\_

COUNTY OF \_\_\_\_\_

Sworn to and subscribed before me on this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

PBK Architects  
Project No. 220394

Parker Whitney Elementary School - Replace Existing Fire Alarm System  
Rocklin Unified School District

*(Seal)*

(Notary Public Signature)

## **SECTION 01 77 00 CLOSEOUT PROCEDURES**

### **PART 1 GENERAL**

#### **1.1 RELATED DOCUMENTS**

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

#### **1.2 PRE-CLOSEOUT MEETING**

- A. Pre-Closeout Meeting: Schedule and convene a pre-closeout meeting with Owner and Architect in accordance with Section 01 31 00: Project Management and Coordination.

#### **1.3 SUBSTANTIAL COMPLETION**

- A. The items identified in the Contract Documents, including the Supplementary Conditions and the following items shall be completed before Substantial Completion will be granted (also see Section 01 77 22: Substantial Completion Procedures):
  1. Contractor's completion list (punch list): Submit a thorough list of items to be completed or corrected, along with a written request for Substantial Completion and for review of the Work or portion of the Work. Architect's or Engineer's Project representative, at their discretion, may attend and assist in the preparation of Contractor's punch list.
  2. Architect's supplemental punch list: Architect/Engineer, along with Owner at Owner's discretion, will inspect the Work utilizing Contractor's prepared punch list, noting completed items and incomplete items, and will prepare a supplemental list of items that have been omitted or incomplete items that were not previously noted.
  3. Operations and maintenance manuals: Submit as described.
  4. Final cleaning: Provide final cleaning and adequate protection of installed construction as described.
  5. Starting of systems: Start up equipment and systems as described.
  6. Testing and balancing: Testing and balancing of systems must be performed and completed by Owner's forces, and the report submitted and accepted by Architect/Engineer and Owner, as described in the Contract Documents. Make adjustments to equipment as required to achieve acceptance.
  7. Demonstrations: If required by individual Specification Sections or by Owner, provide demonstrations and instructions for use of equipment as described.
- B. Date of Substantial Completion: Complete or correct items identified on punch list and confirm that all items have been corrected prior to Architect's re-inspection. Architect/Engineer, along with Owner, will re-inspect the corrected work to establish the Date of Substantial Completion. Incomplete items remaining will be appended to the Certificate of Substantial Completion (AIA G704). The Date of Substantial Completion represents day one of the closeout period and represents the date of commencement of Contractor's correctional period and all warranty periods as described and required by the Contract Documents, except as amended in the Certificate of Substantial Completion and elsewhere in the Contract Documents.
- C. Certificate of Substantial Completion: When the Work or designated portion thereof is substantially complete, Architect will prepare the Certificate of Substantial Completion to be executed by Owner and Contractor. Items on the appended punch list shall be completed or corrected within the time limits established in the Certificate.

#### 1.4 PUNCH LIST

- A. A comprehensive list prepared by Contractor prior to Substantial Completion, and attached thereto, to establish all items to be corrected, or limited items of work to be completed, if any. This list is intended to represent a limited number of items needing attention.
- B. Punch lists shall be furnished to Architect in Microsoft Excel and PDF formats. The punch list shall be in matrix form and shall include the following information for each punch list item:
  - 1. Room number or other suitable location identifier.
  - 2. Description of the Work.
  - 3. Subcontractor/trade sign-off that the work has been verified to be 100 percent complete and in accordance with the Contract Documents.
  - 4. Subcontractor/trade sign-off date.
  - 5. General Contractor sign-off that the work has been verified to be 100 percent complete and in accordance with the Contract Documents.
  - 6. General Contractor/trade sign-off date.
  - 7. A/E consultant sign-off.
  - 8. A/E consultant sign-off date.
  - 9. If requested by Owner, provide two (2) additional similar columns for their sign-off.
  - 10. In the case of excessive repetition of the same item at various locations, the punch list may contain "general notes/items" that shall be applied to the entire Project. It shall be the responsibility of the Contractor/Subcontractor to thoroughly examine the entire Project and make corrective measures at all applicable locations.
- C. Should Architect determine that Contractor's punch list lacks sufficient detail or requires extensive supplementation, the punch list will be returned to Contractor for re-inspection and revision. The date of Substantial Completion will be delayed until the punch list submitted is a reasonable representation of the Work to be done.
- D. A significantly large number of items to be completed or corrected will preclude Architect from issuing a Certificate of Substantial Completion. Owner and Architect will be the sole judges of what constitutes a significantly large number of items. It is anticipated that the detailed list of items of Work to be completed or corrected at the Date of Substantial Completion will be no longer than five (5) typed pages.
- E. Contractor's superintendent shall participate in the preparation of Contractor's punch list that is submitted to Architect and Owner for supplementation. Upon receipt, Architect and consultants shall perform a spot review to determine the adequacy and completeness of Contractor's punch list.
- F. Upon receipt of an acceptable Contractor's punch list, Contractor's superintendent shall accompany Architect, his consultants and Owner (at his discretion) during their observation and the preparation of their supplements to Contractor's punch list:
  - 1. The superintendent shall record or otherwise take note of all supplementary items.
  - 2. Architect will endeavor to furnish to Contractor typed, hand written, or recorded supplements to the punch list in a prompt manner; however, any delay in Contractor receiving said supplements from Architect will not be cause for a claim for additional cost or extension of time as Contractor's superintendent shall have been in attendance during the inspections of Architect and his consultants and will have been expected to take his own notes.

#### 1.5 OPERATIONS AND MAINTENANCE MANUAL

- A. As a requirement for Substantial Completion, the final operation and maintenance manual shall be submitted to, and reviewed and accepted by Architect prior to issuance of the

Certificate.

- B. Prepare a 3-ring D-slant binder cover and spline with printed title "OPERATIONS AND MAINTENANCE MANUAL," title of Project, and subject matter of binder when multiple binders are required.
- C. Submit one (1) copy of preliminary operations and maintenance manuals to respective consultants (civil, MEP, structural, etc.) for review of conformance with Contract requirements prior to submitting final to Architect. Allow time for proper review.
- D. Internally subdivide binder contents with permanent page dividers, logically organized as described below; with tab titling clearly printed under reinforced laminated plastic tabs.
- E. Drawings: Provide with reinforced punched binder tab. Bind in with text; fold larger drawings to size of text pages.
- F. Contents:
  - 1. Prepare Table of Contents for each volume, with each product or system description identified, typed on white paper, in three parts as follows:
    - a. Part 1: Directory, listing names, addresses, and telephone numbers of Architect/Engineer, Contractor, subcontractors, and major equipment suppliers.
    - b. Part 2: Operation and Maintenance, arranged by system and subdivided by Specification Section. For each category, identify names, addresses, and telephone numbers of subcontractors and suppliers. Identify the following:
      - 1) Significant design criteria.
      - 2) List of equipment.
      - 3) Parts list for each component.
      - 4) Equipment start-up instructions
      - 5) Operating instructions.
      - 6) Maintenance instructions for equipment and systems.
      - 7) Maintenance instructions for finishes, including recommended cleaning methods and materials, and special precautions identifying detrimental agents.
    - c. Part 3: Project documents and certificates, including the following:
      - 1) Product data.
      - 2) Air and water balance reports.
      - 3) Photocopies of warranties, certificates and bonds. Submit originals with Closeout Documents as specified below.
- G. Submit one (1) final original and two (2) copies to Architect.
- H. Contractor shall provide a DVD, in PDF Format, the following documents after approval by Architect, consultants, and Owner: Closeout Manual, MSDS binder, O&M Manuals, Specifications and approved submittals. Documents shall be hyperlinked to the Table of Contents.

## 1.6 PROJECT CLOSEOUT

- A. Final Payment will not be authorized by Architect until Architect finds the Work acceptable under the Contract Documents, subject to the completion and acceptance of the following requirements and other applicable Contract requirements:
  - 1. Close-out Documents: Provide bound closeout documents as described. Refer to the Supplementary Conditions for additional information.
  - 2. Record Documents: Submit as described.
  - 3. Extra materials: Provide extra stock, materials, and products as described when



- required by individual Specification Sections.
4. Locks: Make final changeover of permanent locks and transmit keys to Owner. Advise Owner's personnel of changeover in security provisions.
  5. Temporary Facilities: Discontinue and remove temporary facilities from the site, along with mockups, construction aids, and similar elements.
  6. Warranties, Certificates and Bonds: Execute and assemble transferable warranty documents, certificates, and bonds from subcontractors, suppliers, and manufacturers as described.
  7. Final Inspection and Acceptance by Architect is achieved as described.

## 1.7 CLOSEOUT DOCUMENTS

- A. Coordinate the following items with the requirements of Document CB, Supplementary Conditions of the Contract.
- B. Prepare 3-ring D-slant binder cover and spline with printed title "CLOSEOUT DOCUMENTS", title of Project, and subject matter of binder when multiple binders are required. Submit one (1) original and two (2) copies.
- C. Internally subdivide binder contents with permanent page dividers, logically organized as described below; with tab titling clearly printed under reinforced laminated plastic tabs.
- D. The closeout documents shall be neatly organized and easily useable as determined by Architect and Owner. Separate closeout document binders from operations and maintenance manuals. Documents identified as "affidavit" shall be notarized.
- E. Prepare a table of contents for each volume, with each item description identified, typed on white paper, in five (5) parts as follows:
  1. Part 1: Directory listing names, addresses, and telephone numbers of Architect/Engineer, Contractor, subcontractors, and major equipment suppliers. All General Contractor's vendors/suppliers and subcontractors that provided materials or performed any work related to this Project must be listed on this form. Submit final list of subcontractors on Document AD.
  2. Part 2: Closeout documents and affidavits, including the following:
    - a. AIA G707 - Consent of Surety to Final Payment.
    - b. AIA G706 - Contractor's Affidavit of Payment of Debts and Claims.
    - c. AIA G706A - Contractor's Affidavit of Release of Liens.
  3. Part 3: Project documents and certificates, including the following:
    - a. Copy of Certificate of Substantial Completion (AIA G704).
    - b. Copy of All Permits.
    - c. Copy of Final Utility Bill or letter of transfer.
    - d. Copy of Certificate of Occupancy.
    - e. Copy of Certification of Project Compliance: Submit on attached **Closeout Form "B"**. Owner and Architect will initiate form and forward to Contractor for signature once Substantial Completion is established (Owner to be provided original separately).
  4. Part 4: Warranties and Release of Liens; compile sequentially based on Specification Sections:
    - a. General Contractor's warranty: Submit on company letterhead as described below. This Warranty shall state all sections of Work performed by General Contractor's own forces, and warranty period for each section of Work.
    - b. Subcontractor's release of lien: Include Contractor's, Subcontractor's, and direct material and equipment supplier's separate final releases. Submit on attached **Closeout Form "A"** – Subcontractor's Affidavit of Release of Lien.
    - c. Hazardous material certificate: Submit on attached **Closeout Form "C"**. Affidavits from Contractor, subcontractors and General Contractor's vendors or suppliers

- stating that no hazardous materials/products have been used or installed in this Project.
- d. Subcontractor's warranty: Notarized and submitted on attached **Closeout Form "D"**. This warranty shall state all sections of Work performed by the Subcontractor and warranty period.
  - e. Special/extended warranties: List and provide notarized warranties requested by Owner, or required by or incorporated in the Contract Documents.
  - f. Spreadsheet depicting all items and materials that carry a warranty longer than one (1) year. Include information consisting of material/supplier/installer/Specification Section/length of warranty and contact information.
5. Part 5: Receipts:
- a. Extra stock: Provide original receipts for delivery of "extra stock" items as described below. Receipts must be signed by an authorized Owner's representative.
  - b. Keys: Provide original receipts for delivery of "keys." Receipts must be signed by an authorized Owner's representative.
  - c. Sign-in sheets: Provide signatures of attendees from all demonstrations.
- F. In addition to the three (3) required closeout binders listed above, provide Architect with one (1) separate binder for their records containing the following:
- 1. Directory listing names, addresses, and telephone numbers of Architect/Engineer, Contractor, subcontractors, and major equipment suppliers.
  - 2. All MSDS sheets for the Project.
  - 3. All warranties from Contractor, subcontractors, direct suppliers, and manufacturers.
- G. Failure to complete and closeout Project after substantial completion may result in liquidated damages being assessed to Contractor. Refer to Conditions of the Contract for additional requirements and liquidated damages.

## 1.8 FINAL CLEANING

- A. Execute final cleaning prior to final Project inspection and acceptance.
- B. Clean interior and exterior glass, and surfaces exposed to view; remove temporary labels, stains and foreign substances, polish transparent and glossy surfaces, vacuum carpeted and soft surfaces, mop hard floor surfaces.
- C. Remove smudges, marks, stains, fingerprints, soil, dirt, spots, dust, lint, and other foreign materials from finished and exposed surfaces
- D. Clean equipment and fixtures to sanitary condition with cleaning materials appropriate to surface and material being cleaned.
- E. Clean and replace filters of operating equipment as required by Contract Documents
- F. Clean debris from roofs, gutters, downspouts, and drainage systems.
- G. Clean site; sweep paved areas, rake clean landscaped surfaces.
- H. Remove waste and surplus materials, rubbish, and temporary construction facilities from site.

## 1.9 PROTECTING INSTALLED CONSTRUCTION

- A. Protect installed Work and provide special protection where specified in individual

Specification Sections until Work is accepted by Architect and Owner.

- B. Provide temporary and removable protection for installed products. Control activity in immediate work area to prevent damage.
- C. Provide protective coverings at walls, projections, jambs, sills, and soffits of openings.
- D. Protect finished floors, stairs, and other surfaces from traffic, dirt, wear, damage, or movement of heavy objects, by protecting with durable sheet materials.
- E. Prohibit traffic or storage upon waterproofed or roofed surfaces. When traffic or activity is necessary, obtain recommendations for protection from waterproofing or roofing material manufacturer.
- F. Prohibit traffic from landscaped areas.

#### **1.10 STARTING OF SYSTEMS**

- A. Coordinate schedule for start-up of various equipment and systems.
- B. Notify Architect/Engineer and Owner 48 hours prior to start-up of each item.
- C. Verify each piece of equipment or system has been checked for proper lubrication, drive rotation, belt tension, control sequence, and for conditions which may cause damage.
- D. Verify tests, meter readings, and specified electrical characteristics agree with those required by equipment or system manufacturer.
- E. Verify wiring and support components for equipment are complete and tested.
- F. Execute start-up under supervision of Contractors' personnel, and installer in accordance with manufacturers' instructions.
- G. When specified in individual Specification Sections or required by manufacturer, require manufacturer to provide authorized representative to be present at site to inspect, check, and approve equipment or system installation prior to start-up, and to supervise placing equipment or system in operation.
- H. When specified in individual Specification Sections or required by Owner or Architect/Engineer, submit a written report in accordance with Section 01 33 00, Submittal Procedures, that equipment or system has been properly installed and is functioning correctly.

#### **1.11 DEMONSTRATION AND INSTRUCTIONS**

- A. Demonstrate operation and maintenance of products to Owner's personnel a minimum of 48 hours prior to date of Final Completion in accordance with Owner's requirements.
- B. Demonstrate Project equipment instructed by qualified manufacturer's representative who is knowledgeable about the Project and equipment.
- C. For equipment or systems requiring seasonal operation, perform demonstration for other season within six (6) months.
- D. Utilize maintenance manual as basis for instruction. Review contents of manual with

Owner's personnel to explain all aspects of operation and maintenance.

- E. Demonstrate start-up, operation, control, adjustment, trouble-shooting, servicing, maintenance, and shutdown of each item of equipment.
- F. Prepare and insert additional data in maintenance manuals when needed for when additional data becomes apparent during instruction.
- G. Review and verify proper start-up and operation of equipment prior to scheduling demonstrations with Owner.
- H. All demonstrations are to be documented by video and submitted to Owner in DVD format along with the closeout documents. General Contractor is responsible for all video and compilation onto DVD with linked menus.

### **1.12 PROJECT RECORD DOCUMENTS**

- A. Project Record Documents, as described in Section 01 78 39: Project Record Documents, shall be submitted at Project closeout. Final payment will not be authorized by Architect until final review and acceptance by Architect and Engineers is achieved in accordance with Owner's requirements.
- B. At Contractor's request, and with associated fee, Architect may provide electronic versions of the construction Drawing and Specification files for Contractor's use, subject to the terms and conditions of Architect's standard electronic document transfer agreement.
- C. Submit reproducible to respective consultants (civil, structural, MEP, etc.) for review. Consultant will mark-up corrections and return to Contractor for final revisions. Make final revisions prior to submitting to Architect:
  - 1. Format: One (1) set of film positive reproducible and two (2) sets of blueprints of approved reproducible.
  - 2. Provide Owner with one (1) set of Record Drawings on a non-rewritable CD in AutoCAD® latest release.
  - 3. Provide Owner with one (1) set of Record Drawings on a non-rewritable CD in PDF format.
  - 4. Label electronic CAD files and PDF files in the same manner as the sheets (example, A2.02 First Floor Area 'A', etc.)

### **1.13 EXTRA STOCK, MATERIALS, AND MAINTENANCE PRODUCTS**

- A. Furnish extra stock, maintenance, and extra products in quantities specified in individual Specification Sections.
- B. Deliver to Project site or to District Maintenance Department as directed by Owner; obtain signed receipt from Owner's authorized representative prior to final application for payment. Delivery of materials to, or obtaining receipt from anyone other than Owner's authorized representative may constitute breach of this requirement and may require delivery of additional materials at no cost to Owner if original materials are misplaced.
- C. Include signed receipts for delivery of extra stock and materials, including keys, with closeout documents.

### **1.14 WARRANTIES, CERTIFICATES, AND BONDS**

- A. Definitions:

1. Standard product warranties: Preprinted written warranties published by individual manufacturers for particular products and are specifically endorsed by the manufacturer to Owner.
  2. Special warranties: Written warranties required by or incorporated in the Contract Documents, either to extend time limits provided by standard warranties or to provide coverage of specific defects, or both.
- B. In accordance with the general warranty obligations under the General Conditions as amended by the Supplementary Conditions, General Contractor's warranty shall be for a period of one (1) year following the date of Substantial Completion, hereinafter called the one-year warranty period. Contractor's one (1) year general warranty shall include all labor, material, and delivery costs required to correct defective material and installation. This warranty shall not limit Owner's rights with respect to latent defects, gross mistakes, or fraud.
- C. Contractor's one (1) year warranty shall run concurrently with the one (1) year period for correction of Work required in the General Conditions.
- D. No service charges or call out charges are allowed to investigate warranty claims.
- E. In addition to Contractor's one (1) year warranty, special warranties, as described in individual Specifications Sections, shall extend the warranty period for the period specified without limitation in respect to other obligations for which Contractor has under the Contract Documents.
- F. Manufacturer's disclaimers and limitations on product warranties do not relieve Contractor of the warranty on the Work that incorporates the products, nor does it relieve the suppliers, manufacturers, and subcontractors required to countersign special warranties with Contractor.
- G. Warranty Requirements:
1. When correcting warranted Work that has failed, remove and replace other Work that has been damaged as a result of such failure or that must be removed and replaced to provide access for correction of warranted Work.
  2. When Work covered by a warranty has failed and been corrected by replacement or reconstruction, reinstate the warranty by written endorsement. The reinstated warranty shall be equal to the original warranty with an equitable adjustment for depreciation.
  3. Upon determination that Work covered by a warranty has failed, replace or rebuild the Work to an acceptable condition complying with requirements of Contract Documents. Contractor is responsible for the cost of replacing defective Work regardless of whether Owner has benefited from use of the Work through a portion of its anticipated useful service life.
  4. Written warranties made to Owner are in addition to implied warranties, and shall not limit the duties, obligations, rights, and remedies otherwise available under the law, nor shall warranty periods be interpreted as limitations on time in which Owner can enforce such other duties, obligations, rights, or remedies.
  5. Owner reserves the right to refuse to accept Work for the Project where a special warranty, certification, or similar commitment is required on such Work or designated portion of the Work, until evidence is presented that entities required to countersign such commitments are willing to do so.
- H. Compile copies of each required warranty properly executed by Contractor and the Subcontractor, supplier, or manufacturer. Verify documents are in proper form, contain full information, and are notarized. Co-execute warranties, certificates, and bonds when required and include signed warrantees with Closeout Documents submitted to Architect.

### **1.15 FINAL COMPLETION AND FINAL PAYMENT**

- A. Final Notice and Inspection:
  - 1. When all items on the punch list have been corrected, final cleaning has been completed, and installed work has been protected, submit written notice to Architect that the Work is ready for final inspection and acceptance.
  - 2. Upon receipt of written notice that the Work is ready for final inspection and acceptance, Architect and Engineer will make final inspection.
- B. Final Change Order: When the Project closeout items described above are successfully completed and the Work is found acceptable to Architect/Engineer and Owner, a Final Change Order will be executed. This Change Order will include any Allowance adjustments as required by the Contract Documents.
- C. Final Application for Payment: When all of the above items are successfully complete, submit to Architect a final Application for Payment and request for release of retainage.
- D. Release of Retainage: Release of retainage will not be authorized by Architect until Contractor completes all requirements for closeout to the satisfaction of Owner and Architect as described herein.

### **1.16 TERMINAL INSPECTION**

- A. Immediately prior to expiration of the one (1) year period for correction of the Work, Contractor shall make an inspection of the Work in the company of Architect and Owner. Architect and Owner shall be given not less than ten (10) days' notice prior to the anticipated date of terminal inspection.
- B. Where any portion of the work has proven to be defective and requires replacement, repair, or adjustment, Contractor shall immediately provide materials and labor necessary to remedy such defective work and shall execute such work without delay until completed to the satisfaction of Architect and Owner, even if the date of completion of the corrective work may extend beyond the expiration date of the correction period.
- C. Contractor shall not be responsible for correction of Work that has been damaged because of neglect or abuse by Owner, nor the replacement of parts necessitated by normal wear in use.

### **PART 2 PRODUCTS (NOT USED)**

### **PART 3 EXECUTION (NOT USED)**

**END OF SECTION 01 77 00**

## SECTION 01 77 10 DSA PROJECT CLOSEOUT AND CERTIFICATION PROCESS

### PART 1 GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.
- B. Related Sections:
  - 1. Section 01 31 00: Project Management and Coordination.
  - 2. Section 01 42 00: References.
  - 3. Section 01 73 00: Execution.
  - 4. Section 01 77 00: Closeout Procedures (Including forms A, B, C, and D)
  - 5. Section 01 77 22: Substantial Completion Procedures.

#### 1.2 PRE-CONSTRUCTION

- A. DSA Documents Required:
  - 1. **SSS 103 Form** to provide DSA and General Contractor with a Structural Testing and Inspections list (T&I).
  - 2. **DSA Form 5** is to be filled out for District to select a Project Inspector (P.I.) to be hired for the particular project type (Class 1, 2 or 3) required. This Project Inspector must be interviewed and approved by the Architect of Record & Structural Engineer of Record. The Project Inspector and Special Testing Laboratory must be DSA Approved.
  - 3. **Pre-Construction Meeting** will be conducted by the Design Professional. Use standard PBK-WLC Pre-Con Sheet and customize for your project. Identify and discuss regulatory responsibilities of Design Professionals, Project Inspector, Testing Lab, General Contractor, the District and DSA.
  - 4. **Provide Documents** such as DSA Approved Plans & Specs, Soils Reports, Hazard Material Report, Addendums and any Material/Color Boards to the General Contractor and Project Inspector.
  - 5. **DSA Approvals.** The Design Professionals responsibility to obtain timely DSA Approval of all Addendums, Construction Change Directives and any changes to the approved Construction Documents. These changes can be a CCD "A" or a CCD "B" to filled out on the DSA 140 Form. CCD "A" is work that effects changes to Structural Safety, Fire Life Safety or Access Compliance. CCD "B" is all other work that will make DSA aware of other important changes but do not affect Structural Safety, Fire Life Safety or Access Compliance. (Simple color of paint or floor finish, cabinet finishes for example are not to be submitted). Deferred Approvals by DSA will be the responsibility of the General Contractor.
  - 6. **Submit DSA Form 102** for Construction Start Notice and Inspection Card Request. This form will include Notice of Construction Start Date, information on the School District, Scope of Work, Listing of Project Participants (Design Professionals, Project Inspector, In-Plant Inspector if any, General Contractor, Laboratory of Record, Geotechnical Engineer, Project Delivery Method, Collaborators for DSA Box Type of Access granted).

#### 1.3 CONSTRUCTION

- A. Project Review:
  - 1. **Project Inspector** shall provide continuous inspection during construction, provide daily and semi-monthly reports of progress of the scope of work to the District, the Design Professionals and DSA. Participate in resolutions for questions from the

contractor and report the status of DSA Field Trip Note issues. Provide a current written record of all work inspected and monitor testing and special inspections required. The Project Inspector will notify contractor of any defective work or deviation from the DSA Approved Plans. If this work is not corrected a Deviation Notice will be issued by the P.I. This can sometimes require the Design Professionals to issue a CCD to DSA for Approval of additional or amended construction documents.

2. **Design Professional** shall observe the construction, obtain deviations from the approved documents by means of COs, CCDs, RFIs, PCOs, ASIs, etc. Resolve DSA Field Trip Note issues.
3. **General Contractors** shall construct the project per the approved plans, timely corrections of Deviations noted by the Project Inspector or Design Professionals and timely submission of Deferred Approvals.
4. **Testing Laboratory** shall provide material testing and special inspections, submit all materials testing and special inspections reports to DSA, Design Professional, Structural Engineer, and Project Inspector.

#### 1.4 CLOSE OUT & CERTIFICATION

##### A. Project Closeout:

1. Contractor shall notify the Design Professional & the District when they are completed enough to have a Punch Walk conducted. After the Punch List items have been completed the contractor shall notify the Design Professionals for issuance of a Notice of Substantial Completion that will start the warranty process for work completed.
2. **Certification is a letter** issued by DSA Certifying that the building project has been completed in accordance with requirements as to the safety and design of the Education Code sections 17280-17316 and 81130-81147. Without Certification the School Board has liability for an future damage to public safety and DSA will be unable to approve plans affecting uncertified construction at any time in the future.
3. **Closing document** should be obtained and submitted to DSA as soon as they become obtainable. Close out is initiated by the DSA Field Engineer. DSA will issue a 90 Day Letter requesting outstanding documents or unresolved issued that are required. All these need to be resolved prior to DSA issuing letter of certification.
4. **District responsibilities** include issuing Notice of Completion and submit fee to DSA invoices. DSA Form 168 for final cost of construction and submit to DSA.
5. **Design Professionals responsibilities** include resolving any outstanding issues related to the DSA 90 Day Letter, and submit a Verified Report DSA Form 6A/E.
6. **Contractors & Project Inspectors responsibilities** include submit Verified Report DSA Form 6.
7. **Laboratories responsibilities** include submit Lab Verified Report DSA Form 291, Special Inspection Verified Report DSA Form 292, and submit Geotechnical Verified Report DSA Form 293.

END OF SECTION 01 77 10



## **SECTION 01 77 22 SUBSTANTIAL COMPLETION PROCEDURES**

### **PART 1 GENERAL**

#### **1.1 RELATED DOCUMENTS**

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

#### **1.2 SUMMARY**

- A. Section includes administrative and procedural requirements for Contract closeout, including, but not limited to, Substantial Completion procedures.
- B. Related Sections:
  - 1. Section 01 77 00: Closeout Procedures.

#### **1.3 SUBMITTALS**

- A. Contractor's List of Incomplete Items (Punch List): Initial submittal at Substantial Completion.

#### **1.4 SUBSTANTIAL COMPLETION PROCEDURES**

- A. Contractor's List of Incomplete Items: Prepare and submit a list of items to be completed and corrected (Contractor's punch list), indicating the value of each item on the list and reasons why the Work is incomplete.
- B. Submittals Prior to Substantial Completion:
  - 1. Minimum of ten (10) days prior to requesting an inspection for determining date of Substantial Completion. List items that are incomplete at time of request:
    - a. Certificates of release: Obtain and submit releases from all (i.e. city, county, authorities) authorities having jurisdiction permitting Owner unrestricted use of the Work and access to services and utilities. Include occupancy permits, operating certificates, and similar releases.
    - b. Submit closeout submittals, including Project record documents, operation and maintenance manuals, final completion construction photographic documentation, damage or settlement surveys, property surveys, and similar final record information.
    - c. Submit closeout submittals specified in individual Sections, including specific warranties, workmanship bonds, maintenance service agreements, final certifications, and similar documents.
    - d. Submit maintenance material submittals specified in individual Sections, including tools, spare parts, extra materials, and similar items, and deliver to location designated by Architect. Label with manufacturer's name and model number where applicable:
      - 1) List of extra materials: Prepare and submit schedule of maintenance material submittal items, including name and quantity of each item and name and number of related Specification Section. Obtain Architect's signature for receipt of submittals.
    - e. Submit test/adjust/balance records from Owner vendor.
    - f. Submit changeover information related to Owner's occupancy, use, operation, and maintenance.

- C. Procedures Prior to Substantial Completion:
1. A minimum of ten (10) days prior to requesting inspection for determining date of Substantial Completion, submit list items that are incomplete at time of request:
    - a. Advise Owner of pending insurance changeover requirements.
    - b. Make final changeover of permanent locks and deliver keys to Owner. Advise Owner's personnel of changeover in security provisions.
    - c. Complete startup and testing of systems and equipment.
    - d. Perform preventive maintenance on equipment used prior to Substantial Completion.
    - e. Instruct Owner's personnel in operation, adjustment, and maintenance of products, equipment, and systems. Submit demonstration and training video recordings as applicable.
    - f. Advise Owner of changeover in heat and utilities.
    - g. Participate with Owner in conducting inspection and walkthrough with local emergency responders.
    - h. Terminate and remove temporary facilities from site, including mockups, construction tools, and similar elements, and restore or configure area to required or original condition.
    - i. Complete final cleaning requirements, including touchup painting.
    - j. Touch up and otherwise repair and restore marred exposed finishes to eliminate visual defects.
    - k. Conditional lien regulations.
- D. Inspection:
1. Submit written request for inspection to determine Substantial Completion a minimum of ten (10) days prior to date the Work will be completed and ready for final inspection and tests. On receipt of request, Architect will either proceed with inspection or notify Contractor of unfulfilled requirements. Architect will prepare the Certificate of Substantial Completion after inspection or will notify Contractor of items, either on Contractor's list or additional items identified by Architect, that must be completed or corrected before certificate will be issued:
    - a. Re-inspection: Request re-inspection when the Work identified in previous inspections as incomplete is completed or corrected.
    - b. Results of completed inspection will form the basis of requirements for final completion.

## **PART 2 PRODUCTS (NOT USED)**

## **PART 3 EXECUTION**

### **3.1 FINAL CLEANING**

- A. Perform Final Cleaning:
1. Conduct cleaning and waste-removal operations to comply with local laws and ordinances, and Federal and local environmental and antipollution regulations.
  2. Employ experienced workers or professional cleaners for final cleaning. Clean each surface or unit to condition expected in an average commercial building cleaning and maintenance program. Comply with manufacturer's written instructions:
    - a. Complete cleaning operations before requesting inspection for certification of Substantial Completion for entire Project or for a designated portion of Project. Cleaning activities include but are not limited to:
      - 1) Clean site, yard, and grounds, in areas disturbed by construction activities, including landscape development areas, of rubbish, waste material, litter, and other foreign substances.
      - 2) Sweep paved areas broom clean. Remove petrochemical spills, stains, and

- foreign deposits.
- 3) Rake grounds that are neither planted nor paved to a smooth, even-textured surface.
  - 4) Remove tools, construction equipment, machinery, and surplus material from Project site.
  - 5) Remove snow and ice to provide safe access to building.
  - 6) Clean exposed exterior and interior hard-surfaced finishes to a dirt-free condition, free of stains, films, and similar foreign substances. Avoid disturbing natural weathering of exterior surfaces. Restore reflective surfaces to their original condition.
  - 7) Remove debris and surface dust from limited access spaces, including roofs, plenums, shafts, trenches, equipment vaults, manholes, attics, and similar spaces.
  - 8) Sweep concrete floors broom clean in unoccupied spaces.
  - 9) Vacuum carpet and similar soft surfaces, removing debris and excess nap; clean according to manufacturer's recommendations if visible soil or stains remain.
  - 10) Clean transparent materials, including mirrors and glass in doors and windows. Remove glazing compounds and other noticeable, vision-obscuring materials. Polish mirrors and glass, taking care not to scratch surfaces.
  - 11) Remove labels that are not permanent.
  - 12) Wipe surfaces of mechanical and electrical equipment, elevator equipment, and similar equipment. Remove excess lubrication, paint and mortar droppings, and other foreign substances.
  - 13) Clean plumbing fixtures to a sanitary condition, free of stains, including stains resulting from water exposure.
  - 14) Replace disposable air filters and clean permanent air filters. Clean exposed surfaces of diffusers, registers, and grills.
  - 15) Clean ducts, blowers, and coils if units were operated without filters during construction or that display contamination with particulate matter on inspection:
    - a) Clean HVAC system in compliance with NADCA Standard ACR 2013. Provide written report on completion of cleaning.
  - 16) Clean light fixtures, lamps, globes, and reflectors to function with full efficiency.
  - 17) Leave Project clean and ready for occupancy.
- B. Pest Control:
1. Comply with pest control requirements in Division 01: General Requirements. Prepare written report.
- C. Construction Waste Disposal:
1. Comply with waste disposal requirements.

**END OF SECTION 01 77 22**

## **SECTION 01 78 23 OPERATION AND MAINTENANCE DATA**

### **PART 1 GENERAL**

#### **1.1 RELATED DOCUMENTS**

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

#### **1.2 SUMMARY**

- A. Section includes administrative and procedural requirements for preparing operation and maintenance manuals, including the following:
  1. Operation and maintenance documentation directory manuals.
  2. Emergency manuals.
  3. Systems and equipment operation manuals.
  4. Systems and equipment maintenance manuals.
  5. Product maintenance manuals.

#### **1.3 DEFINITIONS**

- A. Subsystem: A portion of a system with characteristics similar to a system.
- B. System: An organized collection of parts, equipment, or subsystems united by regular interaction.

#### **1.4 SUBMITTALS**

- A. Submit operation and maintenance manuals indicated. Provide content for each manual as specified in individual Specification Sections, and as reviewed and approved at the time of Section submittals. Submit reviewed manual content formatted and organized as required by this Section:
  1. Architect will comment on whether content of operation and maintenance submittals is acceptable.
  2. Where applicable, clarify and update reviewed manual content to correspond to revisions and field conditions.
- B. Format:
  1. Submit operation and maintenance manuals in the following format:
    - a. Submit on digital media acceptable to Architect or by uploading to web-based project software site or by email to Architect. Enable reviewer comments on draft submittals.
    - b. Submit three (3) paper copies. Architect will return two (2) copies.
- C. Initial Manual Submittal: Submit draft copy of each manual at least 30 days before commencing demonstration and training. Architect will comment on whether general scope and content of manual are acceptable.
- D. Final Manual Submittal:
  1. Submit each manual in final form prior to requesting inspection for Substantial Completion and at least 15 days before commencing demonstration and training. Architect will return copy with comments:
    - a. Correct or revise each manual to comply with Architect's and Commissioning Authority's comments. Submit copies of each corrected manual within 15 days of

receipt of Architect's comments and prior to commencing demonstration and training.

- E. Comply with Section 01 77 00: Closeout Procedures for schedule for submitting operation and maintenance documentation. Where applicable use 01 91 13: General Commissioning Requirements.

## 1.5 FORMAT OF OPERATION AND MAINTENANCE MANUALS

- A. Manuals, Electronic Files:
  - 1. Submit manuals in the form of a multiple file composite electronic PDF file for each manual type required:
    - a. Electronic files: Use electronic files prepared by manufacturer where available. Where scanning of paper documents is required, configure scanned file for minimum readable file size.
    - b. File names and bookmarks: Bookmark individual documents based on file names. Name document files to correspond to system, subsystem, and equipment names used in manual directory and table of contents. Group documents for each system and subsystem into individual composite bookmarked files, then create composite manual, so that resulting bookmarks reflect the system, subsystem, and equipment names in a readily navigated file tree. Configure electronic manual to display bookmark panel on opening file.
- B. Manuals, Paper Copy:
  - 1. Submit manuals in the form of hard-copy, bound and labeled volumes:
    - a. Binders:
      - 1) Heavy-duty, three-ring, vinyl-covered, loose-leaf binders, in thickness necessary to accommodate contents, sized to hold 8-1/2 by 11-inch (215 mm X 280 mm) paper, with clear plastic sleeve on spine to hold label describing contents and with pockets inside covers to hold folded oversize sheets:
        - a) If two (2) or more binders are necessary to accommodate data of a system, organize data in each binder into groupings by subsystem and related components. Cross-reference other binders if necessary to provide essential information for proper operation or maintenance of equipment or system.
        - b) Identify each binder on front and spine, with printed title "OPERATION AND MAINTENANCE MANUAL," Project title or name, and subject matter of contents, and indicate Specification Section number on bottom of spine. Indicate volume number for multiple-volume sets.
    - b. Dividers: Heavy-paper dividers with plastic-covered tabs for each section of the manual. Mark each tab to indicate contents. Include typed list of products and major components of equipment included in the section on each divider, cross-referenced to Specification Section number and title of Project manual.
    - c. Protective plastic sleeves: Transparent plastic sleeves designed to enclose diagnostic software storage media for computerized electronic equipment. Enclose title pages and directories in clear plastic sleeves.
    - d. Supplementary text: Prepared on 8-1/2 by 11-inch (215 mm X 280 mm) white bond paper.
    - e. Drawings:
      - 1) Attach reinforced, punched binder tabs on Drawings and bind with text:
        - a) If oversize Drawings are necessary, fold Drawings to same size as text pages and use as foldouts.
        - b) If Drawings are too large to be used as foldouts, fold and place Drawings in labeled envelopes and bind envelopes in rear of manual. At appropriate locations in manual, insert typewritten pages indicating Drawing titles, descriptions of contents, and Drawing locations.

## 1.6 REQUIREMENTS FOR EMERGENCY, OPERATION, AND MAINTENANCE MANUALS

- A. Organization of Manuals:
  - 1. Unless otherwise indicated, organize each manual into a separate section for each system and subsystem, and a separate section for each piece of equipment not part of a system. Each manual shall contain the following materials, in the order listed:
    - a. Title page.
    - b. Table of contents.
    - c. Manual contents.
- B. Title Page:
  - 1. Include the following information:
    - a. Subject matter included in manual.
    - b. Name and address of Project.
    - c. Name and address of Owner.
    - d. Date of submittal.
    - e. Name and contact information for Contractor.
    - f. Name and contact information for Construction Manager.
    - g. Name and contact information for Architect.
    - h. Name and contact information for commissioning authority.
    - i. Names and contact information for major consultants to Architect that designed the systems contained in the manuals.
    - j. Cross-reference to related systems in other operation and maintenance manuals.
- C. Table of Contents:
  - 1. List each product included in manual, identified by product name, indexed to the content of the volume, and cross-referenced to Specification Section number in Project Manual:
    - a. If operation or maintenance documentation requires more than one volume to accommodate data, include comprehensive table of contents for all volumes in each volume of the set.
- D. Manual Contents: Organize into sets of manageable size. Arrange contents alphabetically by system, subsystem, and equipment. If possible, assemble instructions for subsystems, equipment, and components of one system into a single binder.
- E. Identification: In the documentation directory and in each operation and maintenance manual, identify each system, subsystem, and piece of equipment with same designation used in the Contract Documents. If no designation exists, assign a designation according to ASHRAE Guideline 4, "Preparation of Operating and Maintenance Documentation for Building Systems."

## 1.7 OPERATION AND MAINTENANCE DOCUMENTATION DIRECTORY MANUAL

- A. Operation and Maintenance Documentation Directory:
  - 1. Prepare a separate manual that provides an organized reference to emergency, operation, and maintenance manuals. List items and their location to facilitate ready access to desired information. Include the following:
    - a. List of systems and subsystems: List systems alphabetically. Include references to operation and maintenance manuals that contain information about each system.
    - b. List of equipment: List equipment for each system, organized alphabetically by system. For pieces of equipment not part of system, list alphabetically in separate list.
    - c. Tables of contents: Include a table of contents for each emergency, operation, and maintenance manual.

## 1.8 EMERGENCY MANUALS

- A. Emergency Manual: Assemble a complete set of emergency information indicating procedures for use by emergency personnel and by Owner's operating personnel for types of emergencies indicated.
- B. Content:
  - 1. Organize manual into a separate section for each of the following:
    - a. Type of emergency.
    - b. Emergency instructions.
    - c. Emergency procedures.
- C. Type of Emergency:
  - 1. Where applicable for each type of emergency indicated below, include instructions and procedures for each system, subsystem, piece of equipment, and component:
    - a. Fire.
    - b. Flood.
    - c. Gas leak.
    - d. Water leak.
    - e. Power failure.
    - f. Water outage.
    - g. System, subsystem, or equipment failure.
    - h. Chemical release or spill.
- D. Emergency Instructions: Describe and explain warnings, trouble indications, error messages, and similar codes and signals. Include responsibilities of Owner's operating personnel for notification of Installer, supplier, and manufacturer to maintain warranties.
- E. Emergency Procedures:
  - 1. Include the following, as applicable:
    - a. Instructions on stopping.
    - b. Shutdown instructions for each type of emergency.
    - c. Operating instructions for conditions outside normal operating limits.
    - d. Required sequences for electric or electronic systems.
    - e. Special operating instructions and procedures.

## 1.9 SYSTEMS AND EQUIPMENT OPERATION MANUALS

- A. Systems and Equipment Operation Manual:
  - 1. Assemble a complete set of data indicating operation of each system, subsystem, and piece of equipment not part of a system. Include information required for daily operation and management, operating standards, and routine and special operating procedures:
    - a. Engage a factory-authorized service representative to assemble and prepare information for each system, subsystem, and piece of equipment not part of a system.
    - b. Prepare a separate manual for each system and subsystem, in the form of an instructional manual for use by Owner's operating personnel.
- B. Content:
  - 1. In addition to requirements in this Section, include operation data required in individual Specification Sections and the following information:
    - a. System, subsystem, and equipment descriptions. Use designations for systems and equipment indicated on Contract Documents.
    - b. Performance and design criteria if Contractor has delegated design responsibility.
    - c. Operating standards.

- d. Operating procedures.
  - e. Operating logs.
  - f. Wiring diagrams.
  - g. Control diagrams.
  - h. Piped system diagrams.
  - i. Precautions against improper use.
  - j. License requirements including inspection and renewal dates.
- C. Descriptions:
- 1. Include the following:
    - a. Product name and model number. Use designations for products indicated on Contract Documents.
    - b. Manufacturer's name.
    - c. Equipment identification with serial number of each component.
    - d. Equipment function.
    - e. Operating characteristics.
    - f. Limiting conditions.
    - g. Performance curves.
    - h. Engineering data and tests.
    - i. Complete nomenclature and number of replacement parts.
- D. Operating Procedures:
- 1. Include the following, as applicable:
    - a. Startup procedures.
    - b. Equipment or system break-in procedures.
    - c. Routine and normal operating instructions.
    - d. Regulation and control procedures.
    - e. Instructions on stopping.
    - f. Normal shutdown instructions.
    - g. Seasonal and weekend operating instructions.
    - h. Required sequences for electric or electronic systems.
    - i. Special operating instructions and procedures.
- E. Systems and Equipment Controls: Describe the sequence of operation and diagram controls as installed.
- F. Piped Systems: Diagram piping as installed and identify color coding where required for identification.

#### **1.10 SYSTEMS AND EQUIPMENT MAINTENANCE MANUALS**

- A. Systems and Equipment Maintenance Manuals:
- 1. Assemble a complete set of data indicating maintenance of each system, subsystem, and piece of equipment not part of a system. Include manufacturers' maintenance documentation, preventive maintenance procedures and frequency, repair procedures, wiring and systems diagrams, lists of spare parts, and warranty information:
    - a. Engage a factory-authorized service representative to assemble and prepare information for each system, subsystem, and piece of equipment not part of a system.
    - b. Prepare a separate manual for each system and subsystem, in the form of an instructional manual for use by Owner's operating personnel.
- B. Content: For each system, subsystem, and piece of equipment not part of a system, include source information, manufacturers' maintenance documentation, maintenance procedures, maintenance and service schedules, spare parts list and source information, maintenance service contracts, and warranties and bonds as described below.



- C. Source Information: List each system, subsystem, and piece of equipment included in manual, identified by product name and arranged to match manual's table of contents. For each product, list name, address, and telephone number of installer or supplier and maintenance service agent, and cross-reference Specification Section number and title in Project manual and Drawing or schedule designation or identifier where applicable.
- D. Manufacturers' Maintenance Documentation:
  - 1. Include the following information for each component part or piece of equipment:
    - a. Standard maintenance instructions and bulletins:
      - 1) Include only sheets pertinent to product or component installed. Mark each sheet to identify each product or component incorporated into the Work. If data include more than one (1) item in a tabular format, identify each item using appropriate references from the Contract Documents. Identify data applicable to the Work and delete references to information not applicable:
        - a) Prepare supplementary text if manufacturers' standard printed data are not available and where the information is necessary for proper operation and maintenance of equipment or systems.
    - b. Drawings, diagrams, and instructions required for maintenance, including disassembly and component removal, replacement, and assembly.
    - c. Identification and nomenclature of parts and components.
    - d. List of items recommended to be stocked as spare parts.
- E. Maintenance Procedures:
  - 1. Include the following information and items that detail essential maintenance procedures:
    - a. Test and inspection instructions.
    - b. Troubleshooting guide.
    - c. Precautions against improper maintenance.
    - d. Disassembly; component removal, repair, and replacement; and reassembly instructions.
    - e. Aligning, adjusting, and checking instructions.
    - f. Demonstration and training video recording, if available.
- F. Maintenance and Service Schedules:
  - 1. Include service and lubrication requirements, list of required lubricants for equipment, and separate schedules for preventive and routine maintenance and service with standard time allotment:
    - a. Scheduled maintenance and service: Tabulate actions for daily, weekly, monthly, quarterly, semiannual, and annual frequencies.
    - b. Maintenance and service record: Include manufacturers' forms for recording maintenance.
- G. Spare Parts List and Source Information: Include lists of replacement and repair parts, with parts identified and cross-referenced to manufacturers' maintenance documentation and local sources of maintenance materials and related services.
- H. Maintenance Service Contracts: Include copies of maintenance agreements with name and telephone number of service agent.
- I. Warranties and Bonds:
  - 1. Include copies of warranties and bonds and lists of circumstances and conditions that would affect validity of warranties or bonds:
    - a. Include procedures to follow and required notifications for warranty claims.
- J. Drawings:
  - 1. Prepare Drawings supplementing manufacturers' printed data to illustrate the

relationship of component parts of equipment and systems and to illustrate control sequence and flow diagrams. Coordinate these Drawings with information contained in record Drawings to ensure correct illustration of completed installation:

- a. Do not use original Project record documents as part of maintenance manuals.

### **1.11 PRODUCT MAINTENANCE MANUALS**

- A. Product Maintenance Manual: Assemble a complete set of maintenance data indicating care and maintenance of each product, material, and finish incorporated into the Work.
- B. Content: Organize manual into a separate section for each product, material, and finish. Include source information, product information, maintenance procedures, repair materials and sources, and warranties and bonds, as described below.
- C. Source Information: List each product included in manual, identified by product name and arranged to match manual's table of contents. For each product, list name, address, and telephone number of installer or supplier and maintenance service agent, and cross-reference Specification Section number and title in Project manual and Drawing or schedule designation or identifier where applicable.
- D. Product Information:
  1. Include the following, as applicable:
    - a. Product name and model number.
    - b. Manufacturer's name.
    - c. Color, pattern, and texture.
    - d. Material and chemical composition.
    - e. Reordering information for specially manufactured products.
- E. Maintenance Procedures:
  1. Include manufacturer's written recommendations and the following:
    - a. Inspection procedures.
    - b. Types of cleaning agents to be used and methods of cleaning.
    - c. List of cleaning agents and methods of cleaning detrimental to product.
    - d. Schedule for routine cleaning and maintenance.
    - e. Schedule for annual inspection and reports.
    - f. Repair instructions.
- F. Repair Materials and Sources: Include lists of materials and local sources of materials and related services.
- G. Warranties and Bonds:
  1. Include copies of warranties and bonds and lists of circumstances and conditions that would affect validity of warranties or bonds:
    - a. Include procedures to follow and required notifications for warranty claims.

### **PART 2 PRODUCTS (NOT USED)**

### **PART 3 EXECUTION (NOT USED)**

**END OF SECTION 01 78 23**

## **SECTION 26 05 00 COMMON WORK RESULTS FOR ELECTRICAL**

### **PART 1 GENERAL**

#### **1.1 RELATED DOCUMENTS**

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

#### **1.2 SUMMARY**

- A. This Section Includes:
  - 1. Electrical work described in these plans and specifications including but not limited to, raceways, boxes, enclosures, feeders, branch circuiting, supports, terminal cabinets, sleeves, gutters, panels, transformers, switchgear, lighting fixtures, controls, relays, contactors, in order to complete and make fully functional the systems described.
  - 2. Complete fire alarm system as shown.
  - 3. Lighting systems, both interior and exterior, including controls.
  - 4. HVAC and plumbing electrical.
  - 5. Service and Distribution.
  - 6. Data systems infrastructure: Pathways, backbone, and Horizontal cabling.
  - 7. Low Voltage: provide low voltage signal and communications Systems.
- B. System Description:
  - 1. The electrical plans indicate the general layout and arrangement; the architectural drawings and field conditions shall determine exact locations. Field verify existing conditions.
  - 2. Discrepancies shall be brought immediately to the attention of the Architect for clarification. Prior to rough-in, refer to architectural plans that shall take precedence over electrical plans with respect to locations.
- C. Related Work Under Other Sections:
  - 1. Mechanical Wiring: Control circuit wiring, energy management controls and interlocks for mechanical equipment shall be provided by the mechanical installer.
  - 2. Electrical provides conduits and boxes.

#### **1.3 SUBMITTALS**

- A. Before construction, submit in accordance with the General Conditions of this Specification.
- B. Provide equipment submittals where specifically required in this Division. Do not provide submittals on commodity materials.
- C. The intent of these specifications is to establish a standard of quality for materials and equipment.
- D. Substitutions shall be subject to the Architect's approval. Where the substitution will affect other trades, coordinate all changes with those trades concerned and pay any additional costs incurred by them as a result of this substitution. Approval of substitutions shall not relieve the Contractor from providing an operational system in accordance with all applicable codes and ordinances.

#### **1.4 WARRANTY**

- A. Equipment and labor shall be guaranteed and warranted free of defects, unless otherwise stated to be more restrictive, for a period of one year from the date of final acceptance by the Owner. A written warranty shall be presented to the Architect at the time of completion prior to final acceptance. Equipment deemed to be damaged, broken or failed should be repaired or replaced at no cost to the Owner. Materials or system requiring longer than a one-year warranty as described herein shall be separately warranted in separate letters of guarantee stating the duration of warranty.

## **1.5 DELIVERY, STORAGE, AND HANDLING**

- A. Storage of equipment for the job is the responsibility of the Electrical Contractor and shall be scheduled for delivery to the site, as the equipment is required. Damage to the equipment delivered to the site or in transport to the job shall be the responsibility of the Electrical Contractor.

## **PART 2 PRODUCTS**

### **2.1 MATERIALS**

- A. Materials shall be new and bear the label of or be listed by a nationally recognized testing laboratory. The quality and suitability of all materials shall conform to the standards and practices of this trade.
- B. Supplied materials shall be of a current manufactured product line. Discontinued products are not acceptable.

## **PART 3 EXECUTION**

### **3.1 INSTALLATION**

- A. Materials shall be installed in accordance with the manufacturers' specification and recommendations.
- B. Electrical Contractor shall lay work out in advance in order to avoid unnecessary cutting, chasing, and drilling of floors, walls, ceilings and other surfaces. Approval for cuts or penetrations in structural members shall be by the Architect.
- C. Supporting Devices:
  - 1. Verify mounting height of all luminaires or items prior to installation when heights are not detailed.
  - 2. Install vertical support members for equipment and luminaires, straight and parallel to building walls.
  - 3. Support conduits within 18" of outlets, boxes, panels, cabinets and deflections. Maximum distance between supports not to exceed spacing per CEC.
  - 4. Securely suspend all junction boxes, pull boxes or other conduit terminating housings located above suspended ceiling from the floor above or roof structure to prevent sagging and swaying.
  - 5. Provide seismic bracing per UBC requirements for this building location.
  - 6. Supporting Devices: Safety factor of 4 required for every fastening device or support for electrical equipment installed. Support to withstand four times weight of equipment it supports. Bracing to comply with seismic design category as per Structural Engineer.
- D. Coordinate work with other trades as required to eliminate any delays during construction.

- E. Record Drawings: Provide an accurate set of field record drawings marked up in a neat and understandable manner. The drawings shall dimension all electrical facilities including but not limited to underground conduit, vaults, boxes as well as conduit routing scaled to within 12" of actual field conditions and shall be kept up to date reflecting changes or deviations. Refer to the general conditions of these specifications for additional requirements. Record drawings shall be required to identify both horizontal and vertical dimensions to visible and fixed points such as concrete, asphalt, buildings, sidewalks, etc.
- F. Identification: Provide engraved laminated plastic nameplates for switchboards, panelboards, fire alarm cabinets, backboards, control panels, time clocks, contactors and safety disconnect switches accurately identifying each device. Labels shall be attached to the equipment by means of screws or rivets. Self-adhering labels will not be acceptable. Provide black-on white (Normal) or white-on red (Emergency).
- G. Safety: Maintain equipment in a safe and responsible manner. Provide barriers, trench plates, flags, tape, etc.
- H. Operating and Installation Manuals: Provide two copies each of manuals, operating and installation instructions for equipment indicated in submittal packages. Instruct the Owner's representative as to the operation and location of equipment necessary to allow them to operate the facility upon final acceptance.

End of Section 26 05 00

## **SECTION 26 05 19 LINE-VOLTAGE POWER CONDUCTORS**

### **PART 1 GENERAL**

#### **1.1 RELATED DOCUMENTS**

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

#### **1.2 SUMMARY**

- A. Section includes:
  - 1. Wires and cables.
  - 2. Connectors.
  - 3. Splice Kits.
- B. System Description: Conductors and accessories.
  - 1. Provide for a complete electrical system.

#### **1.3 SUBMITTALS**

- A. Provide product data for the following equipment: None.

#### **1.4 QUALITY ASSURANCE**

- A. Regulatory Requirements:
  - 1. Furnish products listed by UL.

### **PART 2 PRODUCTS**

#### **2.1 MANUFACTURERS**

- A. Wires and Cables: General Cable, Okonite, Southwire, or approved equal.
- B. Connectors: Burndy, IlSCO, Thomas & Betts, or approved equal. Wire connectors shall be minimum 75 degree centigrade rated and properly sized for the number of conductors being connected, terminated, spliced etc. All above grade connectors shall be solderless lug or plastic wire nut type, screw on, pressure cable type (wire nut or spring nut type), 600 Volt, 105-degree C, with skirt to cover all portions of stripped wires. Connector shall be U.L. rated for number and size of conductors being joined together as a splice.
- C. Splices:
  - 1. Branch Circuit Splices: Ideal, 3M, or approved equal.
  - 2. Feeder Splices: Compression or tapped split bolt connector.

#### **2.2 LINE VOLTAGE SYSTEM POWER CONDUCTORS**

- A. Wire and Cable Shall Be:
  - 1. Copper, 600 volt rated. Conductors 12AWG, and smaller: Stranded; to 10AWG, either. Conductors 8AWG and larger, stranded.
  - 2. Phase color to be consistent at all feeder terminations; A-B-C, top to bottom, left to right, front to back. Phasing tape shall be permitted on sizes #6 and larger.
  - 3. Color Code Conductors as Follows:

PHASE	208 VOLT	240 VOLT DELTA	480 VOLT
A	Black	Black	Brown
B.	Red	Orange (High Leg)	Orange
C.	Blue	Blue	Yellow
Neutral	White	White	White w/colored
Ground	Green	Green	Green

4. Conductors shall be copper unless otherwise noted. Minimum size for individual conductors shall be #12 AWG unless otherwise noted. Individual conductors shall be insulated with type, THHN/THWN insulation unless otherwise noted. Control, signal, communication conductors shall be as dictated by the vendor of that equipment or as specified here-in. Proper insulation type shall be used for the proper environmental application (i.e., waterproof, wet location, plenum, temperature rated). If a condition exists where the application is uncertain, contact the Engineer for direction. Contractor is responsible to follow specific cabling requirements described in other sections of this specification relative to various communications and controls systems as well as the respective riser diagrams shown on plans. If a discrepancy occurs, communicate such discrepancy to the Architect and Engineer immediately for resolution.
5. Refer to Low-Voltage System specification sections for cable requirements.

## PART 3 EXECUTION

### 3.1 INSTALLATION

- A. Ream conduits at cut ends to remove burrs. Ensure that raceways are clean and dry before installing conductors. Hold conduit bends in a pull to 270 degrees maximum. Do not exceed manufacturers recommendations on pulling tension and side-wall pressure. Protect conductor ends if not to be immediately terminated. Provide an equipment grounding conductor in receptacle and feeder circuits.
- B. Megger test feeders > 225 ampere and report results to the Architect. The minimum acceptable insulation ground resistance is 1 megohm.
- C. Insulation: Use proper insulation types where temperature and environment are a factor.
- D. Labeling: All conductors in panels, switchboards, terminal cabinets, vaults, pull boxes, and junction boxes shall be labeled with tape number markers indicating circuit number and identifying system. All labeling shall be permanent. See Section 26 05 53: Identification of Electrical Systems.
- E. All conductors, wiring, cable where installed below floor, slab or underground shall be considered wet locations, and shall be rated accordingly. Non-waterproof cabling is not allowed in any below grade or wet application.
- F. Cables routed together in cable tray shall be stacked, organized and tie wrapped together in a neat and workman like manner. Random cable routing is not acceptable.
- G. Cable and conductors routed through pull boxes and vaults shall be properly supported. Bend radius of cable or conductor shall not be less than six times the overall cable diameter.
- H. Wires and Cables:
  1. Conductor Installation:
    - a. Install conductors in raceways having adequate, code size cross-sectional area for wires indicated.
    - b. Install conductors with care to avoid damage to insulation.
    - c. Do not apply greater tension on conductors than recommended by manufacturer

- during installation.
- d. Use of pulling compounds is permitted. Clean residue from exposed conductors and raceway entrances after conductor installation.
2. Conductor Size and Quantity:
    - a. Install no conductors smaller than 12AWG unless otherwise shown (e.g. – Fire alarm and communications systems, as defined in their respective specifications sections and/or drawings).
    - b. Provide all required conductors for a fully operable system.
  3. Provide dedicated neutrals (one neutral conductor for each phase conductor). Exceptions may only be granted with Electrical Engineer approval.
  4. Conductors in Cabinets:
    - a. Cable and train all wires in panels and cabinets for power and control neatly and uniformly. Use plastic ties in panels and cabinets.
    - b. Tie and bundle feeder conductors in wireways of panelboards.
    - c. Hold conductors away from sharp metal edges.

### **3.2 FIELD QUALITY CONTROL**

- A. Tests:
  1. Test conductor insulation on feeders of 400 amp and greater for conformity with 1000 volt megohmmeter. Use Insulated Cable Engineers Association testing procedures. Minimum insulation resistance acceptable is 1 megohm for systems 600 volts and below.
  2. Test Report: Prepare a typed tabular report indicating the testing instrument, the feeder tested, amperage rating of the feeder, insulation type, voltage, the approximate length of the feeder, conduit type, and the measured resistance of the megohmmeter test. Submit report with operating and maintenance manual.

**END OF SECTION 26 05 19**



## **SECTION 26 05 33 ELECTRICAL RACEWAY AND BOXES**

### **PART 1 GENERAL**

#### **1.1 RELATED DOCUMENTS**

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

#### **1.2 SUMMARY**

- A. Section Includes:
  1. Conduit and fittings.
  2. Outlet boxes.
  3. Weatherproof outlet boxes.
  4. Junction and pull boxes.
  5. Floor boxes.
  6. Cabinets, termination cabinets.
  7. Gutters.
- B. Related Work:
  1. Installation of electrical raceways and boxes.
  2. Use UL-Listed products for raceways and boxes.
  3. Pathways are shown in a diagrammatic way and are generally accurate as to routing, Coordinate with all other trades that require space within a building. Obtain approval for installation of raceways routing through structural footings, retaining walls, columns, beams, purlins, grade beams, etc.
  4. Minimum trade size conduits: 1/2" interior and 3/4" underground.
  5. Line voltage wiring above-grade within the building shall be installed in metallic conduit.

#### **1.3 SUBMITTALS**

- A. Provide Product Data for the Following Equipment: None.

#### **1.4 QUALITY ASSURANCE**

- A. Regulatory Requirements:
  1. Conform to requirements of the CEC, latest adopted version with amendments by local AHJs.
  2. Furnish products listed by UL or other independent and nationally recognized testing firm.

### **PART 2 PRODUCTS**

#### **2.1 RACEWAYS**

- A. Underground Locations: PVC schedule 40 ducts with cemented fittings.
- B. Concealed Above-Grade Dry Locations: Electrical metallic tubing with steel set-screw fittings. Die-cast fittings are not acceptable.
- C. Terminal Connections to Motors, Damp or Wet Locations: Neoprene-covered liquid-tight flexible steel conduit with approved fittings. Include on equipment ground conductor in these

“seal-tight” cans.

- D. Dry Locations Exposed <7'-0" AFF: Galvanized rigid steel conduit with threaded fittings.
- E. Above-Grade Wet Locations: Galvanized rigid steel conduit with threaded fittings.
- F. Where structural conditions Make the use of EMT impractical, the Engineer may allow the use of flexible conduit if requested.

## 2.2 OUTLET BOXES

- A. NEMA 1 gutter, junction and pull boxes shall be fabricated from code gage steel finished in grey enamel with screw cover fronts and concentric knockouts in all sides.
- B. NEMA 3R gutter, junction and pull boxes shall be fabricated from code gage galvanized steel with screw cover fronts and concentric knockouts in the bottom only. Any penetrations to the top shall be weatherproofed in an approved manner such as “MYERS” gasketed type hub.
- C. Steel outlet boxes and plaster rings shall be galvanized STEEL, either one piece pressed or factory welded construction containing the size and number of knockouts required. Device Outlet: Installation of one or two devices at common location, minimum 4” square, minimum 1 1/2” deep. Single or 2 gang flush device plaster ring. Raco or equal.
- D. Luminaire Outlet: minimum 4” square with correct plaster ring depth, minimum 1 1/2” deep with 3/8” luminaire stud if required. Provide proper depth plaster ring on bracket outlets and on ceiling outlets.

## 2.3 JUNCTION AND PULL BOXES

- A. Construction: Provide galvanized sheet steel junction and pull boxes, with screw-on covers; of the type shape and size, to suit each respective location and installation; with welded seams and equipped with steel nuts, bolts, screws and washers.
- B. Location:
  - 1. Install junction boxes above accessible ceilings for drops into walls for receptacle outlets from overhead.
  - 2. Install junction boxes and pull boxes as required to facilitate the installation of conductors and limiting the accumulated angular sum of bends between boxes, cabinets and appliances to 270 degrees.
  - 3. Locations: Junction boxes shall be located only where necessary and only in equipment rooms, closets, and accessible attic and underfloor spaces. A horizontal distance of 24” shall separate outlet boxes on opposite sides of occupancy separation walls, fire-rated walls or partitions.
  - 4. Labeling: Junction box covers shall be marked with indelible ink indicated the circuit numbers passing through the box.

## 2.4 FLOOR BOXES - SINGLE GANG

- A. Construction: Deep cast iron fully adjustable before and after concrete pour with all required components for complete activation. Verify required components for application of service fittings, covers, monuments, and the like, attached to floor boxes.
- B. Activations:
  - 1. Flush: Provide brass duplex or single signal cover, hinged with set screw lock. Carpet

- or tile finish ring.
2. Monuments: Provide stainless steel monuments with power receptacle or data grommet as noted.
  3. Coordinate specific application of systems as noted on Drawings.

## **2.5 FLOOR BOXES - MULTIPLE GANG**

- A. Construction: Deep cast iron, fully adjustable before and after pour. Equal to Walker/Wiremold RFB Series or Walker Omnibox multi-service floor box with carpet plates, and/or water resistant device covers. Verify color. Partition for different power or signal applications. Provide required power receptacle devices and signal grommets or receptacles as noted. Flange type shall be compatible with floor covering for either carpet or vinyl as required and shall be brass type not polycarbonate.
- B. Floor mounted boxes shall be water tight and cast iron when installed in grade level concrete slab floor, fully adjustable with interior and exterior leveling screws. Receptacle flange shall be brass with a duplex lift lid. Flange type shall be compatible with floor type. Before installation, coordinate exact location with Architect.

## **PART 3 EXECUTION**

### **3.1 PVC SCHEDULE 40**

- A. PVC conduit shall be formed or field bent only with the use of properly approved bending Conduits shall be cut square and reamed of burrs. Approved and compatible glue shall be used on all PVC fittings to attain watertight joints.

### **3.2 GALVANIZED RIGID STEEL (GRS)**

- A. Conduits shall be cut square and reamed to remove burrs and sharp edges. Strap conduit below 8' above grade at 5' intervals. Threaded ends entering a junction box of any type shall require one locknut on the inside and one on the outside of the enclosure and be provided with a plastic bushing or grounding bushing where necessary for proper grounding. Where exposed to moisture, a watertight hub or other approved method shall be required. All conduits shall be stubbed up straight and uniform into junction boxes, panels, cabinets, etc., and shall be (GRS) properly supported and strapped.

### **3.3 ELECTRICAL METALLIC TUBING (EMT)**

- A. Connectors and couplings shall be steel insulated set screw type where installed in indoor dry locations not subject to moisture. Where the potential for moisture is present, compression type weathertight fittings are required. One hole conduit straps are permitted from 1/2" to 1" and two hole conduit straps are required for size 1 1/4" and larger. Install ground wire in EMT conduits for receptacle and power circuits.

### **3.4 FLEXIBLE GALVANIZED STEEL**

- A. Flexible conduit shall not exceed a total directional change of 270 bending degrees in any one run between conduit terminations. Squeeze type or Jake type steel flex fittings of a grounding type are required. Flexible conduit must be supported in accordance with CEC. Flexible conduit may not be used where exposed except for last 2' of equipment connection and unless otherwise noted or approved. A copper ground wire sized per CEC 250-122 shall be installed in all flexible conduit runs. Flexible conduit may not be used exposed. Connect recessed lighting fixtures to conduit runs with a maximum of 6' of flexible metal conduit extending from junction box to fixture.

### **3.5 TRANSITION FROM UNDERGROUND**

- A. Underground PVC-40 branch circuit conduits may rise concealed to out outlet box at maximum +18" AFF where conceal. For boxes higher than +18", transition to EMT at approximately +12".
- B. Underground PVC-40 feeder conduits may rise concealed to a cabinet bottom at maximum +18" AFF. If the riser extends greater than +18", then transition to EMT at approximately +12".
- C. Underground PVC-40 conduits with exposed risers shall transition within the first 6" above grade to (Typically) galvanized rigid steel.
- D. The clear intent here is to avoid placing galvanized rigid steel conduits in contact with earth or concrete.

### **3.6 CONDUIT SUPPORTS**

- A. Conduit runs may be supported by one-hole and two-hole straps or supports as manufactured by Unistrut, Minerallac, Caddy or equals. Supports may be fastened by means of anchors, shields, beam clamps, toggle bolts, or other approved methods appropriate for the application and size of conduit. Pipe nailers (J-hooks) may only be used for 1" conduit and smaller and only in wood frame construction. Conduit support methods are subject to review by the engineer and authority having jurisdiction for adequacy. Installations deemed inadequate shall be corrected by the contractor at no cost to the Owner.

### **3.7 CONDUIT STUB-OUTS**

- A. Below grade shall be capped with plastic cap

### **3.8 CONFLICTS WITH FOUNDATIONS**

- A. Conduits, routed below footings, slabs, grade beams, columns, and other structural elements shall be installed in compliance with structural details and criteria shown on structural plans. Clearances below structural elements and sleeves through structural elements must be carefully planned to avoid conflict and must be approved by the structural engineer if conflict arises.

### **3.9 FIRE PENETRATIONS**

- A. All conduit or raceways passing through fire rated walls, floors, or ceilings shall be installed with a listed penetration method which protects the opening to the same rating as the assembly and is non hardening.

### **3.10 COORDINATE OUTLET PLACEMENT**

- A. Coordinate electrical device locations with the architectural floor plan and interior and exterior elevations to prevent mounting devices within elements that they may conflict such as cabinetry, mirrors, planters, etc.
- B. .

**END OF SECTION 26 05 33**

## **SECTION 28 31 00 FIRE DETECTION AND ALARM**

### **PART 1 GENERAL**

#### **1.1 RELATED DOCUMENTS**

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

#### **1.2 SUMMARY**

- A. This Section Includes:
  - 1. Demolition of an existing fire alarm system, including devices, components, and wiring.
  - 2. Provision of a new addressable voice-evacuation fire detection and alarm system.
  - 3. Provision of control-by-event components and connections for such events as HVAC shut-down, door release, and elevator recall.
- B. Related Work:
  - 1. Provision of conduits, boxes, and related fittings.
  - 2. Electrical and telephone connections to the fire alarm panels.
  - 3. Testing of the completed system.

#### **1.3 SUBMITTALS**

- A. Provide cut sheets and related California State Fire Marshal listing sheets for all components, including those that may be owner-furnished and contractor-installed. No shop drawings are required.

#### **1.4 QUALITY ASSURANCE**

- A. Conform to the requirements of the California Electrical Code, California Fire Code, and applicable IR's as issued by DSA.
- B. Provide materials and components that are listed by UL or other independent and nationally recognized testing agencies.

### **PART 2 - PRODUCTS**

#### **2.1 FIRE ALARM CONTROL PANEL**

- A. The system is designed around Silent Knight products.
- B. The district has pre-purchased the longer lead-time Silent Knight components, including the following, as owner-furnished, contractor-installed:
  - 1. 6820-EVS Addressable Fire/Emergency Voice Control Panel
  - 2. EVS-INT50 50 watt internal amplifier card
  - 3. EVS-CE4 Four-circuit audio expander card
  - 4. EVS-VCM Voice control module
  - 5. EVS-RVM Remote voice module
  - 6. 6815 SLC circuit expander card
  - 7. EVS-LOC Local operator console.
- C. Provide the balance of the required components as scheduled on the drawings.

## **2.2 FIRE ALARM PERIPHERAL DEVICES**

- A. Provide the peripheral devices as scheduled and in quantities as shown on the drawings.

## **2.3 FIRE ALARM WIRING AND CABLING**

- A. Provide wiring and cabling as scheduled on the drawings.

## **2.4 FIRE ALARM DOCUMENTS CABINET**

- A. Provide a CSFM-listed documents cabinet adjacent to the location of the fire alarm control panel.

## **2.5 SPARE DEVICES**

- A. Provide 10% spare stock of each type of initiation and notification appliance, but no less than a quantity of one. Spare parts are to be provided in unopened boxes.

## **PART 3 - EXECUTION**

### **3.1 FIRE ALARM CONTROL PANEL**

- A. Locate the FACP where shown on the drawings at +72" AFF to top of cabinet. Attach to wall structure with lag screws.
- B. Program the control panel to report initiation events and locations, supervisory alerts, and trouble signals. Verify that the system is properly programmed to report to the Central Station monitoring service via two copper analog telephone circuits.

### **3.2 FIRE ALARM PERIPHERAL DEVICES**

- A. Locate the peripheral devices generally as shown on the drawings. Adjust the positions of devices as required to avoid conflicts with HVAC diffusers/grills, lighting fixtures, other system sensors, and ceiling breaks.
- B. Locate wall-mounted strobes at heights depicted on the drawings.

### **3.3 FIRE ALARM WIRING AND CABLING**

- A. Install cables and wiring within new and/or existing conduit systems. Open cabling is not permitted. Surface non-metallic raceway (Wiremold, Panduit, etc.) is also not permitted.
- B. Maintain color coding of conductors without transposition throughout the project. Make splices and terminations on screw terminals. Spring connectors (wirenuts) are not permitted.

### **3.4 FIRE ALARM DOCUMENTS CABINET**

- A. Locate the cabinet where shown on the drawings. Attach to wall structure with lag screws.

### **3.5 SYSTEM PERFORMANCE REQUIREMENTS**

- A. Alarm, trouble and supervisory signals from all intelligent reporting devices shall be encoded on NFPA Style 4 (Class B) Signaling Line Circuits (SLC).

- B. Device Circuits (IDC) shall be wired Class A (NFPA Style D) as part of an addressable device connected by the SLC Circuit.
- C. Notification Appliance Circuits (NAC) shall be wired Class B (NFPA Style Y) as part of an addressable device connected by the SLC Circuit.
- D. On Style 6 or 7 (Class A) configurations a single ground fault or open circuit on the system Signaling Line Circuit shall not cause system malfunction, loss of operating power or the ability to report an alarm.
- E. Alarm signals arriving at the FACP shall not be lost following a primary power failure (or outage) until the alarm signal is processed and recorded.
- F. Speaker circuits may be controlled by NAC outputs built into the amplifiers, which shall function as addressable points on the Digital Audio Loop.
- G. NAC speaker circuits shall be arranged such that there is a minimum of one speaker circuit per floor of the building or smoke zone whichever is greater.
- H. NAC speaker circuits and control equipment shall be arranged such that loss of one (1) speaker circuit will not cause the loss of any other speaker circuit in the system.
- I. Two-way emergency telephone communication circuits shall be supervised for open and short circuit conditions.
- J. Speaker circuits shall be arranged such that there is a minimum of one speaker circuit per smoke zone.
- K. Speaker circuits shall be electrically supervised for open and short circuit conditions. If a short circuit exists on a speaker circuit, it shall not be possible to activate that circuit.
- L. Audio amplifiers and tone generating equipment shall be electrically supervised for abnormal conditions. Digital amplifiers shall provide built-in speaker circuits, field configurable as four Class B (Style Y), or two Class A (Style Z) circuits.
- M. Digital amplifiers shall be capable of storing up to two minutes of digitally recorded audio messages and tones. The digital amplifiers shall also be capable of supervising the connection to the associated digital message generator, and upon loss of that connection shall be capable of one of the following system responses:
  - a. The digital amplifier shall automatically broadcast the stored audio message.
  - b. The digital amplifier shall switch to a mode where a local bus input on the digital amplifier will accept an input to initiate a broadcast of the stored message. This bus input shall be connected to a NAC on a local FACP for the purpose of providing an alternate means of initiating an emergency message during a communication fault condition.
  - c. Speaker circuits shall be either 25 VRMS or 70VRMS. Speaker circuits shall have 20% space capacity for future expansion or increased power output requirements.
  - d. Two-way emergency telephone (Fire Fighter Telephone) communication shall be supported between the Audio Command Center and up to seven (7) remote Fire Fighter's Telephone locations simultaneously on a telephone riser.
  - e. Means shall be provided to connect FFT voice communications to the speaker circuits in order to allow voice paging over the speaker circuit from a telephone handset.
  - f. The digital audio message generator shall be of reliable, non-moving parts, and support the digital storage of up to 32 minutes of tones and emergency messages,

shall support programming options to string audio segments together to create up to 1000 messages, or to loop messages and parts of messages to repeat for pre-determined cycles or indefinitely.

### 3.6 PROJECT CLOSEOUT

- A. As-Built Drawings: Provide at project closeout a reproducible record set of .pdf drawings showing installed wiring, color coding, wire tag notations, locations of all installed equipment, specific interconnections and internal wiring of the equipment.
- B. Test the completed system in accordance with NFPA Standard 72.7.1.
- C. Provide a reproducible .pdf maintenance manual of the completed system.
- D. Provide a two-year maintenance contract.
- E. Provide a training and orientation session for the Owner of minimum 2-hour duration.
- F. Substitutions are not permitted because the district has pre-purchased the head end components to mitigate long lead times.

### 3.7 QUALITY ASSURANCE

- A. Regulatory Requirements
  - 1. The specifications and standards listed below form a part of this specification. The system shall fully comply with the latest issue of these standards, if applicable.
  - 2. National Fire Protection Association (NFPA) – USA:
    - a. NFPA 70: National Electrical Code (NEC)
    - b. NFPA 72: National Fire Alarm Code
    - c. NFPA 101: Life Safety Code
  - 3. Underwriters Laboratories Inc. (UL):
    - a. UL 38: Manually Actuated Signaling Boxes
    - b. UL 268: Smoke Detectors for Fire Protective Signaling Systems
    - c. UL 464: Audible Signaling Appliances
    - d. UL 521: Heat Detectors for Fire Protective Signaling Systems
    - e. UL 864: Control Units for Fire Protective Signaling Systems
    - f. UL 1480: Speakers for Fire Alarm and Signaling Systems, Including Accessories
    - g. UL 1481: Power Supplies for Fire Protective Signaling Systems
    - h. UL 1711: Standard for Amplifiers for Fire Protective Signaling Systems
    - i. UL 1712: Tests for Ampacity of Insulated Electrical Conductors Installed in Fire Protective System
    - j. UL 1971: Visual Notification Appliances
    - k. UL 2572: Mass Notification Systems
  - 4. Local and State Building Code, including but not limited to:
    - a. California Building Code
    - b. California Electric Code
    - c. California Fire Code
  - 5. All requirements of the Authority Having Jurisdiction (AHJ).

### 3.8 WARRANTY

- A. For a period of two years from date of final acceptance, the system shall be under full guarantee for materials and labor at no cost to the Owner. The system shall be under a service contract with a technician authorized by the manufacturer. Replacement parts and labor shall be readily available during normal business hours while the service contract is in



effect. A complete system inspection and test shall be performed at five months and again at eleven months after final acceptance. Tests shall include all smoke detector sensitivity settings.

### **3.9 REPORT**

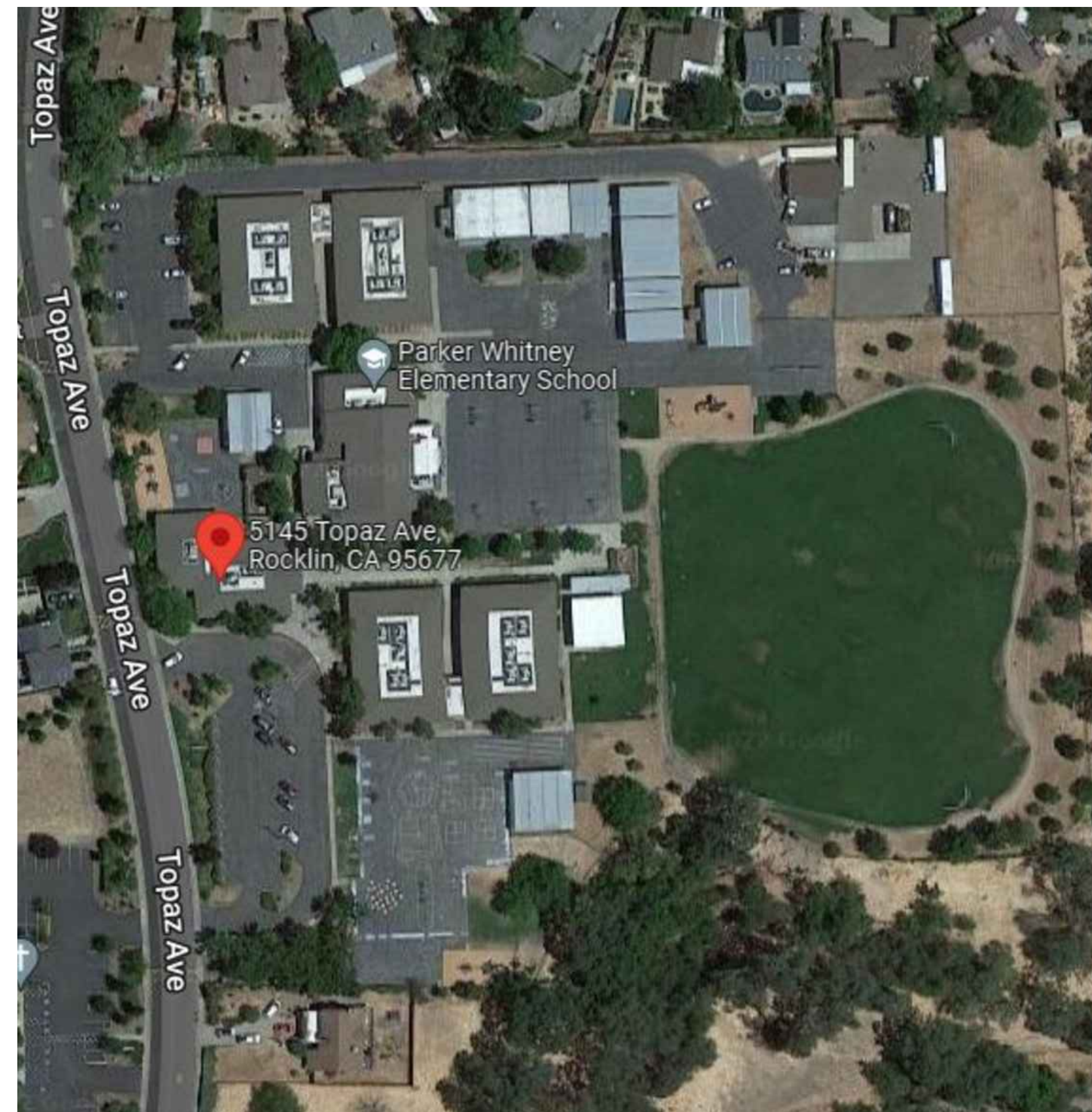
- A. Prepare written report of final test results, signed by witnessing parties. Submit to the Engineer for final approval.

**END OF SECTION 28 31 00**





ROCKLIN UNIFIED SCHOOL DISTRICT  
 PARKER WHITNEY ELEMENTARY SCHOOL  
 FIRE ALARM SYSTEM UPGRADE



OWNER

ROCKLIN UNIFIED SCHOOL DISTRICT  
 4090B DEL MAR AVENUE  
 ROCKLIN, CA 95677  
 P.O.C.: CRAIG ROUSE  
 PHONE: 916-630-3188  
 EMAIL: crouse@rocklinusd.org

SITE

PARKER WHITNEY ELEMENTARY SCHOOL  
 5145 TOPAZ AVENUE  
 ROCKLIN, CA 95677  
 PHONE: 916-624-2491

ENGINEER

LEAF ENGINEERS  
 1110 IRON POINT ROAD, SUITE 200  
 FOLSOM, CA 95630  
 P.O.C.: LARRY MYERS P.E., SR. ELECTRICAL ENGINEER  
 PHONE: 916-682-9494  
 EMAIL: larry.myers@leafengineers.com

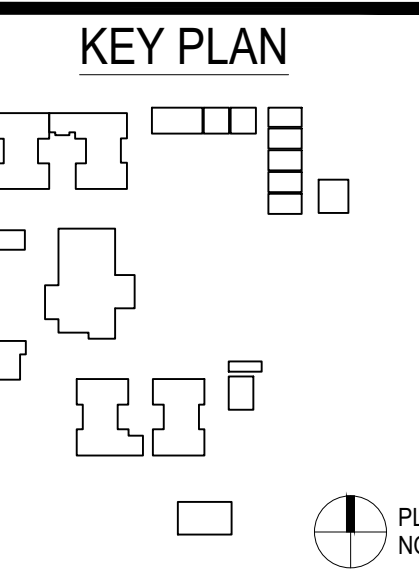
IDENTIFICATION STAMP  
 DIV. OF THE STATE ARCHITECT  
 APP: 02-120690 INC:  
 REVIEWED FOR  
 SS  FLS  ACS   
 DATE: 02/28/2023



ARCHITECT PBK Architects, Inc.  
 SACRAMENTO/FOLSOM  
 1110 IRON POINT ROAD, SUITE 200  
 FOLSOM, CA 95630  
 916-682-9494 PH

MEP Engineering || Technology  
 LEAF ENGINEERS  
 SACRAMENTO/FOLSOM  
 1110 IRON POINT ROAD, SUITE 200  
 FOLSOM, CA 95630  
 916-682-9494 P  
 916-682-9995 F

REPLACE FIRE ALARM SYSTEM  
 ROCKLIN UNIFIED SCHOOL DISTRICT  
 PARKER WHITNEY ELEMENTARY SCHOOL  
 5145 TOPAZ AVENUE  
 ROCKLIN, CA 95677  
 DSA APPL. NO. 02-120690 FILE NO. 31-37



CLIENT  
 ROCKLIN USD  
 PROJECT NUMBER  
 220394  
 DATE  
 NOVEMBER 29, 2022  
 DRAWN BY: C.Y.    CHECKED BY: L.M.

REVISIONS		
#	DESCRIPTION	DATE

DSA SUBMITTAL  
**FIRE ALARM  
 COVER SHEET**

**FA0.0**

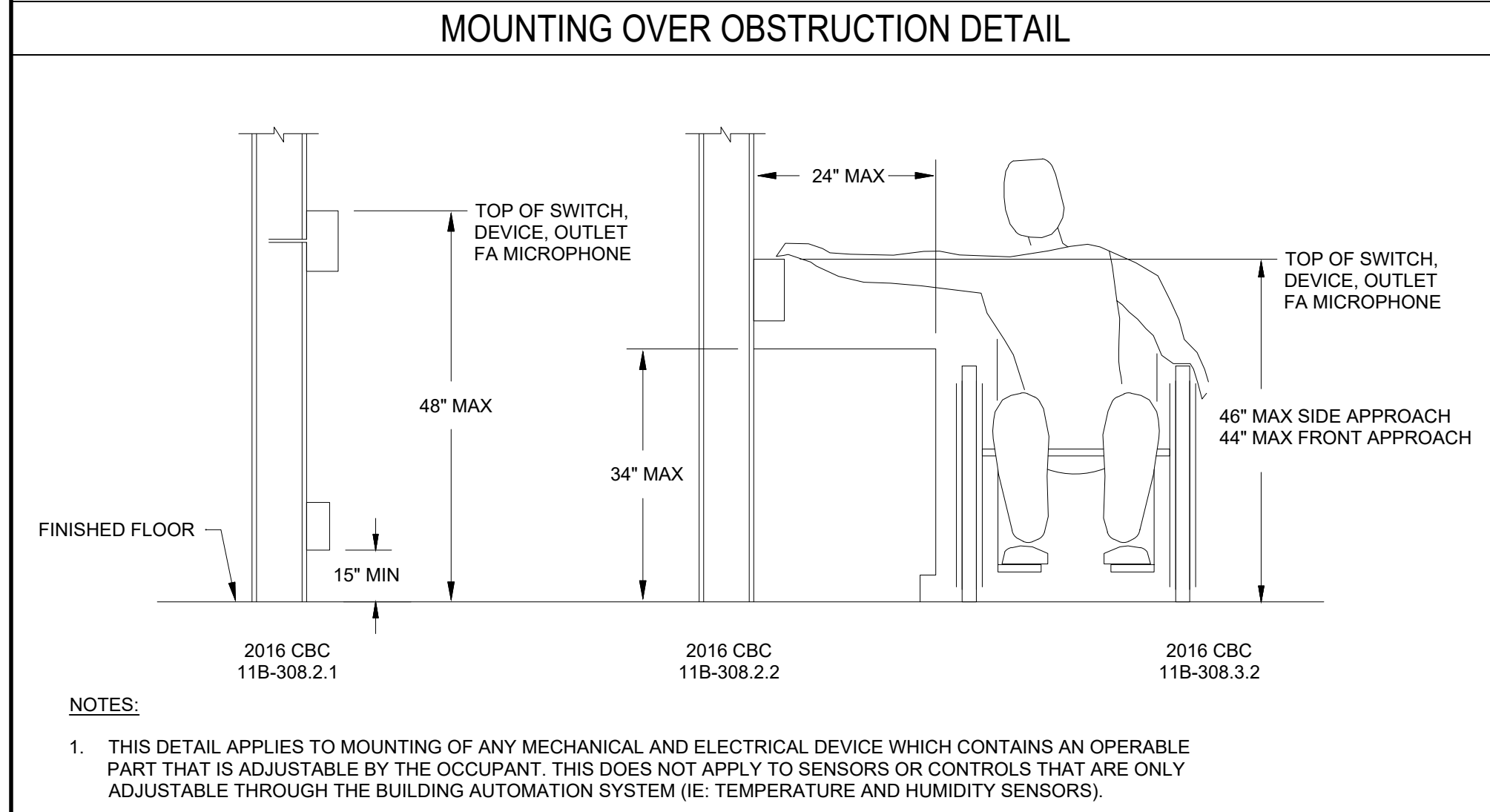


### FIRE ALARM MATRIX OF OPERATION

\*REFERENCE NFPA 72 2016, FIGURE A.14.6.2.4

● = ACTION  
□ = NO ACTION

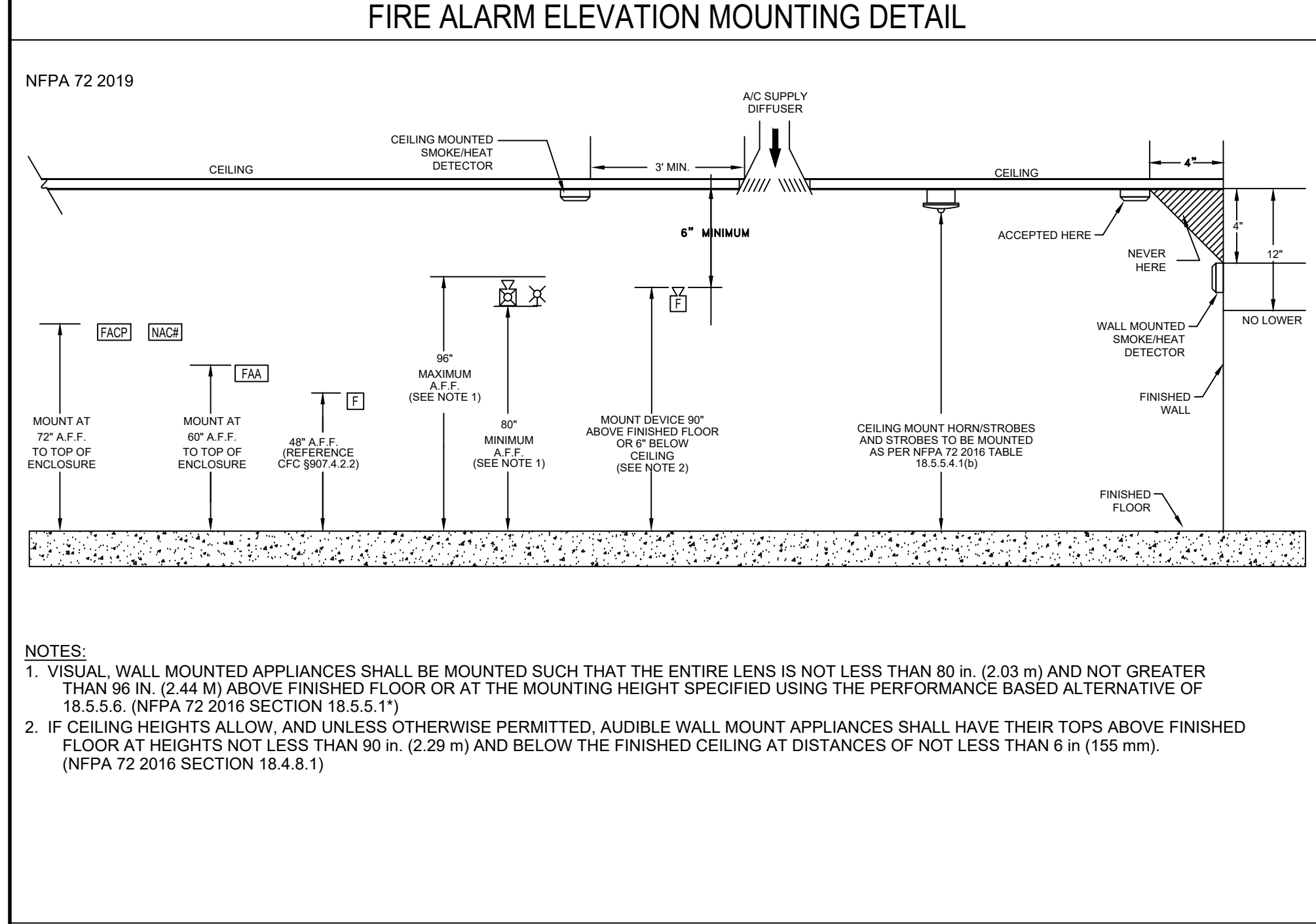
FIRE ALARM SYSTEM OUTPUTS	FIRE ALARM SYSTEM INPUTS											
	A	B	C	D	E	F	G	H	I	J	K	L
1. MANUAL FIRE ALARM PULL STATION	●	●										
2. SMOKE OR HEAT DETECTOR	●	●										
3.												
4.												
5.												
6. FIRE ALARM AC POWER FAILURE					●						●	
7. FIRE ALARM SYSTEM LOW BATTERY					●						●	
8. FIRE ALARM OPEN CIRCUIT					●						●	
9. FIRE ALARM GROUND FAULT					●						●	
10. NAC CIRCUIT SHORT					●						●	
11. CELLULAR COMMUNICATOR FAULT					●						●	
12. CO DETECTOR					●						●	
13.												



### FIRE ALARM DEVICE ADDRESS LEGEND

<p>## SLC OR ZONE DEVICE #</p>	<p>1. SIGNATURE LINE CIRCUIT (INITIATION) DEVICE ADDRESS. ADDRESSES MAY DIFFER DEPENDING ON MANUFACTURER.</p>
<p>NR # NAC DEVICE NAC CIRCUIT (FACP)</p>	<p>2. FACP NOTIFICATION APPLIANCE CIRCUIT ADDRESS.</p>
<p># # # NAC DEVICE NAC CIRCUIT</p>	<p>3. REMOTE POWER SUPPLY NOTIFICATION APPLIANCE CIRCUIT ADDRESS. (*C# = CANDELA SETTING) (DECIBEL SETTINGS DEPEND ON MANUFACTURER)</p>
<p>S # # # SPEAKER/SPEAKER STROBE SPEAKER CIRCUIT AMPLIFIER NUMBER</p>	<p>4. EMERGENCY VOICE/ALARM COMMUNICATION SYSTEM AMPLIFIER AND SPEAKER ADDRESSES. (*W = WATTS)</p>

\*DEVICE ADDRESSING VARIES DEPENDING ON THE MANUFACTURER. F/A CONTRACTOR TO PROGRAM DEVICES ACCORDING TO THE MANUFACTURER'S OPERATION MANUAL.



### FIRE ALARM SYSTEM EQUIPMENT LEGEND AND SYMBOLS

SYM.	MODEL	MANUFACTURER	DESCRIPTION	MOUNTING	CSFM #
EVAC	6820EVS	SILENT KNIGHT	EMERGENCY VOICE/ALARM COMMUNICATION PANEL EVS-INT50W EVS-CE4 EVS-VCM 6815 HFSS SOFTWARE SUITE	WALL MOUNTED	7165-0559-0500
FAC	HWF2V-COM	HONEYWELL/ADEMCO	CELLULAR FIRE ALARM COMMUNICATOR	WALL MOUNTED	7300-1645-0511
FAA	EVS-LOC	SILENT KNIGHT	FIRE ALARM ANNUNCIATOR	WALL MOUNTED	7165-0559-0500
AMP#	EVS-50W	SILENT KNIGHT	INTELLIGENT 50 WATT AUDIO AMPLIFIER	WALL MOUNTED	7165-0559-0500
NAC#	RPS-1000	SILENT KNIGHT	INTELLIGENT 6 AMP NAC POWER SUPPLY	WALL MOUNTED	7165-0559-0135
FATC	SSU00636	SAE	FIRE ALARM TERMINAL CABINET	WALL MOUNTED	UL & NEMA LISTED
AM	SK-MONITOR	SILENT KNIGHT	ADDRESSABLE SINGLE INPUT MODULE	4-11/16" SQUARE BOX 2-1/8" MIN. DEPTH	7300-0559-0155
ARM	SK-RELAY	SILENT KNIGHT	ADDRESSABLE RELAY MODULE	4-11/16" SQUARE BOX 2-1/8" MIN. DEPTH	7300-0559-0155
S	SK-PHOTO B210L9	SILENT KNIGHT	ADDRESSABLE PHOTOELECTRIC SMOKE DETECTOR HEAD 6" DETECTOR BASE	4-11/16" SQUARE BOX 2-1/8" MIN. DEPTH	7272-0559-0149 7300-1653-0109
S	SK-FIRE-CO B2005	SILENT KNIGHT	ADDRESSABLE SMOKE/CO MULTI CRITERIA DETECTOR HEAD 6" SOUNDER DETECTOR BASE	4-11/16" SQUARE BOX 2-1/8" MIN. DEPTH	7275-0559-0170 7300-1653-0213
S	SK-BEAM	SILENT KNIGHT	ADDRESSABLE BEAM SMOKE DETECTOR WITH TRANSMITTER & REFLECTOR, BEAMSKM AND BEAMMMK.	WALL MOUNTED W/ MOUNTING KITS	7260-0559-0148
RTS151	RTS151	SILENT KNIGHT	REMOTE TEST STATION	SINGLE GANG BOX 2-1/8" MIN. DEPTH	7300-1653-0212
SK-HEAT B210L9	SK-HEAT B210L9	SILENT KNIGHT	ADDRESSABLE FIXED (135°F) HEAT SENSOR HEAD (F = FIXED, A = ATTIC) 6" DETECTOR BASE	4-11/16" SQUARE BOX 2-1/8" MIN. DEPTH	7270-0559-0147 7300-1653-0109
****	****	****	EXISTING FIRE/SMOKE DAMPER	TBD	****,****,****
F	SK-PULL-SA	SILENT KNIGHT	ADDRESSABLE SINGLE ACTION MANUAL PULL STATION	4-11/16" SQUARE BOX 2-1/8" MIN. DEPTH	7150-0559-0161
SR	SR	SYSTEM SENSOR	MULTI CANDELA STROBE, WALL MOUNT-RED	4-11/16" SQUARE BOX 2-1/8" MIN. DEPTH	7125-1653-0504
SPSRL	SPSRL	SYSTEM SENSOR	MULTI CANDELA TEMPORAL SPEAKER STROBE, WALL MOUNT-RED	4-11/16" SQUARE BOX 2-1/8" MIN. DEPTH	7320-1653-0505
WP	SPRK	SYSTEM SENSOR	WEATHER PROOF SPEAKER, WALL MOUNT-RED	W88 BACK BOX IS INCLUDED	7320-1653-0201
SEE FA SHEET NOTES (BLDG. 'D')	STI-9705-R	STI	PROTECTIVE WIRE NOTIFICATION APPLIANCE COVER-RED	SURFACE MOUNT	UL LISTED
DOC	SSU00672	SAE	FIRE DOCUMENT BOX-RED	WALL MOUNT @ FACP	UL LISTED
SS	DTK-120HWLOK	DITEK	120VAC SURGE PROTECTOR AT FIRE SPRINKLER RISER LOCATION		7300-2105-0102
BATT	SK-RBB	SILENT KNIGHT	REMOTE BATTERY BOX	WALL MOUNTED	7165-0559-0500
TBD	TBD	TBD	ELECTRICAL JUNCTION BOX (SIZES WILL VARY)	TBD	****,****,****
PS-12280	PS-12280	POWER SONIC	12VDC, 28AH RECHARGEABLE SEALED LEAD ACID BATTERY	INSTALL IN RBB ENCLOSURE	UL LISTED
PS-1270	PS-1270	POWER SONIC	12VDC, 7AH RECHARGEABLE SEALED LEAD ACID BATTERY	INSTALL IN NAC, AMP & FAC ENCLOSURES	UL LISTED

NOTES:  
1. INSTALL TWO 12VDC, 28AH BATTERIES IN EVAC/FACP ENCLOSURE.  
2. INSTALL TWO 12VDC, 7AH BATTERIES IN EACH NAC POWER SUPPLY ENCLOSURES.  
3. INSTALL ONE 12VDC, 7AH BATTERY IN COMMUNICATOR ENCLOSURE.  
4. INSTALL TWO 12VDC, 7AH BATTERIES IN AMP-C ENCLOSURE.

### FIRE ALARM WIRE SCHEDULE

TAG	COND.	TYPE	AWG	DESCRIPTION	USE
A	2	SOLID	18	#182, RED JACKET, FPLP	SIGNAL LINE CIRCUIT (SLC)
Au	2	STRANDED	18	#182, RED JACKET (FIRE UNDERGROUND RATED)	SIGNAL LINE CIRCUIT (SLC) - UNDERGROUND
B	4	SOLID	16	#164, RED JACKET, FPLP	SBUS
Bu	4	STRANDED	16	#16 THIN RED (+) BLACK (-) JACKET (FIRE UNDERGROUND RATED)	SBUS - UNDERGROUND
H	4	SOLID	22	#22, RED JACKET, FPLP	REMOTE TEST STATION
U	2	STRANDED	16	#16 THIN RED (+) BLACK (-) JACKET (FIRE UNDERGROUND RATED)	INDICATING CIRCUIT (IOC) - UNDERGROUND
N	2	SOLID	12	#12, RED JACKET, FPLP	NOTIFICATION APPLIANCE CIRCUIT
Nu	2	STRANDED	12	#12 THIN, THIN RED (+) BLACK (-) (FIRE UNDERGROUND RATED)	NOTIFICATION APPLIANCE CRT - UNDERGROUND
S	2	STRANDED	16	#162, OVERALL SHIELDED C2 CABLE	SPEAKER CIRCUIT
Su	2	STRANDED	16	#162, OVERALL SHIELDED C2 CABLE (UNDERGROUND RATE)	SPEAKER CIRCUIT - UNDERGROUND
D	6	STRANDED	22	#222, RED JACKET, FPLP	SPEAKER CIRCUIT - UNDERGROUND

NOTES:  
1. ALL SIGNAL LINE CIRCUIT (SLC) CIRCUITS ARE TO BE CLASS B, STYLE Y.  
2. ALL INDICATING CIRCUITS (IOC) ARE TO BE CLASS B, STYLE Y.  
3. ALL NOTIFICATION APPLIANCE (NAC) CIRCUITS ARE TO BE CLASS B, STYLE Y.  
4. ALL SPEAKER (S) CIRCUITS ARE TO BE CLASS B, STYLE Y.

### FIRE ALARM SYSTEM APPLICABLE CODES

PARTIAL LIST OF APPLICABLE CODES AS OF JANUARY 1, 2017 \*

2022 CALIFORNIA ADMINISTRATIVE CODE (CAC), PART 1, TITLE 24 CCR \*  
2019 CALIFORNIA BUILDING CODE (CBC), PART 2, TITLE 24 CCR \*  
2019 CALIFORNIA ELECTRICAL CODE (CEC), PART 3, TITLE 24 CCR \*  
2019 CALIFORNIA MECHANICAL CODE (CMC), PART 4, TITLE 24 CCR \*  
2019 CALIFORNIA PLUMBING CODE (CPC), PART 5, TITLE 24 CCR \*  
2019 CALIFORNIA FIRE CODE (CFC), PART 9, TITLE 24 CCR \*  
2019 CALIFORNIA GREEN BUILDING STANDARDS CODE (CALGREEN), PART 11, TITLE 24 CCR \*  
2019 CALIFORNIA REFERENCED STANDARDS CODE, PART 12, TITLE 24 CCR TITLE 19 CCR, PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS  
2016 ASME A17.1/CSA B44-13 SAFETY CODE FOR ELEVATORS AND ESCALATORS

PARTIAL LIST OF APPLICABLE STANDARDS

NFPA 72 NATIONAL FIRE ALARM AND SIGNALING CODE (CA AMENDED), 2016 EDITION  
NFPA 720 STANDARD FOR THE INSTALLATION OF CARBON MONOXIDE DETECTION AND WARNING EQUIPMENT, 2015 EDITION  
UL 464 AUDIBLE SIGNALING DEVICES FOR FIRE ALARM AND SIGNALING SYSTEMS, INCLUDING ACCESSORIES, 2003 EDITION  
UL 521 STANDARD FOR HEAT DETECTORS FOR FIRE PROTECTIVE SIGNALING SYSTEMS, 1999 EDITION  
UL 1071 STANDARD FOR SIGNALING DEVICES FOR THE HEARING IMPAIRED, 2002 EDITION

FOR A COMPLETE LIST OF APPLICABLE NFPA STANDARDS REFER TO 2019 CBC (SFM) CHAPTER 35 AND CALIFORNIA FIRE CODE CHAPTER 60.

SEE CALIFORNIA BUILDING CODE, CHAPTER 35, FOR STATE OF CALIFORNIA AMENDMENTS TO THE NFPA STANDARDS.  
\* ALL PARTS OF THE 2019 CALIFORNIA BUILDING CODE BECOME EFFECTIVE JANUARY 1, 2017 EXCEPT THE EFFECTIVE DATE FOR THE USE OF THE 2016 BUILDING ENERGY EFFICIENCY STANDARDS (TITLE 24, PART 1, CHAPTER 10) IS FEBRUARY 25, 2016 AND THE EFFECTIVE DATE FOR THE USE OF THE CALIFORNIA ADMINISTRATIVE CODE (TITLE 24, PART 1, CHAPTER 4) IS JANUARY 20, 2016.

### FIRE ALARM SYSTEM ABBREVIATIONS

ABBREVIATION	DESCRIPTION
AFF	ABOVE FINISHED FLOOR
AIC	AMPERES INTERRUPTING CAPACITY
ARCH.	ARCHITECT; ARCHITECTURAL
AWG	AMERICAN WIRE GAUGE
C	CEILING
CFC	CALIFORNIA FIRE CODE
CKT	CIRCUIT
C.O.	CONDUIT ONLY WITH PULL WIRE
CU	COPPER
DWG	DRAWING
(E)	EXISTING
EMT	ELECTRICAL METALLIC TUBING
FA	FIRE ALARM
FLR	FLOOR
FT	FEET
GF	GROUND FAULT INTERRUPTER
GND	GROUND
(N)	NEW
NIC	NOT IN CONTRACT
NPL	PANEL
(R)	REMOVE or REPLACE or RELOCATE
REQ'D	REQUIRED
SF	SQUARE FEET
SHT	SHEET
SW	SWITCH
TYP	TYPICAL
UG	UNDERGROUND
U.O.N.	UNLESS OTHERWISE NOTED
WP	WEATHERPROOF

### CODE ANALYSIS

BLDG #	CONSTRUCTION	BLDG AREA	OCCUPANCY TYPE
A	VN	10,487 S.F.	E
B	VN	4,070 S.F.	E,B
C	VN	10,502 S.F.	E
D	VN	11,500 S.F.	A2
E	VN	1,920 S.F.	E
F,G	VN	960 S.F.	E
H,J,K,L	VN	800 S.F.	E
N	VN	1,400 S.F.	E
1	VN	1,200 S.F.	E
5	VN	1,824 S.F.	E
TBD	VN	960 S.F.	B
T	VN	480 S.F.	U
X	VN	1,400 S.F.	E

\*NO CHANGE TO BUILDING(S) EXISTING SQUARE FOOTAGE  
\*NO CHANGE TO BUILDING(S) EXISTING HEIGHTS  
\*NO CHANGE TO BUILDING(S) EXISTING INTERIORS  
\*ALL BUILDINGS ARE NON-SPRINKLERED  
\*SCOPE OF WORK DOES NOT INCLUDE ANY BUILDING CONSTRUCTION OR MODIFICATION.

### FIRE ALARM REQUIREMENTS

THE CONTRACTOR SHALL PROVIDE AND SUBMIT THE FIRE ALARM SHOP DRAWINGS TO THE ARCHITECT FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION OF THE FIRE ALARM SYSTEM SUBMITTAL SHALL CONTAIN THE FOLLOWING:

- SHOP DRAWINGS: COMPLETE 1/8" SCALE FLOOR PLANS SHOWING ALL DEVICES, COMPONENTS, CONDUIT AND WIRING INDICATING A COMPLETE AND OPERABLE SYSTEM AS DESIGNED AND SPECIFIED. REPRODUCED COPIES OF BID SET FIRE ALARM PLANS ARE NOT ACCEPTABLE AS SHOP DRAWINGS. SHOP DRAWINGS MUST ALSO INDICATE DEVICE MOUNTING HEIGHTS, ROOM NAMES AND NUMBERS AND THE LOCATION OF ALL FIRE RATED WALLS.
- ELECTRICAL CONTRACTOR'S AND FIRE ALARM SYSTEM INSTALLER'S NAME, ADDRESS, PHONE NUMBER AND C-10 LICENSE NUMBER.
- LIST OF SYSTEM COMPONENTS, EQUIPMENT AND DEVICES, INCLUDING MANUFACTURER'S MODEL NUMBER(S) AND CALIFORNIA STATE FIRE MARSHAL LISTING NUMBERS.
- ORIGINAL COPIES OF MANUFACTURERS' SPECIFICATION SHEETS FOR ALL EQUIPMENT AND DEVICES INDICATED.
- VOLTAGE DROP CALCULATIONS -- INCLUDE THE FOLLOWING INFORMATION FOR THE WORST CASE:  
1. POINT-TO-POINT OR OHMS LAW CALCULATIONS.  
2. IDENTIFICATION OF ZONE USED IN CALCULATIONS.  
3. VOLTAGE DROP PERCENT (NOT TO EXCEED MANUFACTURERS' REQUIREMENTS).  
NOTE: IF VOLTAGE DROP EXCEEDS MANUFACTURERS' LISTED OPERATING RANGE(S) OR EQUIPMENT AND DEVICES.  
NOTE: CIRCUIT NUMBER FOR WORST CASE CALCULATION.
- BATTERY TYPE(S), AMPS HOURS AND LOAD CALCULATIONS, INCLUDE THE FOLLOWING INFORMATION:  
1. NORMAL OPERATION: 100% OF APPLICABLE DEVICES FOR 24 HOURS + CONTROL PANEL AMPS PLUS LIST OF AMPS PER DEVICE WHICH DRAW POWER FROM THE PANEL DURING STANDBY POWER -- I.E.:  
a. ZONE MODULES  
b. DETECTORS  
c. OTHER DEVICES (IDENTIFY)  
2. ALARM CONDITION: 100% OF APPLICABLE DEVICES FOR 15 MINUTES + CONTROL PANEL AMPS PLUS LIST OF AMPS PER DEVICE WHICH DRAW POWER FROM THE PANEL DURING STANDBY POWER -- I.E.:  
a. ZONE MODULES  
b. SIGNAL MODULES  
c. DETECTORS  
d. SIGNAL DEVICES  
e. ANNUNCIATOR  
f. OTHER DEVICES (IDENTIFY)  
3. NORMAL OPERATION + ALARM OPERATION  
a. TOTAL AMP HOURS REQUIRED.  
b. TOTAL AMP HOURS PROVIDED.

### FIRE ALARM SCOPE OF WORK

- INSTALL A NEW ADDRESSABLE AUTOMATIC EMERGENCY VOICE/FIRE ALARM COMMUNICATION SYSTEM IN ACCORDANCE WITH NFPA 72, NFPA 101, CFC 9907, CMC, DSA IR 9-1, IR 9-2, GL-2 AND THE AUTHORITY HAVING JURISDICTION.

### FIRE ALARM GENERAL NOTES

- APPLICABLE STANDARD NFPA 72, AS ADOPTED AND AMENDED IN CBC CHAPTER 35.
- INSTALLATION OF THE SYSTEMS SHALL NOT BE STARTED UNTIL DETAILED DESIGN DOCUMENTS AND SPECIFICATION, INCLUDING STATE FIRE MARSHAL LISTING NUMBERS FOR EACH COMPONENT OF THE SYSTEM, HAS BEEN APPROVED BY DSA.
- UPON COMPLETION OF SYSTEM DETAILATION, A SATISFACTORY TEST OF THE ENTIRE SYSTEM SHALL BE MADE IN THE PRESENCE OF A DSA PROJECT INSPECTOR.
- A STAMPED SET OF APPROVED FIRE ALARM DESIGN DOCUMENTS SHALL BE ON THE JOB SITE AND USED FOR INSTALLATION.
- ANY DISCREPANCIES BETWEEN THE DRAWINGS AND THE CODE OR RECOGNIZED STANDARDS SHALL BE BROUGHT TO THE ATTENTION OF DSA AND THE ARCHITECT/ENGINEER OF THE PROJECT.
- DSA, ARCHITECT/ENGINEER AND OWNER SHALL BE NOTIFIED A MINIMUM OF 48 HOURS PRIOR TO THE FINAL INSPECTION AND/OR TESTING.
- ALL PENETRATIONS THROUGH RATED ASSEMBLIES REQUIRING OPENING PROTECTION SHALL BE PROVIDED WITH A PENETRATION FIRE STOP SYSTEM AS IDENTIFIED IN CBC CHAPTER 7, UL OR OTHER APPROVED TYPES OF MATERIALS IDENTIFIED IN THE PROJECT SPECIFICATIONS WITHIN THE FIRE ALARM SECTION.
- WALL MOUNTED VISIBILITY NOTIFICATION DEVICES SHALL HAVE THEIR BOTTOMS MOUNTED AT 80" MINIMUM AND 96" MAXIMUM FROM THE FINISHED FLOOR.
- WALL MOUNTED AUDIBLE NOTIFICATION DEVICES SHALL HAVE THEIR TOPS MOUNTED AT 90" MINIMUM AND 100" MAXIMUM FROM FINISHED FLOOR AND NO CLOSER THAN 6" TO A HORIZONTAL STRUCTURE.
- AUDIBLE DEVICES SHALL PROVIDE A SOUND PRESSURE LEVEL OF 15 DECIBELS (dBA) ABOVE THE AVERAGE AMBIENT SOUND LEVEL, OR 5 dBA ABOVE THE MAXIMUM SOUND LEVEL HAVING A DURATION OF AT LEAST 60 SECONDS, WHICHEVER IS GREATER, IN EVERY OCCUPABLE SPACE WITHIN THE BUILDING.
- AUDIBLE DEVICES SHALL BE SYNCHRONIZED TEMPORAL CODE 3 PATTERN, THE CONTRACTOR SHALL ADJUST/INITIAL ALL DEVICES TO MAXIMIZE PERFORMANCE AND TO MINIMIZE FALSE ALARMS.
- VISIBILITY DEVICES SHOULD NOT EXCEED TWO FLASHES PER SECOND AND SHOULD NOT BE SLOWER THAN ONE FLASH EVERY SECOND. THE DEVICE SHALL HAVE A PULSING LIGHT SOURCE NOT LESS THAN 15 CANDELA. VISIBILITY DEVICES WITHIN 55' FROM EACH OTHER SHALL BE SYNCHRONIZED.
- UNDERGROUND AND EXTERIOR CONDUITS TO HAVE WATER TIGHT FITTINGS AND WIRE TO BE APPROVED FOR WET LOCATIONS.
- ALL FIRE ALARM WIRING SHALL BE FPLP OR FPLP/FIRE POWER LIMITED OR FIRE POWER LIMITED PLENUM AS REQUIRED FOR APPLICATION. WIRING IN CONDUIT ABOVE GROUND MAY BE TYPE THHN OR THWN.
- PER CEC STANDARDS, ALL WIRING IS TO BE PULLED THROUGH EACH JUNCTION BOX AND CONNECTED DIRECTLY TO EACH FIRE DEVICE. DO NOT SPLICE THE WIRE. ALL BOXES TO BE SIZED PER CEC.
- SMOKE DETECTORS SHALL NOT BE ANY CLOSER THAN 1' FROM FIRE SPRINKLERS OR 3' FROM ANY SUPPLY DIFFUSER, IN AREA OF CONSTRUCTION OR POSSIBLE DAMAGE/CONTAMINATION ON NEWLY INSTALLED FIRE ALARM DEVICES SHALL BE COVERED UNTIL THAT AREA IS READY TO BE TURNED OVER TO THE OWNER.
- ALL FIRE ALARM CIRCUITS SHALL BE IN CONDUIT, SURFACE RACEWAY OR OPEN RUN ABOVE CEILING, UNDER FLOORS AND IN WALLS IN A NEAT AND PROTECTED MANNER AS INDICATED ON DESIGN DOCUMENTS.
- EXPOSED CIRCUITS ARE ONLY PERMITTED WHEN NOTED AS EXPOSED ON DESIGN DOCUMENTS.
- FIRE ALARM PANEL, REMOTES, AND COMPONENTS SHALL BE SECURED TO MOUNTING SURFACES PER MANUFACTURERS' SPECIFICATIONS. NO SINGLE DEVICE SHALL EXCEED 20 LBS. WITHOUT SPECIAL MOUNTING DEVICES.
- A DEDICATED BRANCH CIRCUIT SHALL BE PROVIDED FOR FIRE ALARM EQUIPMENT. THIS CIRCUIT SHALL BE ENERGIZED FROM THE COMMON USE AREA PANEL AND SHALL HAVE NO OTHER OUTLETS. THE BREAKER SHALL HAVE A RED LOCKING DEVICE TO BLOCK THE HANDLE IN THE "ON" POSITION.
- NOTE: IF VOLTAGE DROP EXCEEDS MANUFACTURERS' LISTED OPERATING RANGE(S) OR EQUIPMENT AND DEVICES, INDICATE MANUFACTURERS' LISTED OPERATING RANGE(S) OR EQUIPMENT AND DEVICES.
- NOTE: CIRCUIT NUMBER FOR WORST CASE CALCULATION.
- THE INSTALLING CONTRACTOR SHALL PROVIDE A COMPLETED "SYSTEM RECORD OF COMPLETION" PER NFPA 72, FIGURE 7.8.2
- FIRE ALARM CONTROL PANELS AND REMOTE ANNUNCIATORS SHALL BE INSTALLED WITH THEIR BOTTOMS MOUNTED AT 48" ABOVE THE FINISHED FLOOR.
- ALL FIRE ALARM WIRING SHALL BE IDENTIFIED WITH FIRE ALARM COMMUNICATION SYSTEMS (EVAC) SHALL BE ACCESSIBLE FOR USE, INSTALLED IN COMPLIANCE WITH CBC SECTIONS 11B-305 AND 11B-308.
- THE INSTALLING CONTRACTOR SHALL PROVIDE SYSTEM PROGRAMMING FOR SUPERVISORY MONITORING PER CBC SECTION 901.6.2.
- SUPERVISORY MONITORING SHALL BE TESTED AND VERIFIED AS SENDING CORRECT SIGNALS IN CONJUNCTION WITH FINAL ACCEPTANCE TEST.
- OWNER SHALL BE RESPONSIBLE FOR ESTABLISHING A FIRE SYSTEM MONITORING CONTRACT OR PROVISIONS.
- ALL CARBON MONOXIDE SIGNALS SHALL SOUND A FOUR-PULSE TEMPORAL PATTERN PER NFPA 720, 5.8.6.1.
- ALL EQUIPMENT SHALL BE NEW AND U.L. & CALIFORNIA STATE FIRE MARSHAL LISTED.
- ELECTRICAL CONTRACTOR SHALL FURNISH ACCESS PANELS TO AREAS THAT REQUIRE SERVICING, TROUBLESHOOTING, ETC.
- DO NOT DEVIATE FROM CONDUIT RUNS AS SHOWN ON FLOOR PLANS WITHOUT PRIOR APPROVAL FROM SYSTEM SUPPLIER. FACTORS SUCH AS EXCESSIVE VOLTAGE DROP, ADDITIONAL PARTS, ENGINEERING, ETC., THAT ARE A RESULT OF CONDUIT RUN DEVIATIONS SHALL BE THE SOLE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR.
- ALL FAN SHUTDOWN FUNCTIONS, DAMPER CLOSURES, AND ASSOCIATED MECHANICAL SYSTEM FIRE ALARM INTERFACE SHALL BE BY MECHANICAL CONTRACTOR.
- ALL DUCT SMOKE DETECTORS SHALL BE MOUNTED BY THE MECHANICAL CONTRACTOR. DUCT SMOKE DETECTORS EXPOSED TO THE WEATHER SHALL BE WEATHER PROTECTED BY THE MECHANICAL CONTRACTOR. ALL AIR VELOCITY TESTING SHALL BE PERFORMED BY THE MECHANICAL CONTRACTOR.
- ALL 120VAC POWER REQUIREMENTS FOR THE FIRE ALARM SYSTEM SHALL BE FURNISHED BY THE ELECTRICAL CONTRACTOR AND SHALL MEET ALL REQUIREMENTS OF THE AUTHORITIES HAVING JURISDICTION.
- ALL FIRE ALARM DEVICE BACKBOXES, FIRE ALARM TERMINAL CABINETS, GUTTERS, JUNCTION BOXES, AND ASSOCIATED CONDUITS SHALL BE FURNISHED AND INSTALLED BY ELECTRICAL CONTRACTOR UNLESS OTHERWISE NOTED. REFER TO FIRE ALARM SYMBOL LIST AND/OR MOUNTING DETAILS FOR ADDITIONAL INFORMATION. SYSTEM SUPPLIER PROVIDED BACKBOXES SHALL BE INSTALLED BY ELECTRICAL CONTRACTOR UNLESS OTHERWISE NOTED.
- SMOKE DETECTOR TESTING SHALL BE ACCOMPLISHED PER THE MANUFACTURER'S INSTRUCTIONS.
- ALL WIRING, INITIATING DEVICES AND ANNUNCIATOR PANEL SHALL BE SUPERVISED TO THE PRINCIPAL POINT OF ANNUNCIATION. THE FIRE ALARM CONTROL PANEL TO SUPERVISE THE ANNUNCIATOR PANEL. ALL WIRING AND INDICATING DEVICES CIRCUITS.
- ALL WIRING SHALL BE CUT FOR IN AND OUT. WIRING SHALL NOT BE LOOPED THROUGH DEVICES.
- POINT, COMMON ANNUNCIATION, AND T-TAPPING ARE PROHIBITED.
- PROVIDE 3/4" CONDUIT FROM FIRE ALARM CONTROL PANEL TO TELEPHONE BACKBOARD FOR OWNER PROVIDED CENTRAL STATION MONITORING.
- ALL CONDUIT SHALL BE 3/4" UNLESS OTHERWISE NOTED.
- ALL FLOW SWITCHES SHALL BE 2 WIRE WITH NON-ELECTRONIC RETARD TYPE SIMILAR TO THE SYSTEM SENSORS MODEL "WD" SERIES ONLY.
- ALL DEVICES IN THE ALARM SYSTEM SHALL BE COMPATIBLE AND INSTALLED PER MANUFACTURERS' SPECIFICATIONS.
- FIRE ALARM SYSTEM SHALL BE UL LISTED (ULUS).
- CBC 907.6.5.3 (SFM AMENDMENT) REQUIRES FIRE ALARM TO "TRANSMIT THE ALARM, SUPERVISORY AND TROUBLE SIGNALS TO AN APPROVED SUPERVISORY STATION IN ACCORDANCE WITH NFPA 72. THE SUPERVISORY STATION SHALL BE LISTED AS EITHER ULUX (CENTRAL STATION) OR ULUS (REMOTE AND PROPRIETARY) BY THE UNDERWRITERS LABORATORY INC. (UL) OR OTHER APPROVED LISTING AND TESTING LABORATORY OR SHALL COMPLY WITH THE REQUIREMENTS OF STANDARD, FM 3011."
- SUBSTITUTION OF SYSTEM COMPONENTS OR MANUFACTURER WILL REQUIRE THE CONTRACTOR TO SEPARATELY OBTAIN APPROVAL WITH THE CSFM AT CONTRACTORS' EXPENSE AND SHALL MEET ALL REQUIREMENTS OF THE SYSTEM AS DESIGNED AND PRE-APPROVED. ALL PROPOSED SUBSTITUTIONS SHALL BE LISTED WITH THE CALIFORNIA STATE FIRE MARSHAL.
- FINAL ACCEPTANCE TEST TO INCLUDE TESTING THE CONNECTION BETWEEN THE FIRE ALARM PANEL AND THE SUPERVISING STATION.
- DSA CERTIFIED PROJECT INSPECTOR EMPLOYED BY THE DISTRICT (OWNER) AND APPROVED BY THE DSA SHALL PROVIDE CONTINUOUS INSPECTION OF THE WORK. THE DUTIES OF THE INSPECTOR ARE DEFINED IN SECTION 4-342, PART 1, TITLE 24, CCR.

### FIRE ALARM SYSTEM APPLICABLE CODES

PARTIAL LIST OF APPLICABLE CODES AS OF JANUARY 1, 2017 \*

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2019 CALIFORNIA REFERENCED STANDARDS CODE, PART 12, TITLE 24 CCR TITLE 19 CCR, PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS  
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SEE CALIFORNIA BUILDING CODE, CHAPTER 35, FOR STATE OF CALIFORNIA AMENDMENTS TO THE NFPA STANDARDS.  
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### FIRE ALARM SHEET INDEX

SHEET #	SHEET DESCRIPTION
FA0.0	FIRE ALARM COVER SHEET
FA0.1	FIRE ALARM TITLE SHEET, INDEX, LEGEND & NOTES
FA0.2	CAL GREEN CHECKLIST
FA1.0	FIRE ALARM SITE PLAN
FA2.0	FIRE ALARM BUILDING "A" DEMOLITION & NEW WORK PLANS
FA2.1	FIRE ALARM BUILDING "B" DEMOLITION & NEW WORK PLANS
FA2.2	FIRE ALARM BUILDING "C" DEMOLITION & NEW WORK PLANS
FA2.3	FIRE ALARM BUILDING "D" DEMOLITION & NEW WORK PLANS
FA2.4	FIRE ALARM BUILDING "NORTH" & "N.E." PORTABLES DEMOLITION WORK PLANS
FA2.5	FIRE ALARM BUILDING "NORTH" & "N.E." PORTABLES NEW WORK PLANS
FA3.0	FIRE ALARM BUILDING "EAST" & "SOUTH" PORTABLES DEMOLITION & NEW WORK PLANS
FA4.0	FIRE ALARM RISER DIAGRAM
FA	



**ADSA** **GL-4**  
PROJECT SUBMITTAL GUIDELINE: CALGREEN CODE

Division of the State Architect (DSA) documents referenced within this publication are available on the DSA Forms or Publications webpages.

Projects submitted to DSA for review, as a single project or as increments, must comply with the Title 24, Part 11, California Green Building Standards Code (CALGreen).

DSA-SS CALGreen regulatory requirements consists of compliance with the scoping requirements in CALGreen Chapter 3, Section 301.4 and the Nonresidential Mandatory Measures adopted by DSA-SS in Chapter 5. Please refer to the Chapter 5 Matrix Adoption Tables for each Division for the specific Mandatory Measures adopted by DSA-SS.

The measures outlined in CALGreen Chapter 5, Section 5.10.2 for building and site Commissioning and Section 5.410.4 for building and site Testing and Adjusting are not mandatory requirements for schools and community colleges, however, portions of these regulations are required by the California Energy Code with which all facilities must comply. For mandatory Commissioning requirements under the California Energy Code, including installation and acceptance testing requirements, refer to Energy Code Section 120.8. Although not adopted by DSA-SS, the additional design measures for Commissioning in CALGreen Section 5.410.2 and the verification measures for Testing and Adjusting under CALGreen Section 5.410.4 are encouraged and recommended.

CALGreen Section 306 Voluntary Measures encourages building practices that improve public health, safety and general welfare by promoting the use of building concepts which minimize the building's impact on the environment, and promote a more sustainable design. Chapter 5 Nonresidential Mandatory Measures that are not adopted as mandatory measures by DSA-SS are voluntary measures recommended and encouraged for the design, construction, verification, and maintenance of non-energy systems. Appendix AS, Divisions A5.1 through A5.5 outline means of achieving enhanced sustainable design and construction by incorporating voluntary measures that exceed the mandatory measures.

Attachment 1 lists the CALGreen Nonresidential Mandatory Measures adopted by DSA-SS. For the complete text, consult the 2019 Title 24, Part 11, California Green Building Standards Code. For Project Submission, check the CALGreen Mandatory Measures that are applicable to and have been incorporated into the Project and submit this Guideline (checklist) with the application.

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DIVISION OF THE STATE ARCHITECT DEPARTMENT OF GENERAL SERVICES STATE OF CALIFORNIA

DSA PROJECT SUBMITTAL GUIDELINE-4  
CALGREEN CODE

Attachment 1  
2019 CALIFORNIA GREEN BUILDING STANDARDS CODE  
Division of the State Architect – Structural Safety (DSA-SS)  
(CCR, Title 24, Part 11)

CHAPTER 3 – GREEN BUILDING  
SECTION 301 – GENERAL

301.4 Mandatory measures for public schools and community colleges. [DSA-SS] New building construction and site work on a new or existing site shall comply with Chapter 5 as adopted by DSA-SS.

- 301.4.1 Building and site construction on a new site shall comply with Chapter 5 as adopted by DSA-SS.
- 301.4.2 Work on an existing site shall comply with Section 301.4.2.
- 301.4.2.1 Newly constructed site work shall comply with Chapter 5 as adopted by DSA-SS.
- 301.4.2.2 Newly constructed buildings shall comply with Chapter 5 as adopted by DSA-SS and Section 301.4.3.
- 301.4.2.3 Additions to existing buildings shall comply with Section 301.4.3.
- 301.4.2.4 Rehabilitated landscape areas shall comply with Sections 5.304.6 and 5.106.12.
- 301.4.3 Minimum rehabilitated landscape area requirement. A minimum rehabilitated landscape area equal to 75 percent of the footprint area of the building shall comply with Section 5.304.6 and Section 106.12. New buildings or additions to existing buildings less than 1,600 square feet shall not be required to comply with Section 301.4.3.

CHAPTER 5 – NONRESIDENTIAL MANDATORY MEASURES  
DIVISION 5.1 – PLANNING AND DESIGN

SECTION 5.106 – SITE DEVELOPMENT

- 5.106.4.2 Bicycle parking. [DSA-SS] For public schools and community colleges, comply with Sections 5.106.4.2.1 and 5.106.4.2.2.
- 5.106.4.2.1 Student bicycle parking. Provide permanently anchored bicycle racks conveniently accessed with a minimum of four two-bike capacity racks per new building.
- 5.106.4.2.2 Staff bicycle parking. Provide permanent secure bicycle parking conveniently accessed with a minimum of two staff bicycle parking spaces per new building. Acceptable parking facilities shall be convenient from the street or staff parking area and shall meet one of the following:
  1. Covered, lockable enclosures with permanently anchored racks for bicycles;
  2. Lockable bicycle rooms with permanently anchored racks; or
  3. Lockable, permanently anchored bicycle lockers.
- 5.106.5.3 Electric vehicle (EV) charging. [N] Construction shall comply with Section 5.106.5.3.1 or Section 5.106.5.3.2 to facilitate future installation of electric vehicle supply equipment (EVSE). When EVSE(s) is/are installed, it shall be in accordance with the California Building Code, the California Electrical Code and as follows:

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DIVISION OF THE STATE ARCHITECT DEPARTMENT OF GENERAL SERVICES STATE OF CALIFORNIA

DSA PROJECT SUBMITTAL GUIDELINE-4  
CALGREEN CODE

- 5.106.5.3.1 Single charging space requirements. [N] When only a single charging space is required per Table 5.106.5.3.3, a raceway is required to be installed at the time of construction and shall be installed in accordance with the California Electrical Code. Construction plans and specifications shall include, but are not limited to, the following:
  1. The type and location of the EVSE.
  2. A listed raceway capable of accommodating a 208/240-volt dedicated branch circuit.
  3. The raceway shall not be less than trade size 1 inch.
  4. The raceway shall originate at a service panel or a subpanel serving the area, and shall terminate in close proximity to the proposed location of the charging equipment and into a listed suitable cabinet, box, enclosure or equivalent.
  5. The service panel or subpanel shall have sufficient capacity to accommodate a minimum 40-ampere dedicated branch circuit for the future installation of the EVSE.
- 5.106.5.3.2 Multiple charging space requirements. [N] When multiple charging spaces are required per Table 5.106.5.3.3 (raceway(s) is/are required to be installed at the time of construction and shall be installed in accordance with the California Electrical Code. Construction plans and specifications shall include, but are not limited to, the following:
  1. The type and location of the EVSE.
  2. The raceway(s) shall originate at a service panel or a subpanel(s) serving the area, and shall terminate in close proximity to the proposed location of the charging equipment and into listed suitable cabinet(s), box(es), enclosure(s) or equivalent.
  3. Plan design shall be based upon 40-ampere minimum branch circuits.
  4. Electrical calculations shall substantiate the design of the electrical system to include the rating of equipment and any on-site distribution transformers and have sufficient capacity to simultaneously charge all required EVs at the full rated amperage.
  5. The service panel or subpanel(s) shall have sufficient capacity to accommodate the required number of dedicated branch circuit(s) for the future installation of the EVSE.
- EV charging space calculation. [N] Table 5.106.5.3.3 shall be used to determine if single or multiple charging space requirements apply for the future installation of EVSE.
 

**Exceptions:** On a case-by-case basis where the local enforcing agency has determined EV charging and infrastructure is not feasible based upon one or more of the following conditions:

  1. Where there is insufficient electrical supply.
  2. Where there is evidence suitable to the local enforcing agency substantiating that additional local utility infrastructure design requirements, directly related to the implementation of Section 5.106.5.3, may adversely impact the construction cost of the project.

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DIVISION OF THE STATE ARCHITECT DEPARTMENT OF GENERAL SERVICES STATE OF CALIFORNIA

DSA PROJECT SUBMITTAL GUIDELINE-4  
CALGREEN CODE

TABLE 5.106.5.3.3	
TOTAL NUMBER OF ACTUAL PARKING SPACES	NUMBER OF REQUIRED EV CHARGING SPACES
0 – 9	0
10 – 25	1
26 – 50	2
51 – 75	4
76 – 100	5
101 – 150	7
151 – 200	10
201 and over	6 percent of total <sup>1</sup>

<sup>1</sup> Calculation for spaces shall be rounded up to the nearest whole number.

- 5.106.5.3.4 [N] Identification. The service panel or subpanel(s) circuit directory shall identify the reserved overcurrent protective device space(s) for future EV charging as "EV CAPABLE." The reserved termination location shall be permanently and visibly marked as "EV CAPABLE."
- 5.106.5.3.5 [N] Future charging spaces. Future charging spaces qualify as designated parking as described in Section 5.106.5.2 Designated parking for clean air vehicles.
- 5.106.8 Light pollution reduction. [N] Outdoor lighting systems shall be designed and installed to comply with the following:
  1. The minimum requirements in the California Energy Code for Lighting Zones 0 to 4 as defined in Chapter 10, Section 10-114 of the California Administrative Code, and
  2. Backlight, (B) ratings as defined in Illuminating Engineering Society of North America (IESNA) TM-15-11 (shown in TABLE A-7 in Chapter 8), and
  3. Uplight and Glare ratings as defined in California Energy Code (shown in TABLES 130.2-A and 130.2-B in Chapter 8) and
  4. Allowable Backlight, Uplight, and Glare (BUG) ratings not exceeding those shown in Table 5.106.8 [N], or comply with a local ordinance lawfully enacted pursuant to Section 101.7, whichever is more stringent.

- Exceptions: [N]**
  1. Luminaires that qualify as exceptions in Section 140.7 of the California Energy Code.
  2. Emergency lighting.
  3. Building facade meeting the requirements in Table 140.7-B of the California Energy Code, Part 6.
  4. Custom lighting features as allowed by the local enforcing agency, as permitted by Section 101.8 Alternate materials, designs and methods of construction.

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- Notes:**
  1. [N] See also California Building Code, Chapter 12, Section 1205.7 for college campus lighting requirements for parking facilities and walkways.
  2. Refer to Chapter 8 (Compliance Forms, Worksheets and Reference Material) for Illuminating Engineering Society Technical Memorandum TM-15-11 Table A-1, California Energy Code Tables 130.2-A and 130.2-B.
  3. Refer to the California Energy Code for requirements for additions and alterations.

TABLE 5.106.8 [N]  
MAXIMUM ALLOWABLE BACKLIGHT, UPLIGHT, AND GLARE (BUG) RATINGS  
(See CALGreen for TABLE)

- 5.106.10 Grading and paving. Construction plans shall indicate how site grading or a drainage system will manage all surface water flows to keep water from entering buildings. Examples of methods to manage surface water include, but are not limited to, the following:
  1. Swales.
  2. Water collection and disposal systems.
  3. French drains.
  4. Water retention gardens.
  5. Other water measures which keep surface water away from buildings and aid in groundwater recharge.

- Exception:** Additions and alterations not altering the drainage path.
- 5.106.12 Shade trees. [DSA-SS] Shade trees shall be planted to comply with Sections 5.106.12.1, 5.106.12.2, and 5.106.12.3. Percentages shown shall be measured at noon on the summer solstice. Landscape irrigation necessary to establish and maintain tree health shall comply with Section 5.304.6.
- 5.106.12.1 Surface parking areas. Shade tree plantings, minimum #10 container size or equal, shall be installed to provide shade over 50% of the parking area within 15 years.
 

**Exception:** The surface parking area covered by solar photovoltaic shade structures, or shade structures with roofing materials that comply with AS 106.11.2.2 in Appendix AS, are not included in the total area calculation.
- 5.106.12.2 Landscape areas. Shade trees plantings, minimum #10 container size or equal, shall be installed to provide shade over 20% of the landscape area within 15 years.
 

**Exception:** Playfields for organized sport activity are not included in the total area calculation.
- 5.106.12.3 Hardscape areas. Shade trees plantings, minimum #10 container size or equal, shall be installed to provide shade over 20% of the hardscape area within 15 years.
 

**Exception:** Walks, hardscape areas covered by solar photovoltaic shade structures, and hardscape areas covered by shade structures with roofing materials that comply with Table AS 106.11.2.2 in Appendix AS, are not included in the total area calculation.

DIVISION 5.2 – ENERGY EFFICIENCY

- 5.201.1 California Energy Code. For the purposes of mandatory energy efficiency standards in this code, the California Energy Commission will continue to adopt mandatory standards.

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DIVISION 5.3 – WATER EFFICIENCY AND CONSERVATION

- 5.303 Water conserving plumbing fixtures and fittings. Plumbing fixtures (water closets and urinals) and fittings (faucets and showerheads) shall comply with the following:
  - 5.303.3.1 Water closets. The effective flush volume of all water closets shall not exceed 1.28 gallons per flush. Tank-type water closets shall be certified to the performance criteria of the U.S. EPA WaterSense Specifications for Tank-Type Toilets.
 

**Note:** The effective flush volume of dual flush toilets is defined as the composite, average flush volume of two reduced flushes and one full flush.
  - 5.303.3.2 Urinals.
    - 5.303.3.2.1 Wall mounted urinals. The effective flush volume of wall mounted urinals shall not exceed 0.125 gallons per flush.
    - 5.303.3.2.2 Floor mounted urinals. The effective flush volume of floor mounted or other urinals shall not exceed 0.5 gallons per flush.
  - 5.303.3.3 Showerheads
    - 5.303.3.3.1 Single showerhead. Showerheads shall have a maximum flow rate of not more than 1.8 gallons per minute at 80 psi. Showerheads shall be certified to the performance criteria of the U.S. EPA WaterSense Specifications for showerheads.
    - 5.303.3.3.2 Multiple showerheads serving one shower. When a shower is served by more than one showerhead, the combined flow rate of all showerheads and/or other shower outlets controlled by a single valve shall not exceed 1.8 gallons per minute at 80 psi, or the showerhead shall be designed to allow only one shower outlet to be in operation at one time.
 

**Note:** A hand-held shower shall be considered a showerhead.
  - 5.303.3.4 Faucets and fountains.
    - 5.303.3.4.1 Non-residential lavatory faucets. Non-residential lavatory faucets shall have a maximum flow rate of not more than 0.5 gallons per minute at 80 psi.
    - 5.303.3.4.2 Kitchen faucets. Kitchen faucets shall have a maximum flow rate of not more than 1.8 gallons per minute at 60 psi. Kitchen faucets may temporarily increase the flow above the maximum rate, but not to exceed 2.2 gallons per minute at 60 psi, and must default to a maximum flow rate of 1.8 gallons per minute at 60 psi.
    - 5.303.3.4.3 Wash fountains. Wash fountains shall have a maximum flow rate of not more than 1.8 gallons per minute/20 [in] spa (inches) at 60 psi.
    - 5.303.3.4.4 Metering faucets. Metering faucets shall not deliver more than 0.20 gallons per cycle.
    - 5.303.3.4.5 Metering faucets for wash fountains. Metering faucets for wash fountains shall have a maximum flow rate of not more than 0.20 gallons per cycle/20 [in] spa (inches) at 60 psi.
- Note:** Where complying faucets are unavailable, aerators or other means may be used to achieve reduction.
- 5.303.6 Standards for plumbing fixtures and fittings. Plumbing fixtures and fittings shall be installed in accordance with the California Plumbing Code, and shall meet the applicable standards referenced in Table 1701.1.1 of the California Plumbing Code and in Chapter 6 of this code.

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SECTION 5.304 – OUTDOOR WATER USE

- 5.304.6 Outdoor potable water use in landscape areas. For public schools and community colleges, landscape projects as described in Sections 5.304.6.1 and 5.304.6.2 shall comply with the California Department of Water Resources Model Water Efficient Landscape Ordinance (MVELO) commencing with Section 450 of Chapter 2.7, Division 2, Title 23, California Code of Regulations, except that the Evapotranspiration Adjustment Factor (ETAF) shall be 0.65 with an additional water allowance for special landscape areas (SLA) of 0.35.
 

**Exception:** Any project with an aggregate landscape area of 2,500 square feet or less may comply with the prescriptive measures contained in Appendix D of the MVELO.

  - 5.304.6.1 Newly constructed landscapes. New construction projects with an aggregate landscape area equal to or greater than 500 square feet.
  - 5.304.6.2 Rehabilitated landscapes. Rehabilitated landscape projects with an aggregate landscape area equal to or greater than 1,200 square feet.

DIVISION 5.4 – MATERIAL CONSERVATION AND RESOURCE EFFICIENCY

- 5.401.1 Weather protection. Provide a weather-resistant exterior wall and foundation envelope as required by California Building Code, Section 1402.2 (Weather Protection), manufacturer's installation instructions, or local ordinance, whichever is more stringent.
- 5.402.2 Moisture control. Employ moisture control measures by the following methods:
  - 5.402.2.1 Sprinklers. Design and maintain landscape irrigation systems to prevent spray on structures.
  - 5.402.2.2 Entries and openings. Design exterior entries and/or openings subject to foot traffic or wind-driven rain to prevent water intrusion into buildings as follows:
    - 5.402.2.2.1 Exterior door protection. Primary exterior entries shall be covered to prevent water intrusion by using nonabsorbent floor and wall finishes within at least 2 feet around and perpendicular to such openings plus at least one of the following:
      1. An installed awning at least 4 feet in depth.
      2. The door is protected by a roof overhang at least 4 feet in depth.
      3. The door is recessed at least 4 feet.
      4. Other methods which provide equivalent protection.
    - 5.402.2.2.2 Flashing. Installed flashings integrated with a drainage plane.

SECTION 5.408 – CONSTRUCTION WASTE REDUCTION, DISPOSAL AND RECYCLING

- 5.408.1 Construction waste management. Recycle and/or salvage for reuse a minimum of 65 percent of the nonhazardous construction and demolition waste in accordance with Section 5.408.1.1, 5.408.1.2 or 5.408.1.3; or meet a local construction and demolition waste management ordinance, whichever is more stringent.
- 5.408.1.1 Construction waste management plan. Where a local jurisdiction does not have a construction and demolition waste management ordinance that is more stringent, submit a construction waste management plan that
  1. Identifies the construction and demolition waste materials to be diverted from disposal by efficient usage, recycling, reuse on the project or salvage for future use or sale.

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- 2. Determines if construction and demolition waste materials will be sorted on-site (source-separated) or bulk mixed (single stream).
- 3. Identifies diversion facilities where construction and demolition waste material collected will be taken.
- 4. Specifies that the amount of construction and demolition waste materials diverted shall be calculated by weight or volume, but not by both.
- 5.408.1.2 Waste management company. Utilize a waste management company that can provide verifiable documentation that the percentage of construction and demolition waste material diverted from the landfill complies with this section.
 

**Note:** The owner or contractor shall make the determination if the construction and demolition waste material will be diverted by a waste management company.

**Exceptions to Sections 5.408.1.1 and 5.408.1.2:**

  1. Excavated soil and land-clearing debris.
  2. Alternate waste reduction methods developed by working with local agencies if diversion or recycle facilities capable of compliance with this item do not exist.
  3. Demolition waste meeting local ordinance or calculated in consideration of local recycling facilities and markets.
- 5.408.1.3 Waste stream reduction alternative. The combined weight of new construction disposal that does not exceed two pounds per square foot of building area may be deemed to meet the 65 percent minimum requirement as approved by the enforcing agency.

- 5.408.1.4 Documentation. Documentation shall be provided to the enforcing agency which demonstrates compliance with Section 5.408.1.1 through 5.408.1.3. The waste management plan shall be updated as necessary and shall be accessible during construction for examination by the enforcing agency.
 

**Notes:**

  1. Sample forms found in "A Guide to the California Green Building Standards Code (Nonresidential)" located at [www.bae.ca.gov/Home/CALGreen.aspx](http://www.bae.ca.gov/Home/CALGreen.aspx) may be used to assist in documenting compliance with the waste management plan.
  2. Mixed construction and demolition debris (C&D) processors can be located at the California Department of Resources Recycling and Recovery (CalRecycle).

SECTION 5.410 – BUILDING MAINTENANCE AND OPERATION

- 5.410.1 Recycling by occupants. Provide readily accessible areas that serve the entire building and are identified for the depositing, storage and collection of non-hazardous materials for recycling, including (at a minimum) paper, corrugated cardboard, glass, plastics, organic waste, and metals or metal a lawfully enacted local recycling ordinance, if more restrictive.
 

**Exception:** Rural jurisdictions that meet and apply for the exemption of Public Resources Code 42649.82 (2)(A) et seq. will also be exempt from the organics waste portion of this section.
- 5.410.1.2 Sample ordinance. Space allocation for recycling areas shall comply with Chapter 18, Part 3, Division 30 of the Public Resources Code. Chapter 18 is known as the California Solid Waste Reuse and Recycling Access Act of 1991 (Act).
- Note:** A sample ordinance for use by local agencies may be found in Appendix X of the document at the CalRecycle's website.

DIVISION 5.5 ENVIRONMENTAL QUALITY

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SECTION 5.504.1 – POLLUTANT CONTROL

- 5.504.1.1 Covering of duct openings and protection of mechanical equipment during construction. At the time of rough installation and during storage on the construction site until final startup of the heating, cooling and ventilating equipment, all duct and other related air distribution component openings shall be covered with tape, plastic, sheet metal or other methods acceptable to the enforcing agency to reduce the amount of dust, water and debris which may enter the system.
- 5.504.1.2 Finish material pollutant control. Finish materials shall comply with Sections 5.504.4.1 through 5.504.4.6.
- 5.504.1.1 Adhesives, sealants, and caulks. Adhesives, sealants, and caulks used on the project shall meet the requirements of the following standards:
  1. Adhesives, adhesive bonding primers, adhesive primers, sealants, sealant primers, and caulks shall comply with local or regional air pollution control or air quality management district rules where applicable, or SCAQMD Rule 1168 VOC limits, as shown in Tables 5.504.4.1 and 5.504.4.2. Such products also shall comply with the Rule 1168 prohibition on the use of certain toxic compounds (chloroform, ethylene dichloride, methylene chloride, perchloroethylene, and trichloroethylene), except for aerosol products as specified in subsection 2, below.
  2. Aerosol adhesives, and smaller unit sizes of adhesives, and sealant or caulking compounds (in units of product, less packaging, which do not weigh more than one pound and do not consist of more than 16 fluid ounces) shall comply with statewide VOC standards and other requirements, including prohibitions on use of certain toxic compounds, of California Code of Regulations, Title 17, commencing with Section 94507.

TABLE 5.504.4.1 – ADHESIVE VOC LIMIT  
(See CALGreen for TABLE)

TABLE 5.504.4.2 – SEALANT VOC LIMIT  
(See CALGreen for TABLE)

- 5.504.4.3 Paints and coatings. Architectural paints and coatings shall comply with VOC limits in Table 1 of the ARB Architectural Coatings Suggested Control Measure, as shown in Table 5.504.4.3, unless more stringent local limits apply. The VOC content limit for coatings that do not meet the definitions for the specialty coatings categories listed in Table 5.504.4.3, shall be determined by classifying the coating as a Flat, Nonflat, or Nonflat-High Gloss coating, based on its gloss, as defined in Subsections 4.21, 4.36 and 4.37 of the 2007 California Air Resources Board, Suggested Control Measure, and the corresponding Flat, Nonflat or Nonflat-High Gloss VOC limit in Table 5.504.4.3 shall apply.

TABLE 5.504.4.3 – VOC CONTENT LIMITS FOR ARCHITECTURAL COATINGS  
(See CALGreen for TABLE)

- 5.504.4.3.1 Aerosol paints and coatings. Aerosol paints and coatings shall meet the PWMIR Limits for ROG in Section 94522(a)(3) and other requirements, including prohibitions on use of certain toxic compounds and ozone depleting substances, in Sections 94522(c)(2) and (d)(2) of California Code of Regulations, Title 17, commencing with Section 94520; and in areas under the jurisdiction of the Bay Area Air Quality Management District additionally comply with the percent VOC by weight of product limits of Regulation 9 Rule 49.
- 5.504.4.3.2 Verification. Verification of compliance with this section shall be provided at the request of the enforcing agency. Documentation may include, but is not limited to, the following:
  1. Manufacturer's product specification.

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- 2. Field verification of on-site product containers.
- 5.504.4.4 Carpet systems. All carpet installed in the building interior shall meet at least one of the following testing and product requirements:
  1. Carpet and Rug Institute's Green Label Plus Program;
  2. Compliant with the VOC-emission limits and testing requirements specified in the California Department of Public Health Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers, Version 1.1, February 2010 (also known as CDPH Standard Method V1.1 or Specification (01350));
  3. NSF/ANSI 140 at the Gold level or higher;
  4. Scientific Certifications Systems Sustainable Choice; or
  5. Compliant with the Collaborative for High Performance Schools California (CA-CHPS) Criteria 2014 and listed in the CHPS High Performance Product Database.
- 5.504.4.4.1 Carpet cushion. All carpet cushion installed in the building interior shall meet the requirements of the Carpet and Rug Institute's Green Label program.
- 5.504.4.4.2 Carpet adhesive. All carpet adhesive shall meet the requirements of Table 5.504.4.1.
- 5.504.4.5 Composite wood products. Hardwood plywood, particleboard, and medium density fiberboard composite wood products used on the interior or exterior of the building shall meet the requirements for formaldehyde as specified in ARB's Air Toxics Control Measure (ATCM) for Composite Wood (17 CCR 93120 et seq.). Those materials not exempted by the ATCM must meet the specified emission limits as shown in Table 5.504.4.5.

TABLE 5.504.4.5 – FORMALDEHYDE LIMITS  
(See CALGreen for TABLE)

- 5.504.4.6 Resilient flooring systems. For 80 percent of floor area receiving resilient flooring, installed resilient flooring shall meet at least one of the following:
  1. Certified under the Resilient Floor Covering Institute (RFCI) FloorScore program;
  2. Compliant with the VOC-emission limits and testing requirements specified in the California Department of Public Health's 2010 Standard Method for the Testing and Evaluation Chambers, Version 1.1, February 2010;
  3. Compliant with the Collaborative for High Performance Schools California (CA-CHPS) Criteria 2014 and listed in the CHPS High Performance Product Database; or
  4. Products certified under the UL GREENGUARD Gold (formerly the Greenguard Children & Schools program).

- 5.504.5.3 Filters. In mechanically ventilated buildings, provide regularly occupied areas of the building with air filtration media for outside and return air prior to occupancy that provides at least a Minimum Efficiency Reporting Value (MERV) of 13. MERV 13 filters shall be installed prior to occupancy and recommendations for maintenance with filters of the same value shall be included in the operation and maintenance manual.
 

**Exception:** Existing mechanical equipment.

- 5.504.5.3.1 Labeling. Installed filters shall be clearly labeled by the manufacturer indicating the MERV rating.

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SECTION 5.505 – INDOOR MOISTURE CONTROL

- 5.505.1 Indoor moisture control. Buildings shall meet or exceed the provisions of California Building Code, CCR, Title 24, Part 2, Sections 1202 (Ventilation) and Chapter 14 (Exterior Walls). For additional measures see Section 5.407.2 of this code.

SECTION 5.506 – INDOOR AIR QUALITY

- 5.506.1 Outside air delivery. For mechanically or naturally ventilated spaces in buildings, meet the minimum requirements of Section 120.1 (Requirements for Ventilation) of the California Energy Code, or the applicable local code, whichever is more stringent, and Division 1, Chapter 4 of CCR, Title 8.

SECTION 5.507 – ENVIRONMENTAL COMFORT

- 5.507.4 Acoustical control. Employ building assemblies and components with Sound Transmission Class (STC) values determined in accordance with ASTM E 90 and ASTM E 413 or Outdoor-Indoor Sound Transmission Class (OITC) determined in accordance with ASTM E 1332, using either the prescriptive or performance method in Section 5.507.4.1 or 5.507.4.2.
 

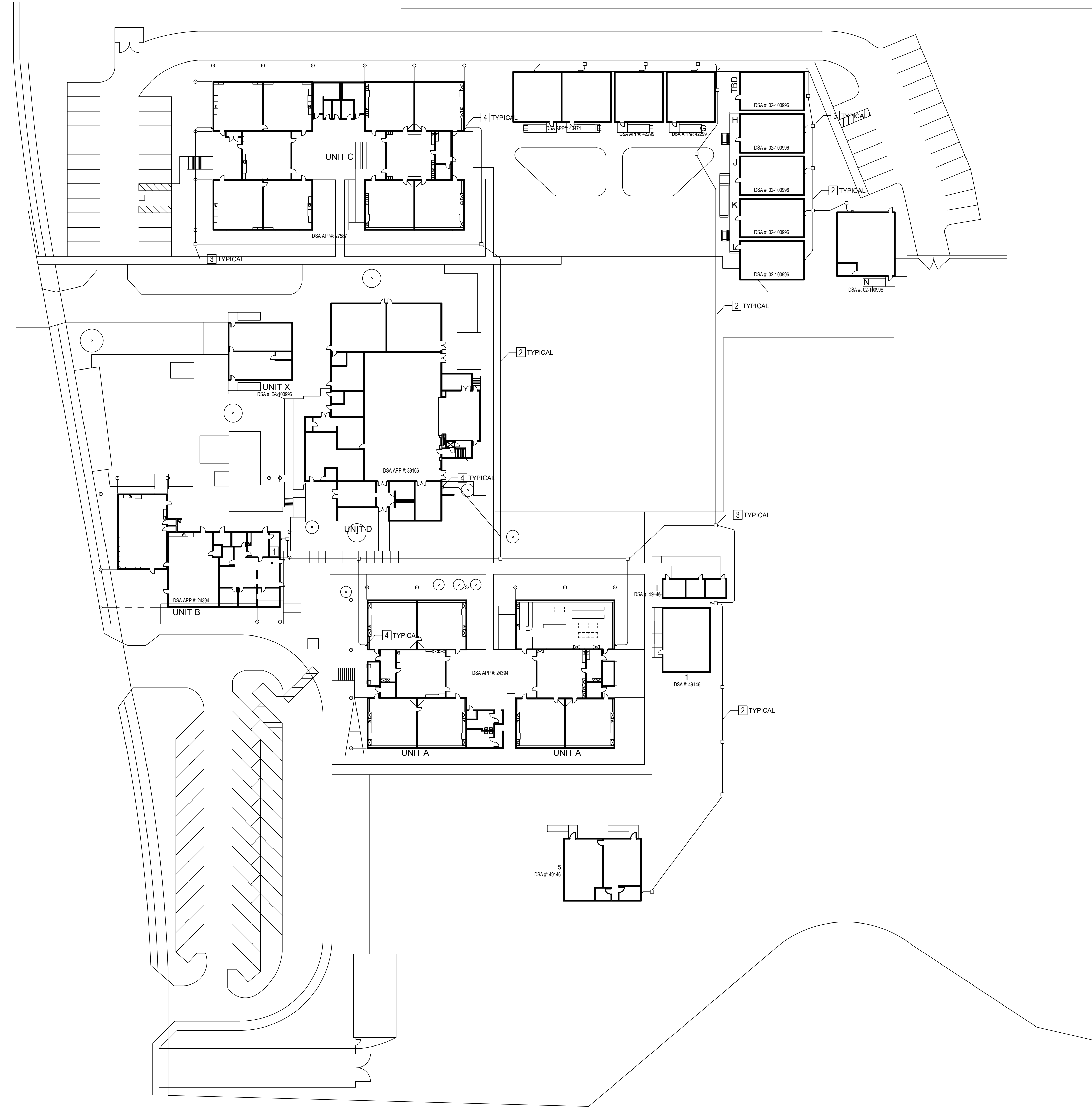
**Exception:** Buildings with few or no occupants or where occupants are not likely to be affected by exterior noise, as determined by the enforcement authority, such as factories, stadiums, arenas, enclosed parking structures and utility buildings.

**Exception:** [DSA-SS] For public schools and community colleges, the requirement of this section and all subsections apply only to new construction.
- 5.507.4.1 Exterior noise transmission, prescriptive method. Wall and roof-ceiling assemblies exposed to the noise source making up the building or addition envelope or altered envelope shall meet a composite STC rating of at least 50 or a composite OITC rating of no less than 40, with exterior windows



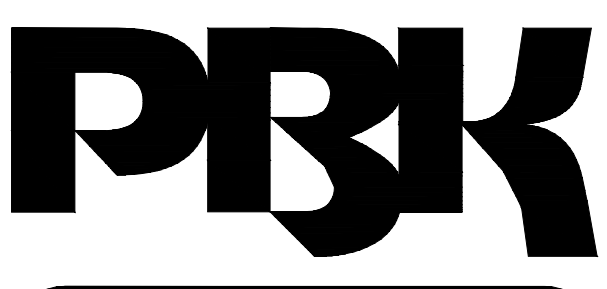
**FIRE ALARM SHEET NOTES**

- 1 LOCATION OF NEW EMERGENCY VOICE/ALARM COMMUNICATION SYSTEM CONTROL PANEL.
- 2 EXISTING UNDERGROUND CONDUIT BANK. FIELD VERIFY EXACT LOCATIONS FOR FIRE ALARM RACEWAYS PRIOR TO ROUGH IN.
- 3 EXISTING UNDERGROUND PULL BOX. FIELD VERIFY EXACT LOCATIONS OF ALL PULL BOXES PRIOR TO ROUGH IN.
- 4 EXISTING FIRE ALARM WEATHER PROOF JUNCTION BOX. FIELD VERIFY LOCATIONS OF P JUNCTION BOXES PRIOR TO ROUGH IN.



**1** FIRE ALARM SITE PLAN  
SCALE: 1" = 30'-0"

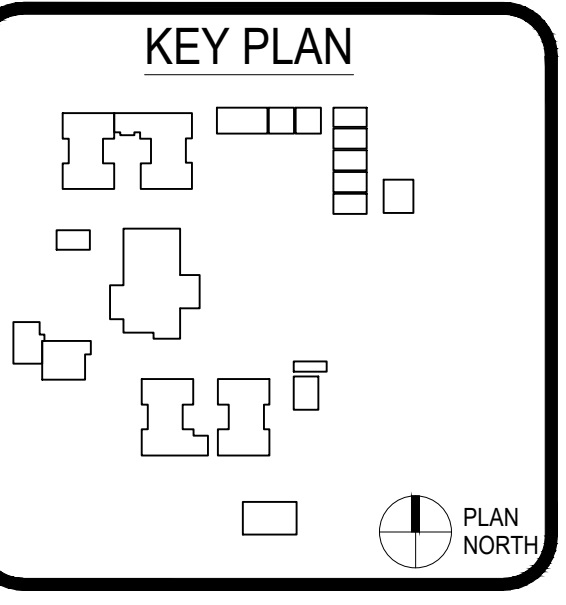
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DIV. OF THE STATE ARCHITECT  
APP: 02-120690 INC:  
REVIEWED FOR:  
SS  FLS  ACS   
DATE: 02/28/2023



ARCHITECT PBK Architects, Inc.  
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1110 IRON POINT ROAD, SUITE 200  
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MEP Engineering | Technology  
**LEAF**  
ENGINEERS  
SACRAMENTO/FOLSOM  
1110 IRON POINT ROAD, SUITE 200  
FOLSOM, CA 95630  
916-882-9494 P  
916-882-9995 F

**REPLACE FIRE ALARM SYSTEM**  
**ROCKLIN UNIFIED SCHOOL DISTRICT**  
**PARKER WHITNEY ELEMENTARY SCHOOL**  
 5145 TOPAZ AVENUE  
 ROCKLIN, CA 95677  
 DSA-APPL NO. 02-120690 FILE NO. 31-37

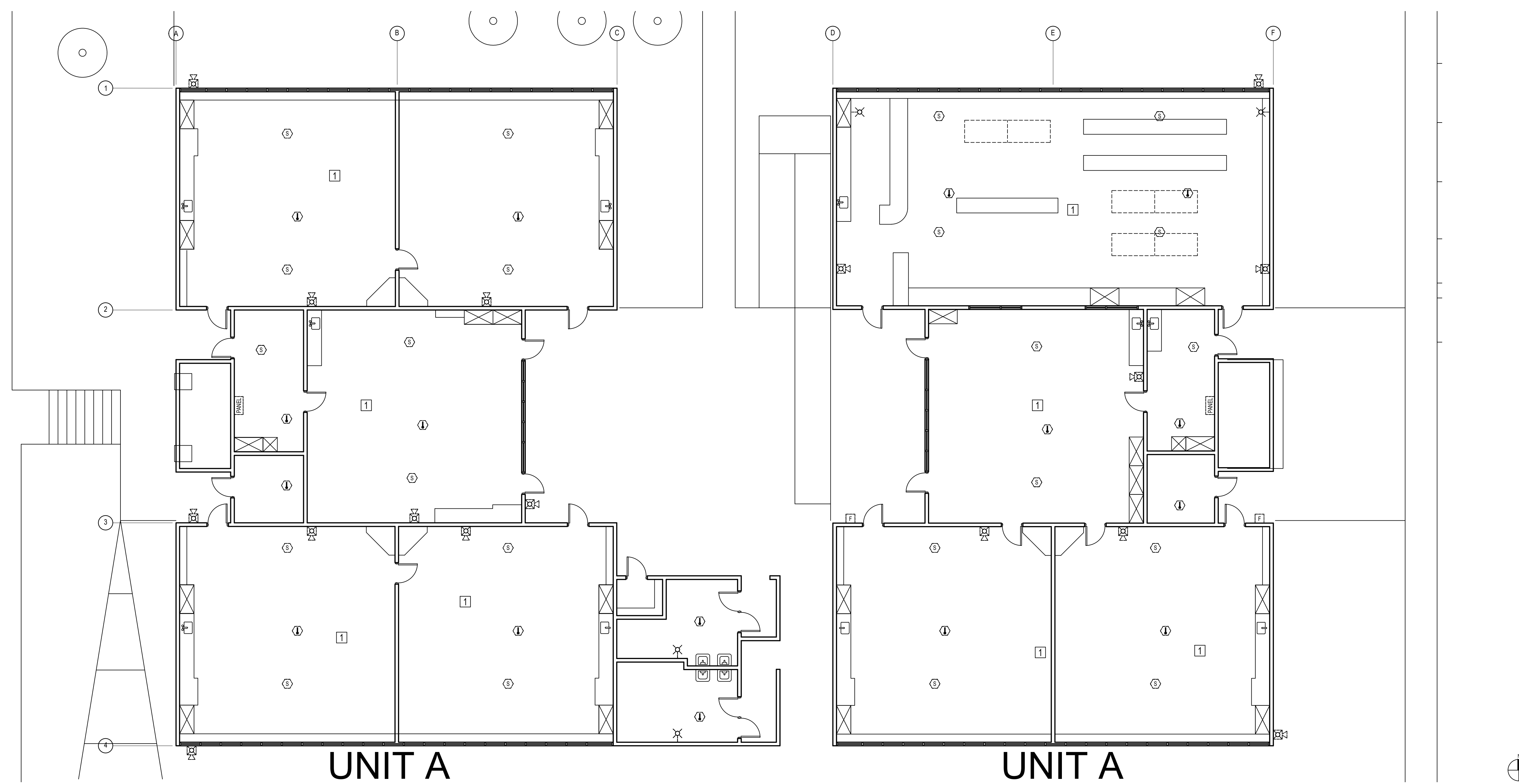


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PROJECT NUMBER: 220394  
DATE: NOVEMBER 29, 2022  
DRAWN BY: C.Y. CHKED BY: L.M.

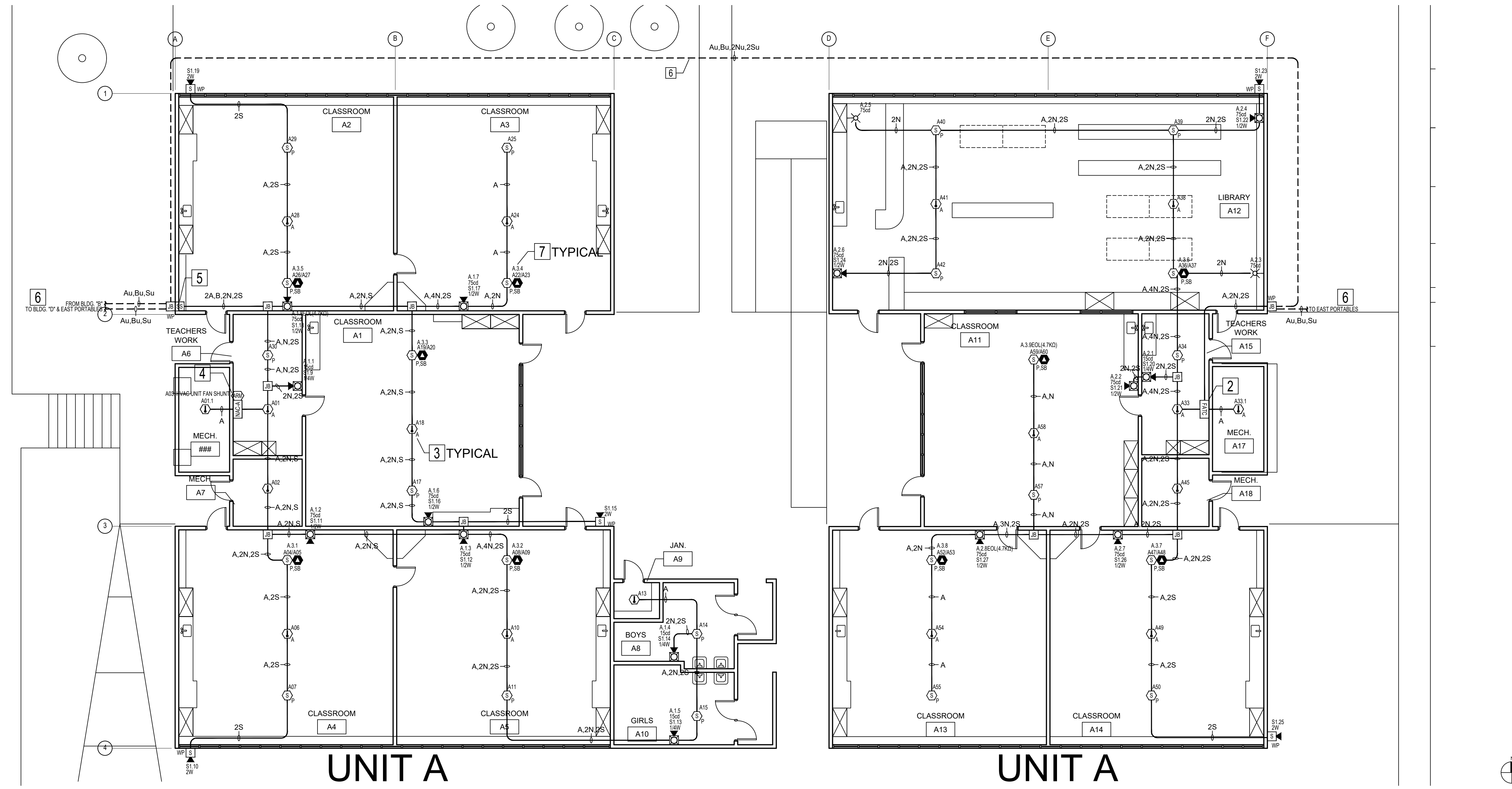
REVISIONS		
#	DESCRIPTION	DATE

DSA SUBMITTAL  
**FIRE ALARM SITE PLAN**

**FA1.0**



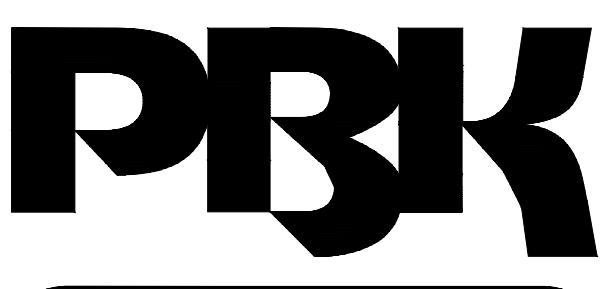
**1** FIRE ALARM BUILDING A DEMOLITION PLAN  
SCALE: 1/8" = 1'-0"



**2** FIRE ALARM BUILDING A NEW PLAN  
SCALE: 1/8" = 1'-0"

- FIRE ALARM SHEET NOTES**
- REMOVE ALL EXISTING FIRE ALARM DEVICES & APPLIANCES IN THIS BUILDING AND SAFE OFF CIRCUITS. REUSE ALL EXISTING CONDUIT WHERE APPLICABLE. INSTALL NEW CONDUIT AND BACK BOXES WHERE NEW DESIGN CALLS FOR THEM.
  - INSTALL NEW FIRE ALARM TERMINAL CABINET AND/OR NOTIFICATION APPLIANCE POWER SUPPLY IN THIS LOCATION. ROUTE ALL WIRING FROM PREVIOUS BUILDING INTO FIRE ALARM TERMINAL CABINET.
  - INSTALL ALL ABOVE CEILING DETECTION AS PER NFPA 72 CHAPTER 17 AND ANNEX "A" FOR SLOPPED CEILING INSTALLATION. ALL ABOVE CEILING DETECTION IS ANNOTATED WITH AN "A".
  - INSTALL ADDRESSABLE RELAY MODULE FOR HVAC UNIT GLOBAL SHUT DOWN ON SMOKE DETECTION.
  - INSTALL SURGE PROTECTION AS PER NFPA 72, CFC AND CEC.
  - UNDERGROUND WIRE ROUTE. ROUTE ALL FIRE ALARM WIRING FROM PREVIOUS BUILDING TO THIS BUILDING AND THEN TO NEXT BUILDING. REFER TO RISER DIAGRAM FOR WIRE ROUTING FROM BUILDING TO BUILDING.
  - INSTALL COMBINATION SMOKE/CARBON MONOXIDE DETECTOR IN ALL CLASSROOMS IN ACCORDANCE WITH NFPA 72 AND CFC §915. ALL CO DETECTORS TO HAVE A SOUNDER BASE WHICH WILL SOUND A TEMPORAL CODE 4 PATTERN UPON CO DETECTION.

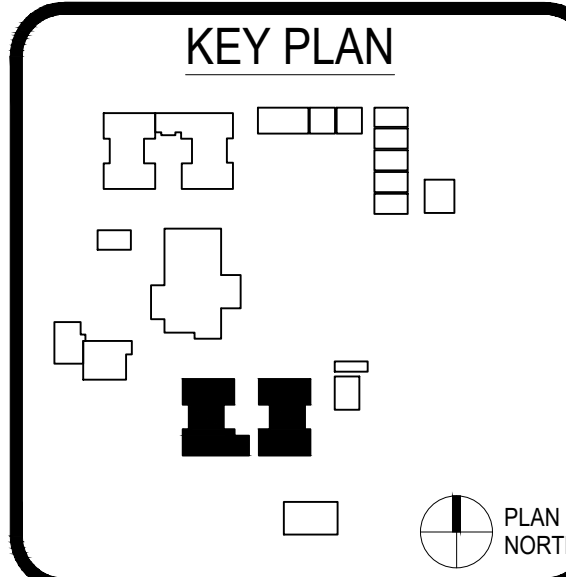
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REPLACE FIRE ALARM SYSTEM  
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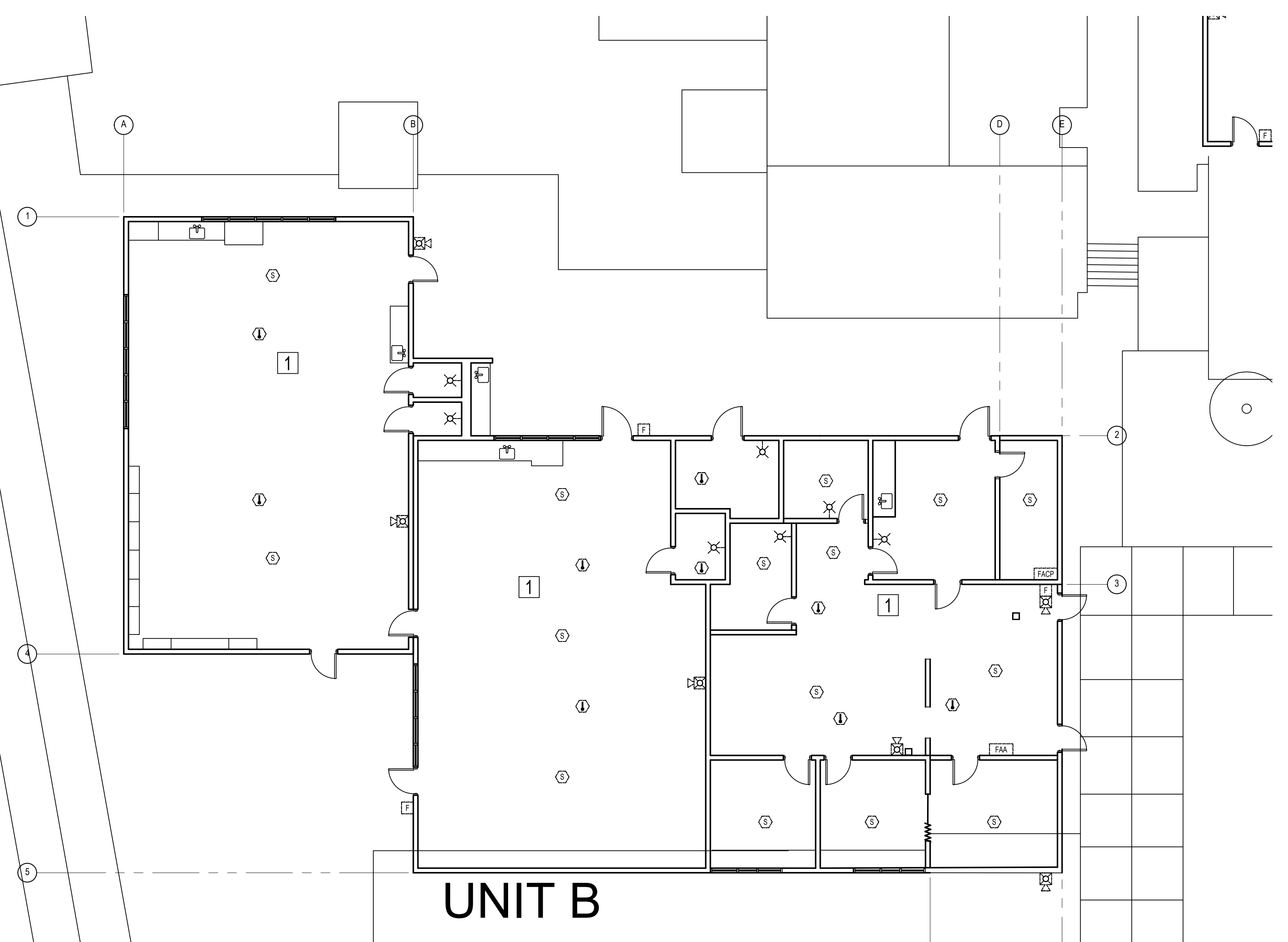
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PROJECT NUMBER: 220394  
DATE: NOVEMBER 29, 2022  
DRAWN BY: C.Y. CHECKED BY: L.M.

#	REVISIONS DESCRIPTION	DATE

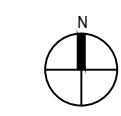
DSA SUBMITTAL  
**FIRE ALARM BLDG  
A DEMO. & NEW  
PLANS**

**FA2.0**

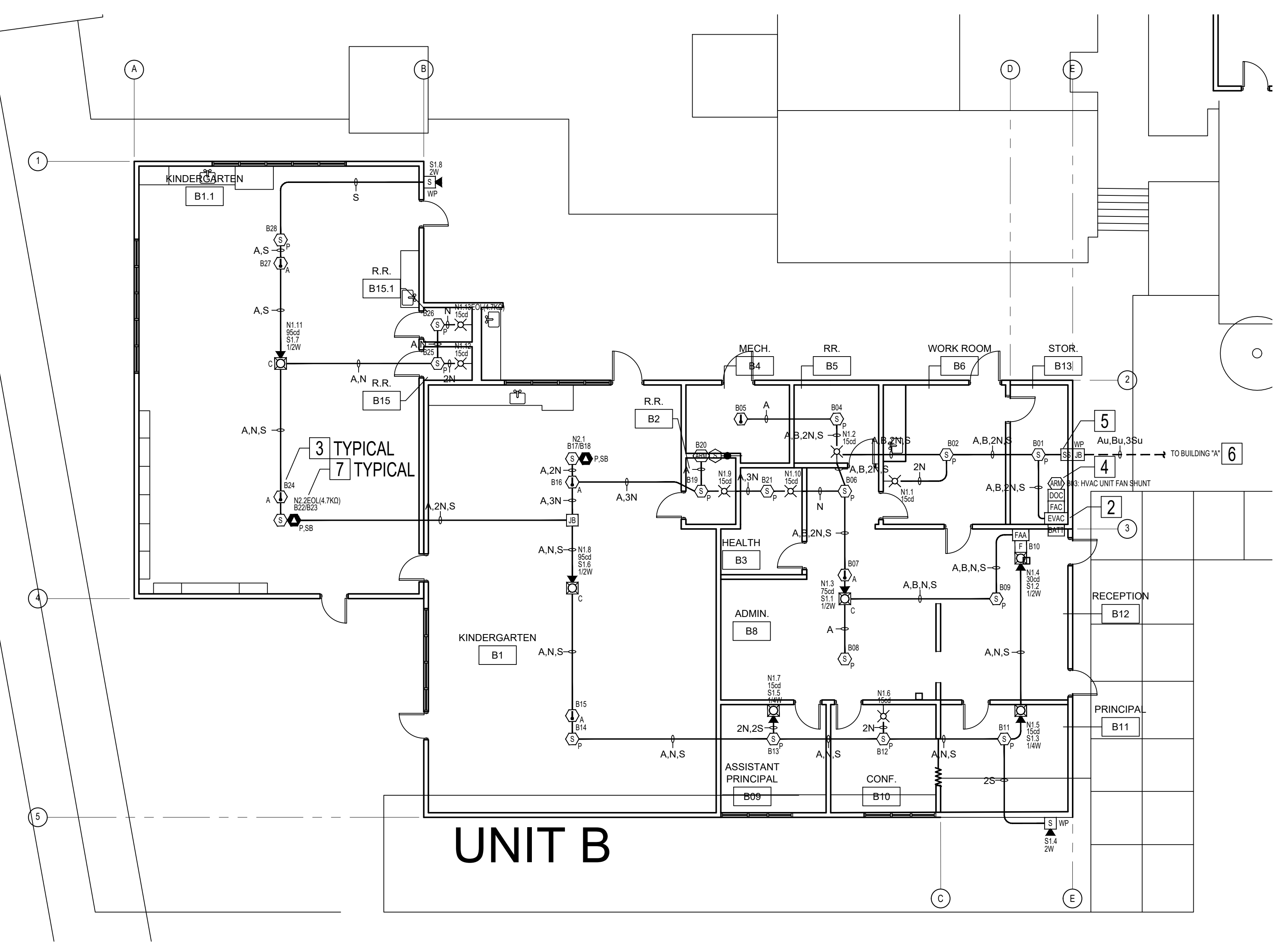




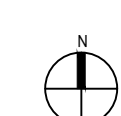
**UNIT B**



**1** FIRE ALARM BUILDING B DEMOLITION PLAN  
SCALE: 1/8" = 1'-0"



**UNIT B**



**2** FIRE ALARM BUILDING B NEW PLAN  
SCALE: 1/8" = 1'-0"

- FIRE ALARM SHEET NOTES**
- 1 REMOVE ALL EXISTING FIRE ALARM DEVICES & APPLIANCES IN THIS BUILDING AND SAFE OFF CIRCUITS. REUSE ALL EXISTING CONDUIT WHERE APPLICABLE. INSTALL NEW CONDUIT AND BACK BOXES WHERE NEW DESIGN CALLS FOR THEM.
  - 2 INSTALL NEW EMERGENCY VOICE/ALARM COMMUNICATION PANEL, CELLULAR COMMUNICATOR, BATTERY ENCLOSURE AND DOCUMENT ENCLOSURE IN THIS LOCATION.
  - 3 INSTALL ALL ABOVE CEILING DETECTION AS PER NFPA 72 CHAPTER 17 AND ANNEX "A" FOR SLOPPED CEILING INSTALLATION. ALL ABOVE CEILING DETECTION IS ANNOTATED WITH AN "A".
  - 4 INSTALL ADDRESSABLE RELAY MODULE FOR HVAC UNIT GLOBAL SHUT DOWN ON SMOKE DETECTION.
  - 5 INSTALL SURGE PROTECTION AS PER NFPA 72, CFC AND CEC.
  - 6 UNDERGROUND WIRE ROUTE. ROUTE ALL FIRE ALARM WIRING FROM PREVIOUS BUILDING TO THIS BUILDING AND THEN TO NEXT BUILDING. REFER TO RISER DIAGRAM FOR WIRE ROUTING FROM BUILDING TO BUILDING.
  - 7 INSTALL COMBINATION SMOKE/CARBON MONOXIDE DETECTOR IN ALL CLASSROOMS IN ACCORDANCE WITH NFPA 72 AND CFC §915. ALL CO DETECTORS TO HAVE A SOUNDER BASE WHICH WILL SOUND A TEMPORAL CODE 4 PATTERN UPON CO DETECTION.

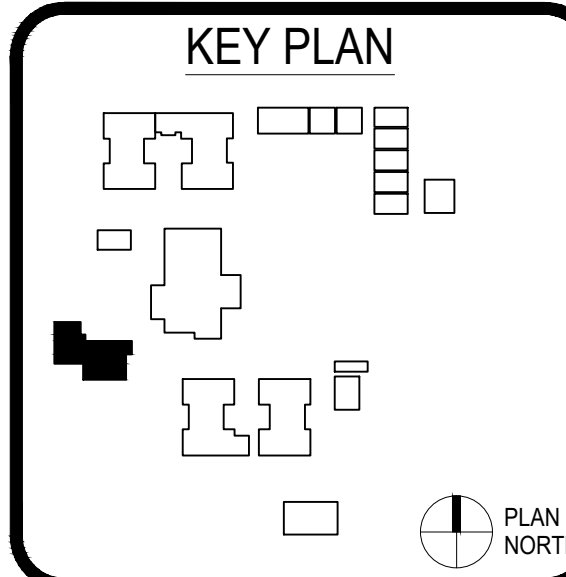
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APP: 02-120690 INC.  
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1110 IRON POINT ROAD, SUITE 200  
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916-882-9494 P  
916-882-9995 F

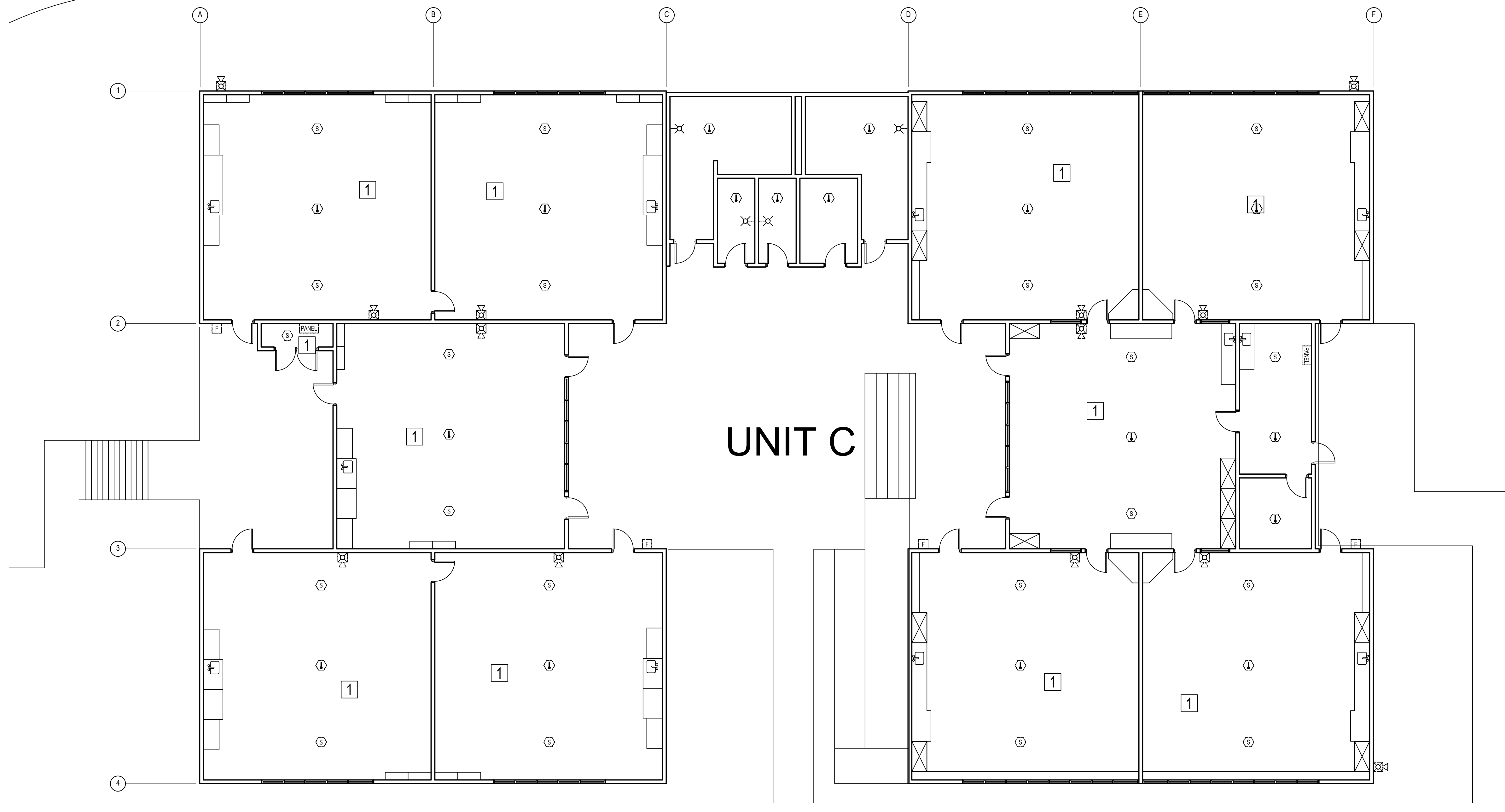
REPLACE FIRE ALARM SYSTEM  
ROCKLIN UNIFIED SCHOOL DISTRICT  
PARKER WHITNEY ELEMENTARY SCHOOL  
5145 TOPAZ AVENUE  
ROCKLIN, CA 95677  
DSA APPL. NO. 02-120690 FILE NO. 31-37



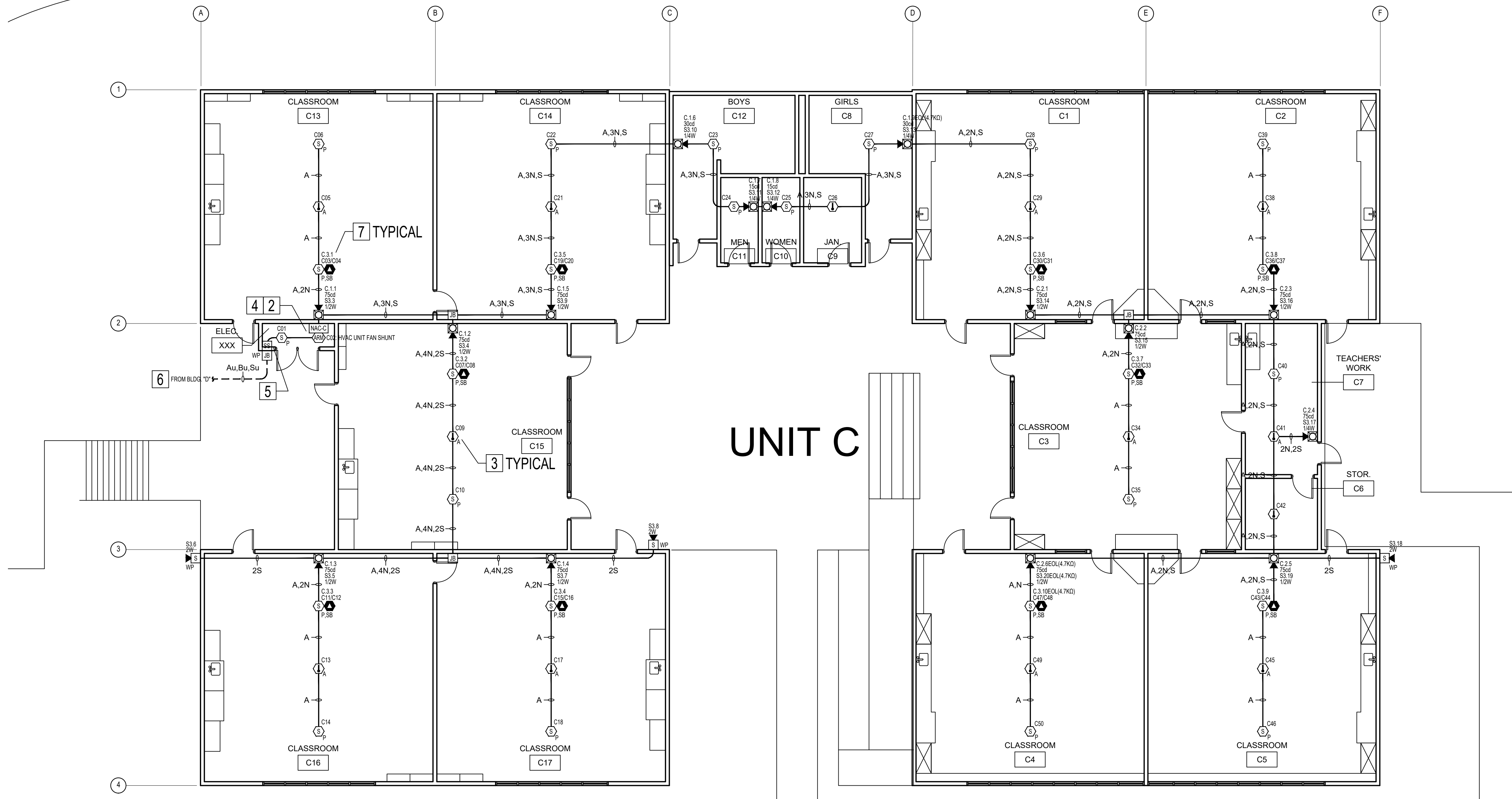
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PROJECT NUMBER: 220394		
DATE: NOVEMBER 29, 2022		
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**FIRE ALARM BLDG B DEMO. & NEW PLANS**

**FA2.1**



**1** FIRE ALARM BUILDING C DEMOLITION PLAN  
SCALE: 1/8" = 1'-0"

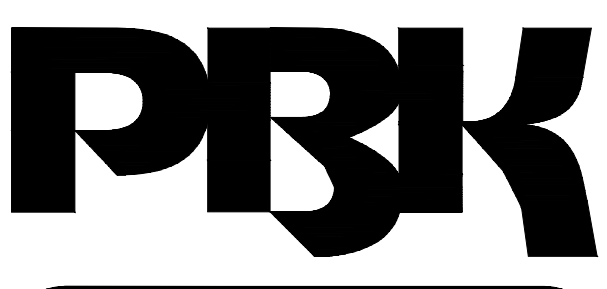


**2** FIRE ALARM BUILDING C NEW PLAN  
SCALE: 1/8" = 1'-0"

**FIRE ALARM SHEET NOTES**

- 1 REMOVE ALL EXISTING FIRE ALARM DEVICES & APPLIANCES IN THIS BUILDING AND SAFE OFF CIRCUITS. REUSE ALL EXISTING CONDUIT WHERE APPLICABLE. INSTALL NEW CONDUIT AND BACK BOXES WHERE NEW DESIGN CALLS FOR THEM.
- 2 INSTALL NEW FIRE ALARM TERMINAL CABINET AND/OR NOTIFICATION APPLIANCE POWER SUPPLY IN THIS LOCATION. ROUTE ALL WIRING FROM PREVIOUS BUILDING INTO FIRE ALARM TERMINAL CABINET.
- 3 INSTALL ALL ABOVE CEILING DETECTION AS PER NFPA 72 CHAPTER 17 AND ANNEX "A" FOR SLOPPED CEILING INSTALLATION. ALL ABOVE CEILING DETECTION IS ANNOTATED WITH AN "A".
- 4 INSTALL ADDRESSABLE RELAY MODULE FOR HVAC UNIT GLOBAL SHUT DOWN ON SMOKE DETECTION.
- 5 INSTALL SURGE PROTECTION AS PER NFPA 72, CFC AND CEC.
- 6 UNDERGROUND WIRE ROUTE. ROUTE ALL FIRE ALARM WIRING FROM PREVIOUS BUILDING TO THIS BUILDING AND THEN TO NEXT BUILDING. REFER TO RISER DIAGRAM FOR WIRE ROUTING FROM BUILDING TO BUILDING.
- 7 INSTALL COMBINATION SMOKE/CARBON MONOXIDE DETECTOR IN ALL CLASSROOMS IN ACCORDANCE WITH NFPA 72 AND CFC §915. ALL CO DETECTORS TO HAVE A SOUNDER BASE WHICH WILL SOUND A TEMPORAL CODE 4 PATTERN UPON CO DETECTION.

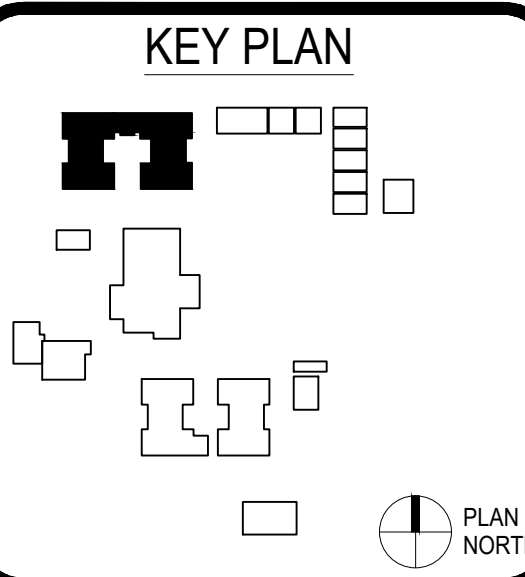
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REPLACE FIRE ALARM SYSTEM  
 ROCKLIN UNIFIED SCHOOL DISTRICT  
 PARKER WHITNEY ELEMENTARY SCHOOL  
 5145 TOPAZ AVENUE  
 ROCKLIN, CA 95677  
 DSA APPL. NO. 02-120690 FILE NO. 31-37



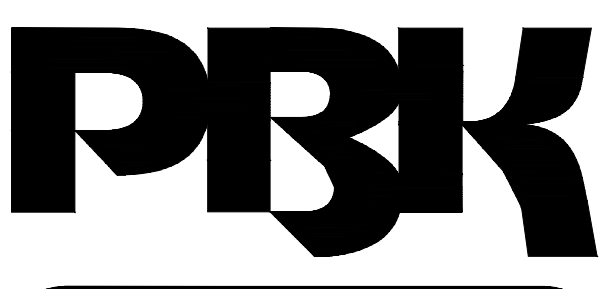
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**FIRE ALARM BLDG C DEMO. & NEW PLANS**

**FA2.2**



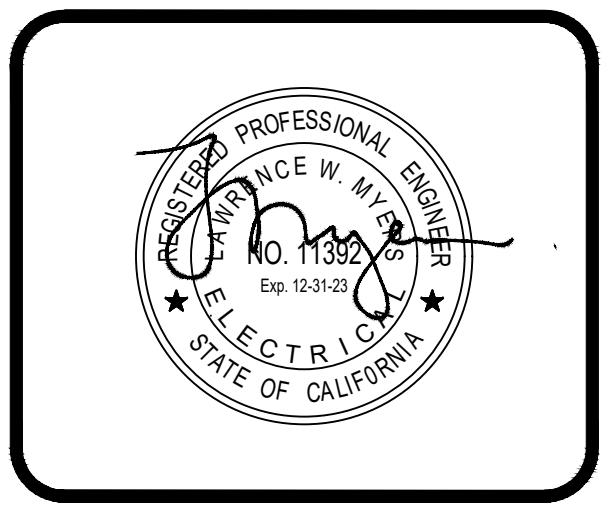
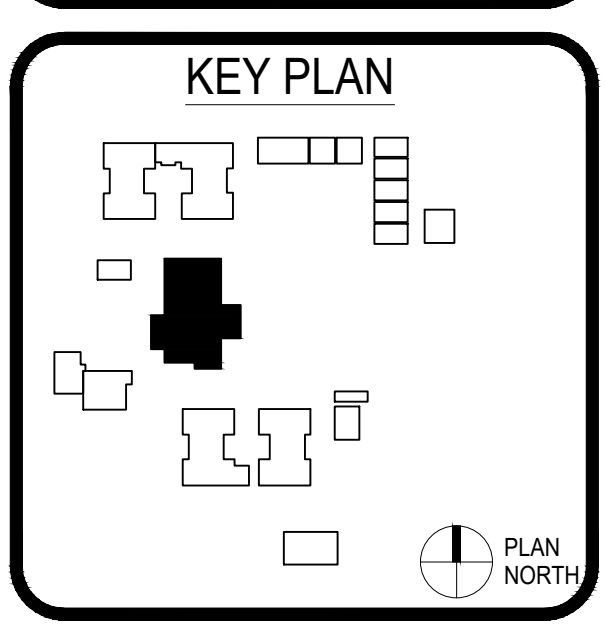
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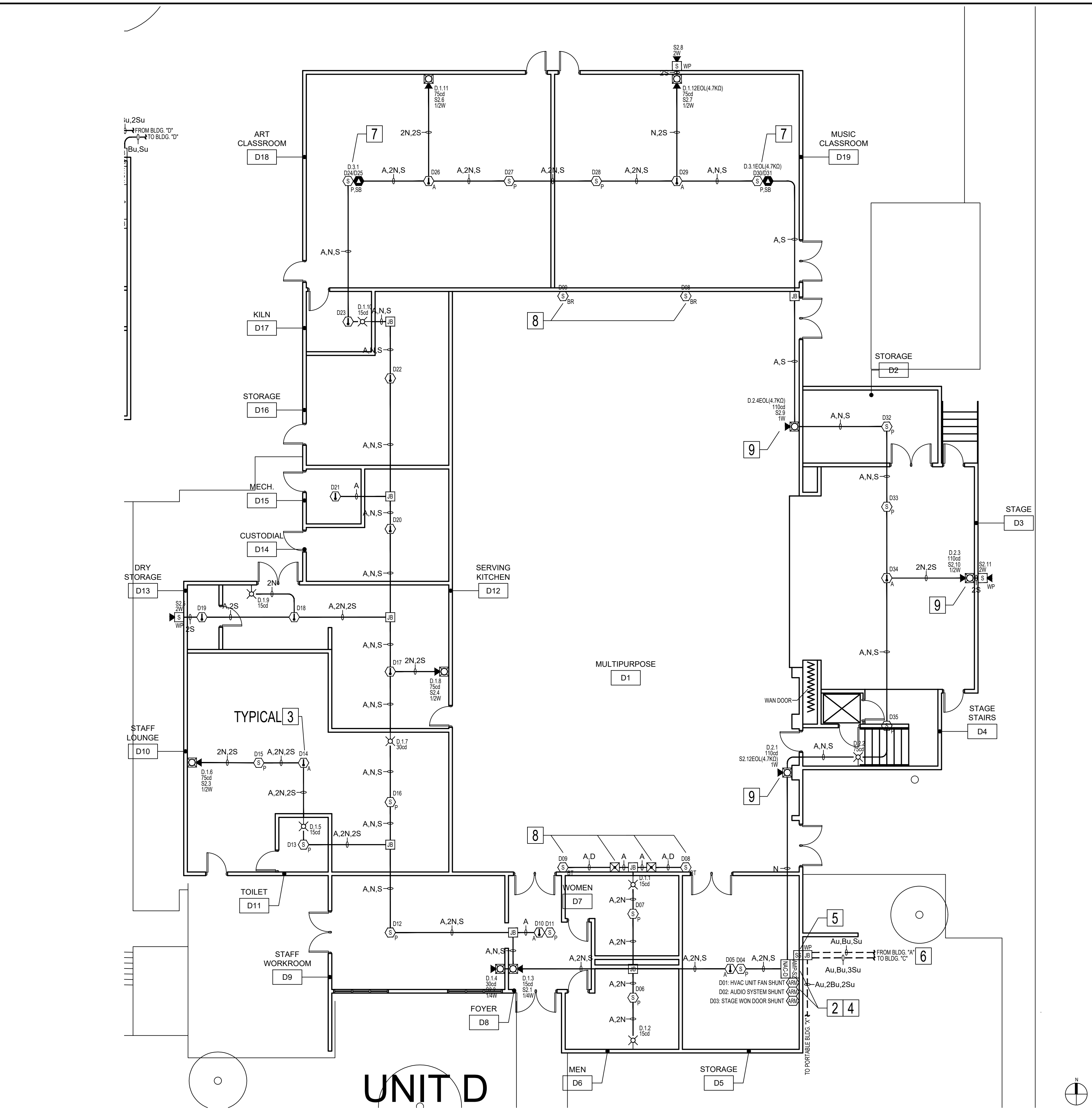
REPLACE FIRE ALARM SYSTEM  
 ROCKLIN UNIFIED SCHOOL DISTRICT  
 PARKER WHITNEY ELEMENTARY SCHOOL  
 5145 TOPAZ AVENUE  
 ROCKLIN, CA 95677  
 DSA-APPL. NO. 02-120690 FILE NO. 31-37



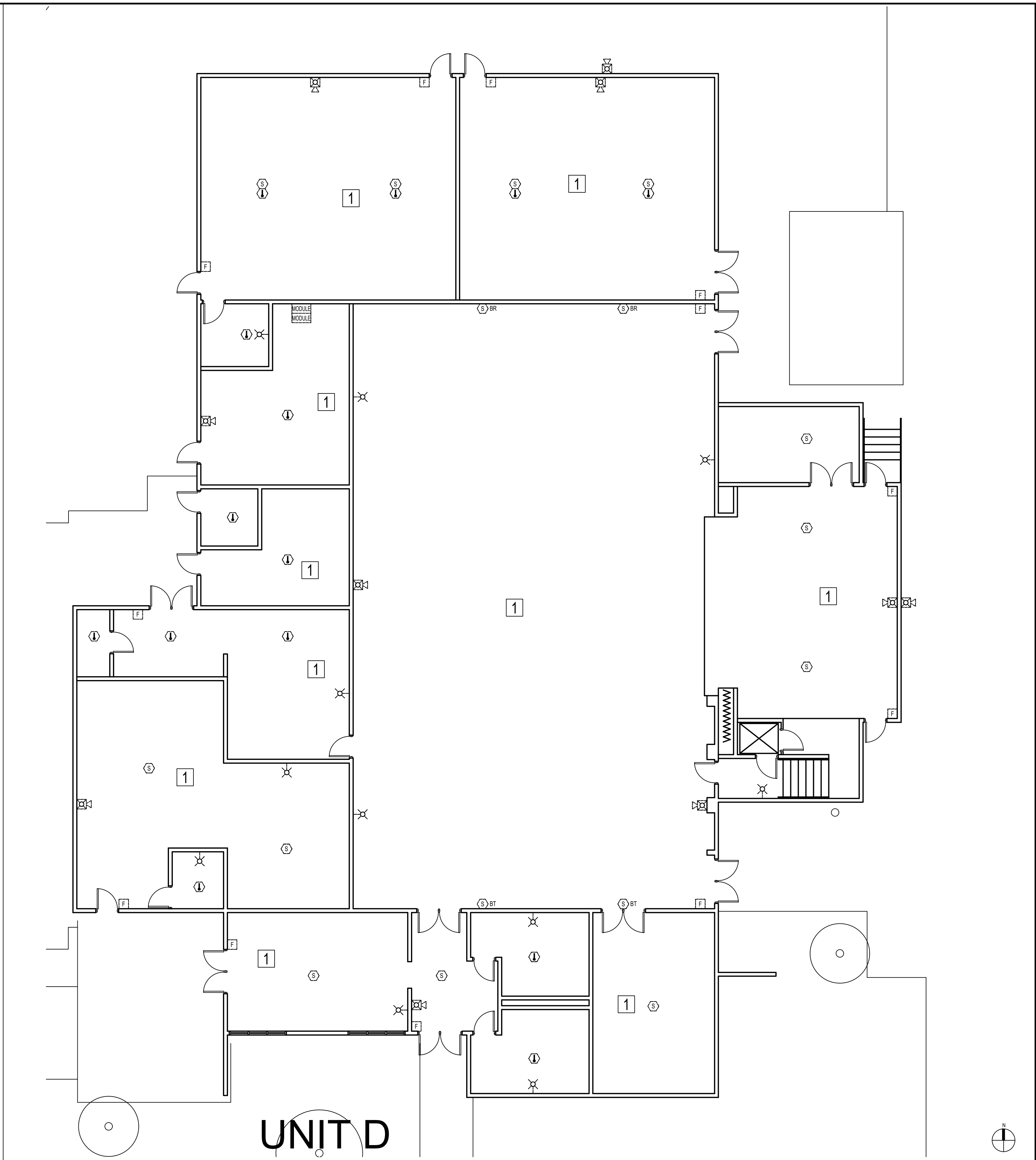
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**FIRE ALARM BLDG  
 D DEMO. & NEW  
 PLANS**

**FA2.3**



**2** FIRE ALARM BUILDING D NEW PLAN  
 SCALE: 1/8" = 1'-0"



**1** FIRE ALARM BUILDING D DEMOLITION PLAN  
 SCALE: 1/8" = 1'-0"

- FIRE ALARM SHEET NOTES**
- REMOVE ALL EXISTING FIRE ALARM DEVICES & APPLIANCES IN THIS BUILDING AND SAFE OFF CIRCUITS. REUSE ALL EXISTING CONDUIT WHERE APPLICABLE. INSTALL NEW CONDUIT AND BACK BOXES WHERE NEW DESIGN CALLS FOR THEM.
  - INSTALL NEW FIRE ALARM TERMINAL CABINET AND/OR NOTIFICATION APPLIANCE POWER SUPPLY IN THIS LOCATION. ROUTE ALL WIRING FROM PREVIOUS BUILDING INTO FIRE ALARM TERMINAL CABINET.
  - INSTALL ALL ABOVE CEILING DETECTION AS PER NFPA 72 CHAPTER 17 AND ANNEX "A" FOR SLOPPED CEILING INSTALLATION. ALL ABOVE CEILING DETECTION IS ANNOTATED WITH AN "A".
  - INSTALL ADDRESSABLE RELAY MODULE FOR HVAC UNIT GLOBAL SHUT DOWN ON SMOKE DETECTION, AUDIO SYSTEM SHUNT AND WON DOOR SHUNT. COORDINATE WITH STAFF FOR SYSTEM CONNECTIONS.
  - INSTALL SURGE PROTECTION AS PER NFPA 72, CFC AND CEC.
  - UNDERGROUND WIRE ROUTE. ROUTE ALL FIRE ALARM WIRING FROM PREVIOUS BUILDING TO THIS BUILDING AND THEN TO NEXT BUILDING. REFER TO RISER DIAGRAM FOR WIRE ROUTING FROM BUILDING TO BUILDING.
  - INSTALL COMBINATION SMOKE/CARBON MONOXIDE DETECTOR IN ALL CLASSROOMS IN ACCORDANCE WITH NFPA 72 AND CFC §915. ALL CO DETECTORS TO HAVE A SOUNDER BASE WHICH WILL SOUND A TEMPORAL CODE 4 PATTERN UPON CO DETECTION.
  - INSTALL SMOKE BEAM DETECTORS, REFLECTORS AND TEST STATIONS FOR SMOKE DETECTION IN MPR OPEN HIGH CEILING AREA. MOUNT DETECTORS AS PER NFPA 72 AND THE MANUFACTURERS INSTALLATION INSTRUCTIONS.
  - INSTALL ST1 PROTECTIVE WIRE COVER ON NOTIFICATION APPLIANCES IN MPR ACTIVITY AREA.

FIRE ALARM SHEET NOTES

1 REMOVE ALL EXISTING FIRE ALARM DEVICES & APPLIANCES IN THIS BUILDING AND SAFE OFF CIRCUITS. REUSE ALL EXISTING CONDUIT WHERE APPLICABLE. INSTALL NEW CONDUIT AND BACK BOXES WHERE NEW DESIGN CALLS FOR THEM.

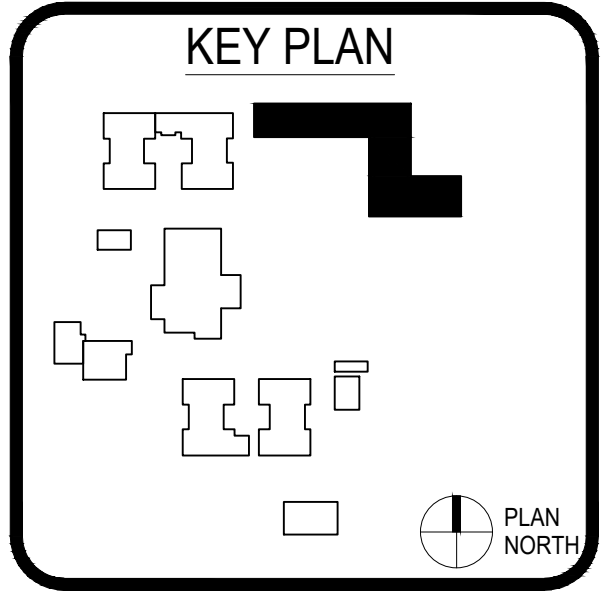
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 916-882-9995 F

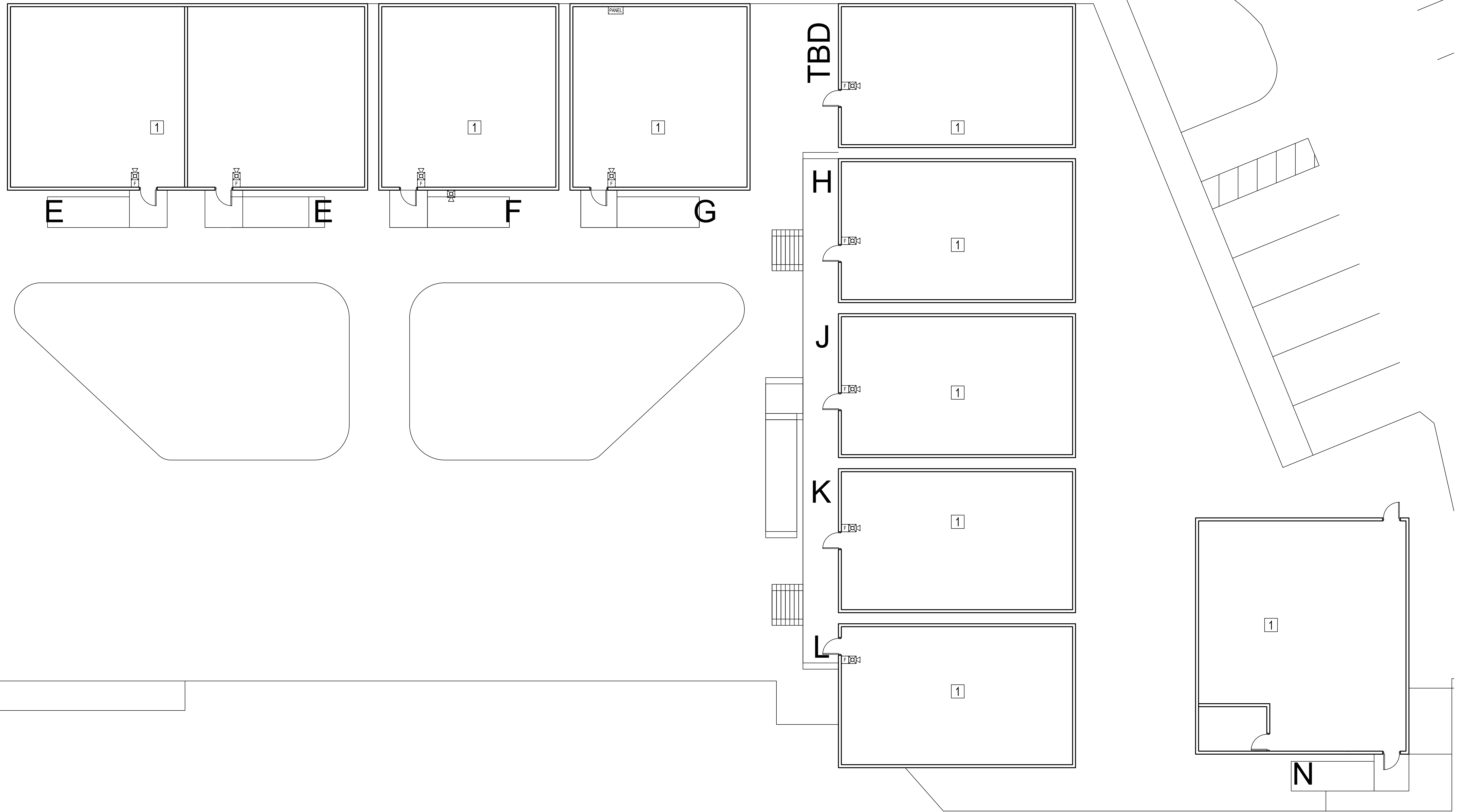
REPLACE FIRE ALARM SYSTEM  
 ROCKLIN UNIFIED SCHOOL DISTRICT  
 PARKER WHITNEY ELEMENTARY SCHOOL  
 5145 TOPAZ AVENUE  
 ROCKLIN, CA 95677  
 DSA APPL. NO. 02-120690 FILE NO. 31-37



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**FIRE ALARM NORTH & N.E. RELOS. DEMO. & NEW WORK PLANS**





**FIRE ALARM SHEET NOTES**

- 1 INSTALL NEW FIRE ALARM TERMINAL CABINET AND/OR NOTIFICATION APPLIANCE POWER SUPPLY IN THIS LOCATION. ROUTE ALL WIRING FROM PREVIOUS BUILDING INTO FIRE ALARM TERMINAL CABINET.
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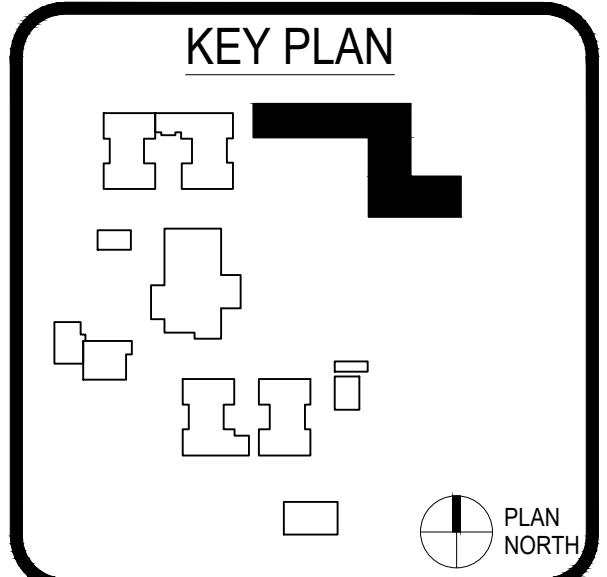
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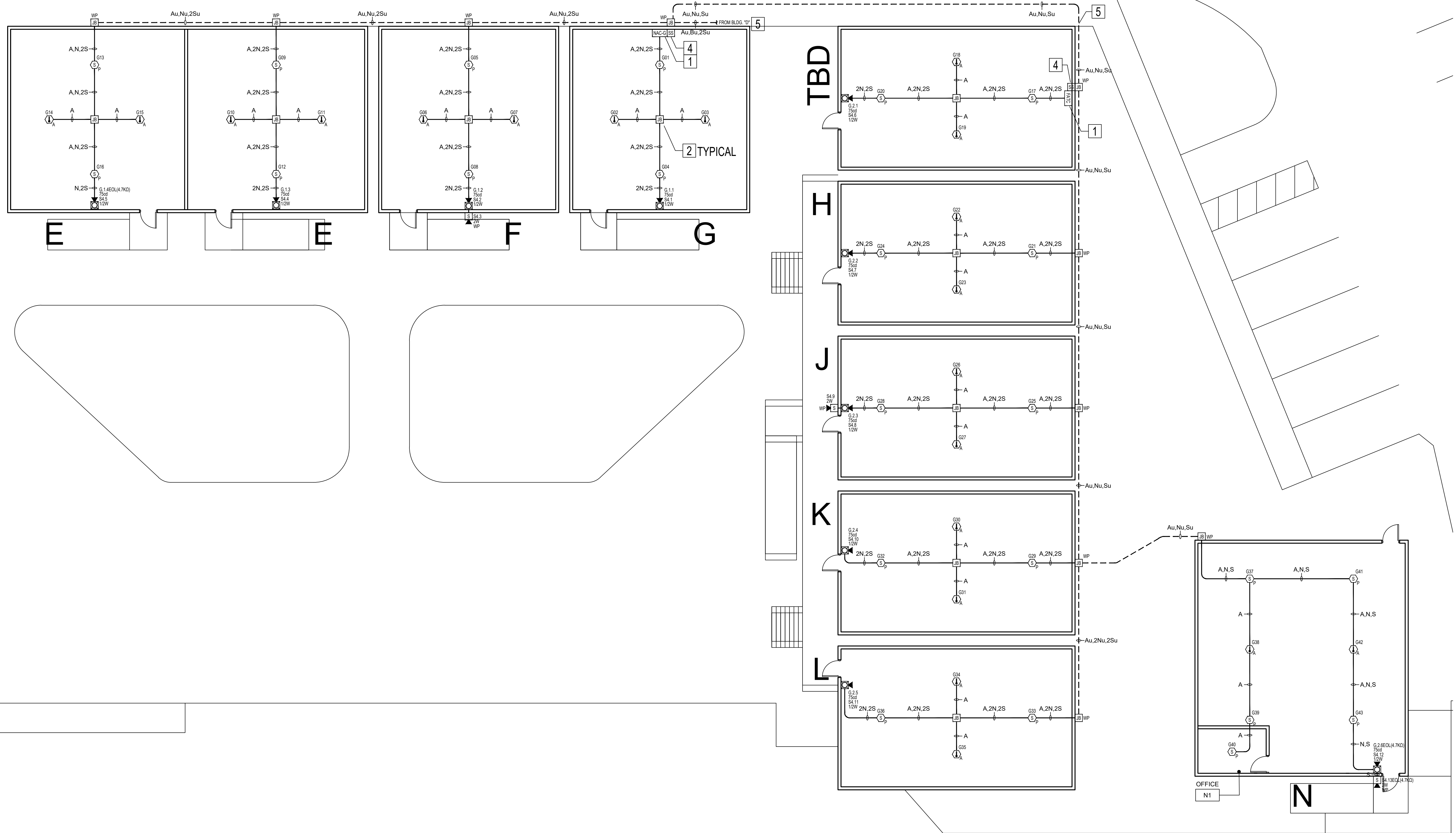
REPLACE FIRE ALARM SYSTEM  
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 PARKER WHITNEY ELEMENTARY SCHOOL  
 5145 TOPAZ AVENUE  
 ROCKLIN, CA 95677  
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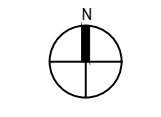
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**FIRE ALARM NORTH & N.E. RELOS NEW WORKPLANS**

**FA2.5**



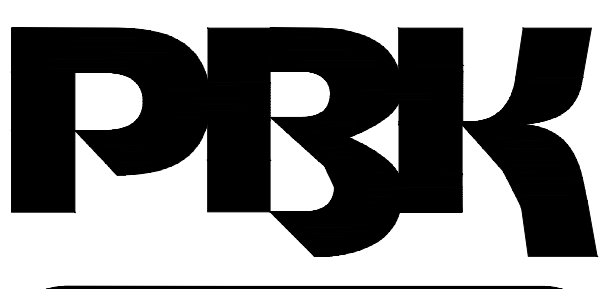
**1** FIRE ALARM NORTH & N.E. RELOCATABLES NEW WORK PLAN  
 SCALE: 1/8" = 1'-0"



**FIRE ALARM SHEET NOTES**

- 1 INSTALL NEW FIRE ALARM TERMINAL CABINET AND/OR NOTIFICATION APPLIANCE POWER SUPPLY IN THIS LOCATION. ROUTE ALL WIRING FROM PREVIOUS BUILDING INTO FIRE ALARM TERMINAL CABINET.
- 2 INSTALL ALL ABOVE CEILING DETECTION AS PER NFPA 72 CHAPTER 17 AND ANNEX "A" FOR SLOPPED CEILING INSTALLATION. ALL ABOVE CEILING DETECTION IS ANNOTATED WITH AN "A".
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- 4 INSTALL SURGE PROTECTION AS PER NFPA 72, CFC AND CEC.
- 5 UNDERGROUND WIRE ROUTE. ROUTE ALL FIRE ALARM WIRING FROM PREVIOUS BUILDING TO THIS BUILDING AND THEN TO NEXT BUILDING. REFER TO RISER DIAGRAM FOR WIRE ROUTING FROM BUILDING TO BUILDING.
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- 7 REMOVE ALL EXISTING FIRE ALARM DEVICES & APPLIANCES IN THIS BUILDING AND SAFE OFF CIRCUITS. REUSE ALL EXISTING CONDUIT WHERE APPLICABLE. INSTALL NEW CONDUIT AND BACK BOXES WHERE NEW DESIGN CALLS FOR THEM.

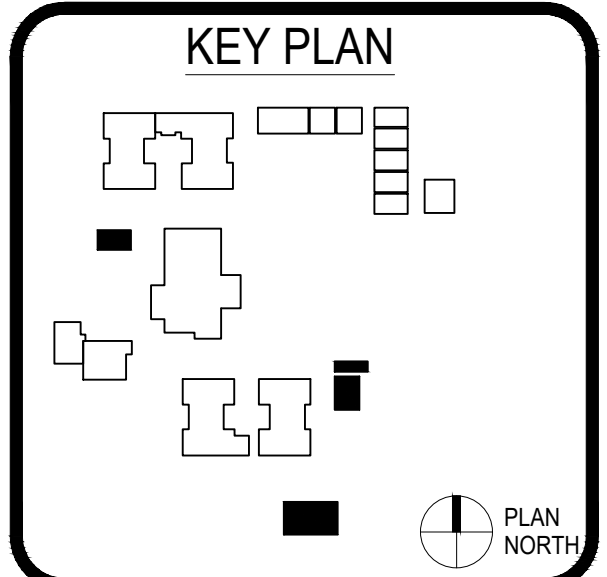
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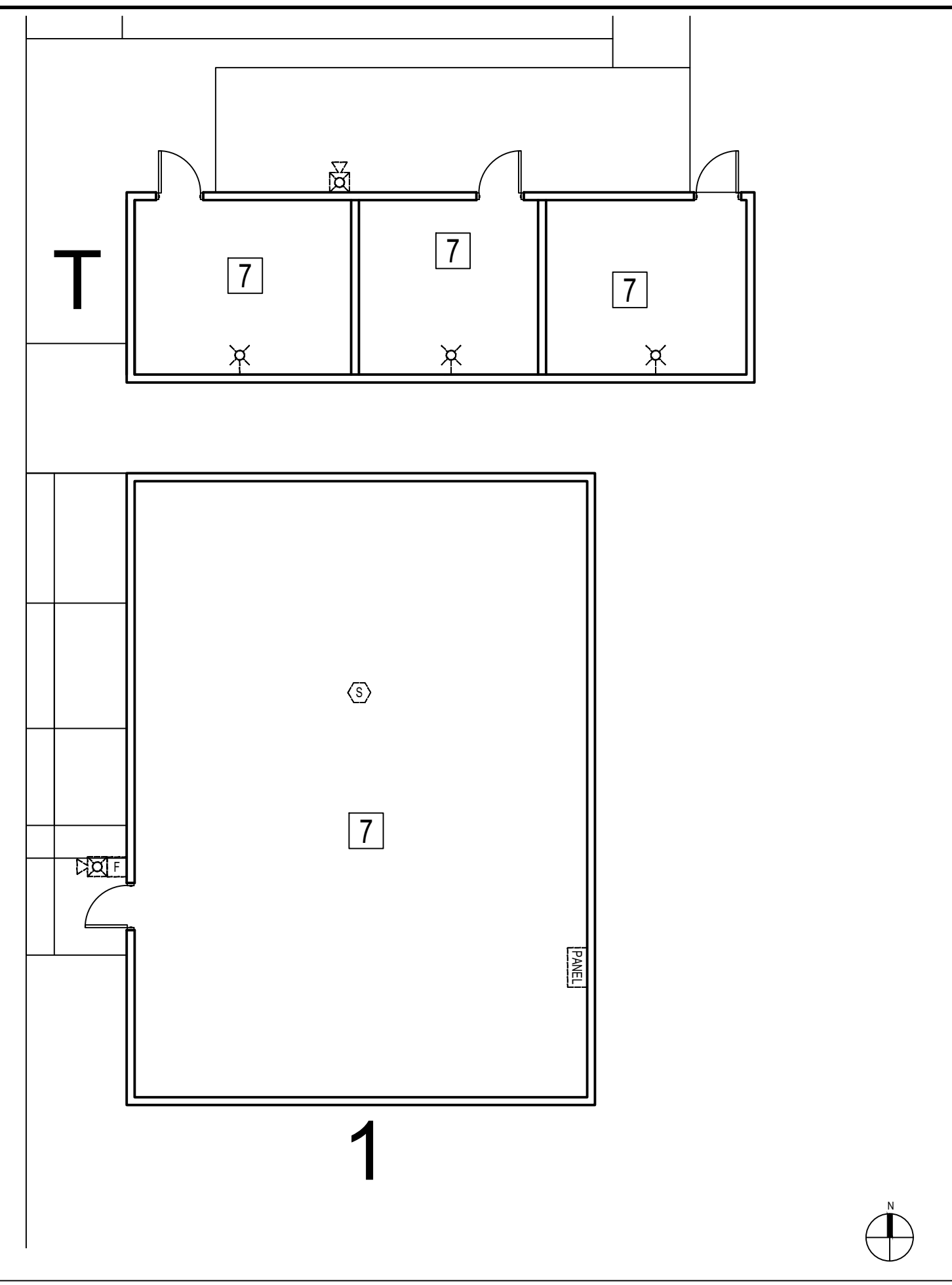


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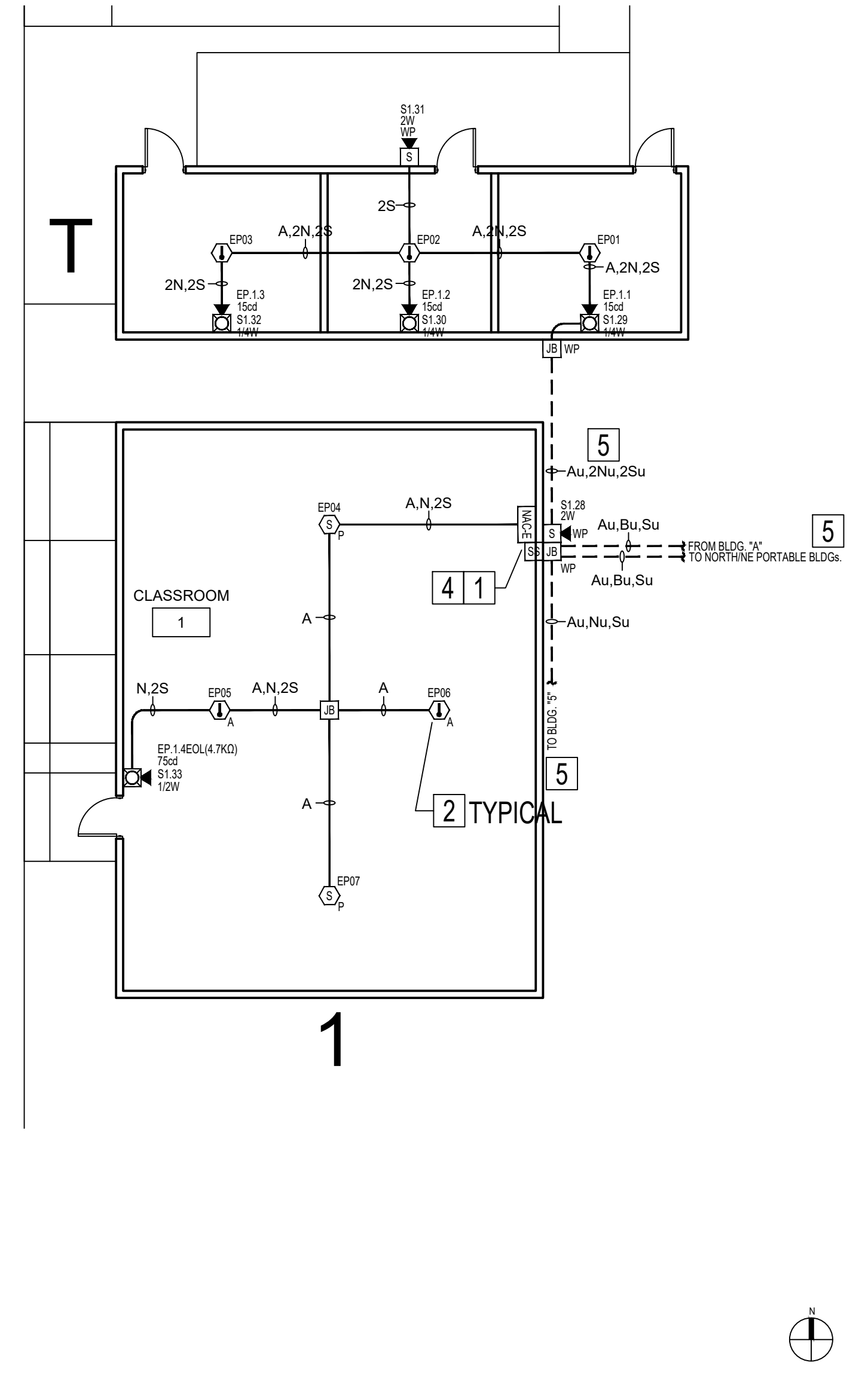
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#	DESCRIPTION	DATE

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**FIRE ALARM EAST & SOUTH RELOCATABLES DEMO & NEW WORK PLANS**

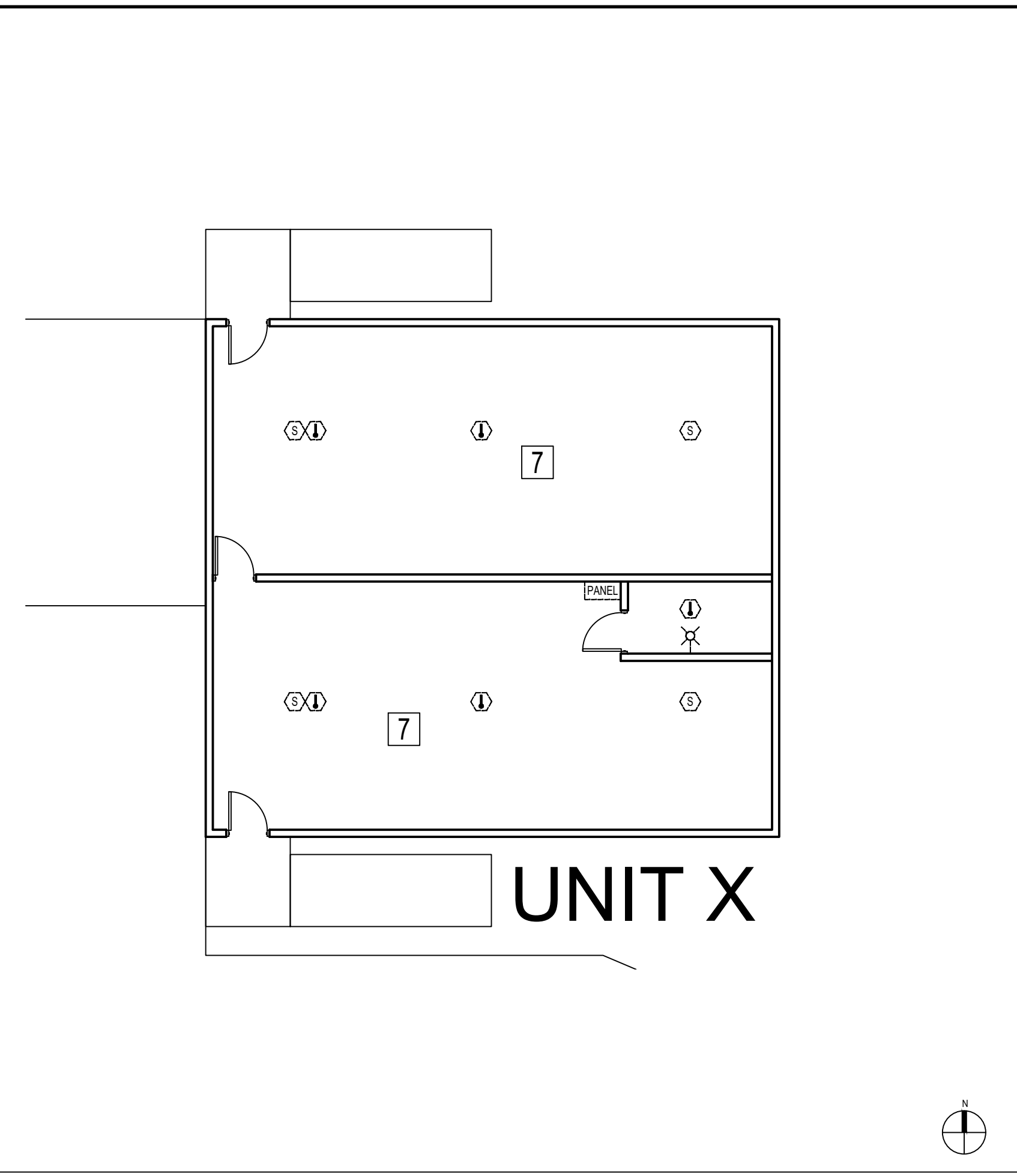
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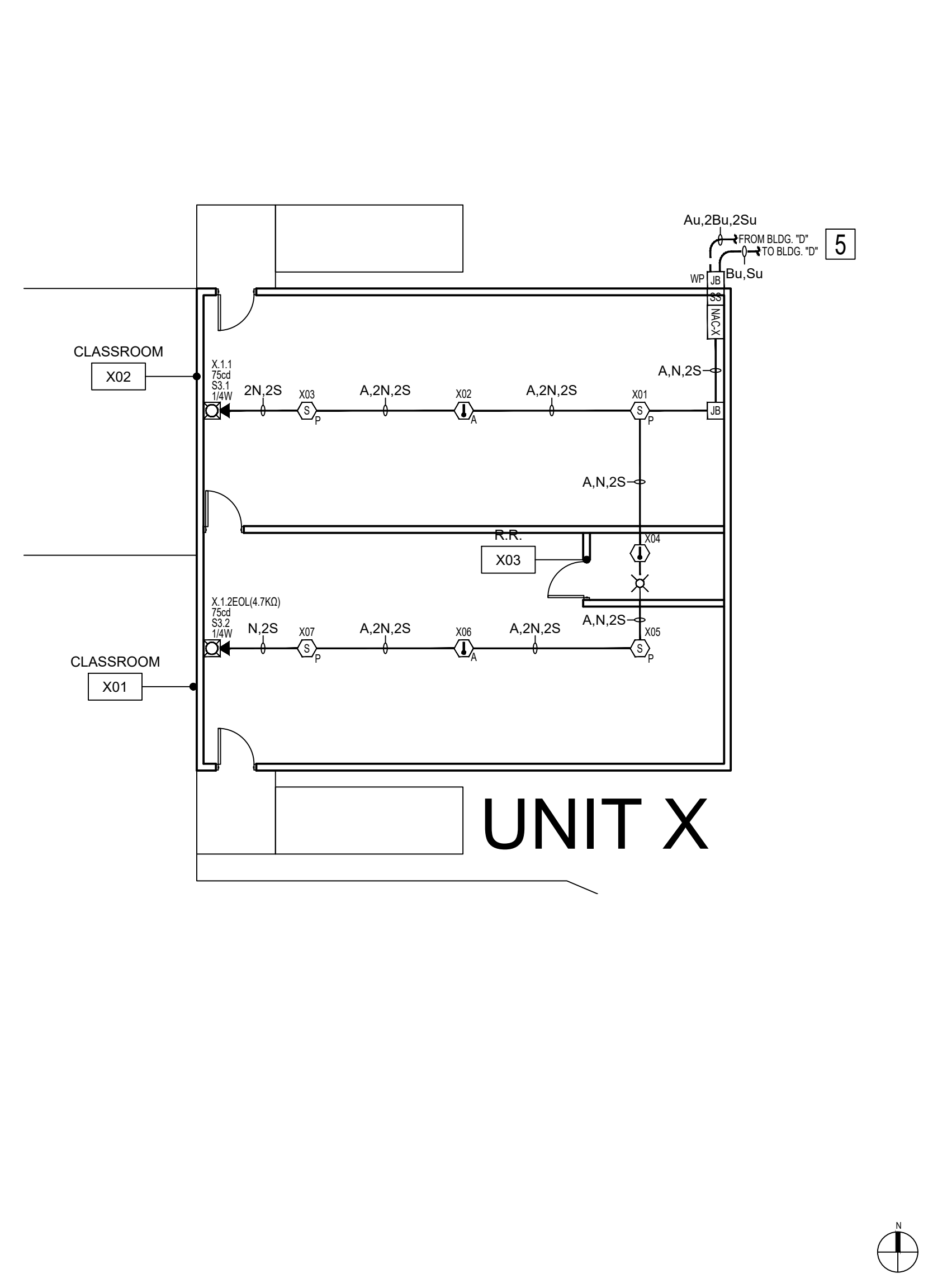
**1 FIRE ALARM EAST RELOCATABLES DEMOLITION PLAN**  
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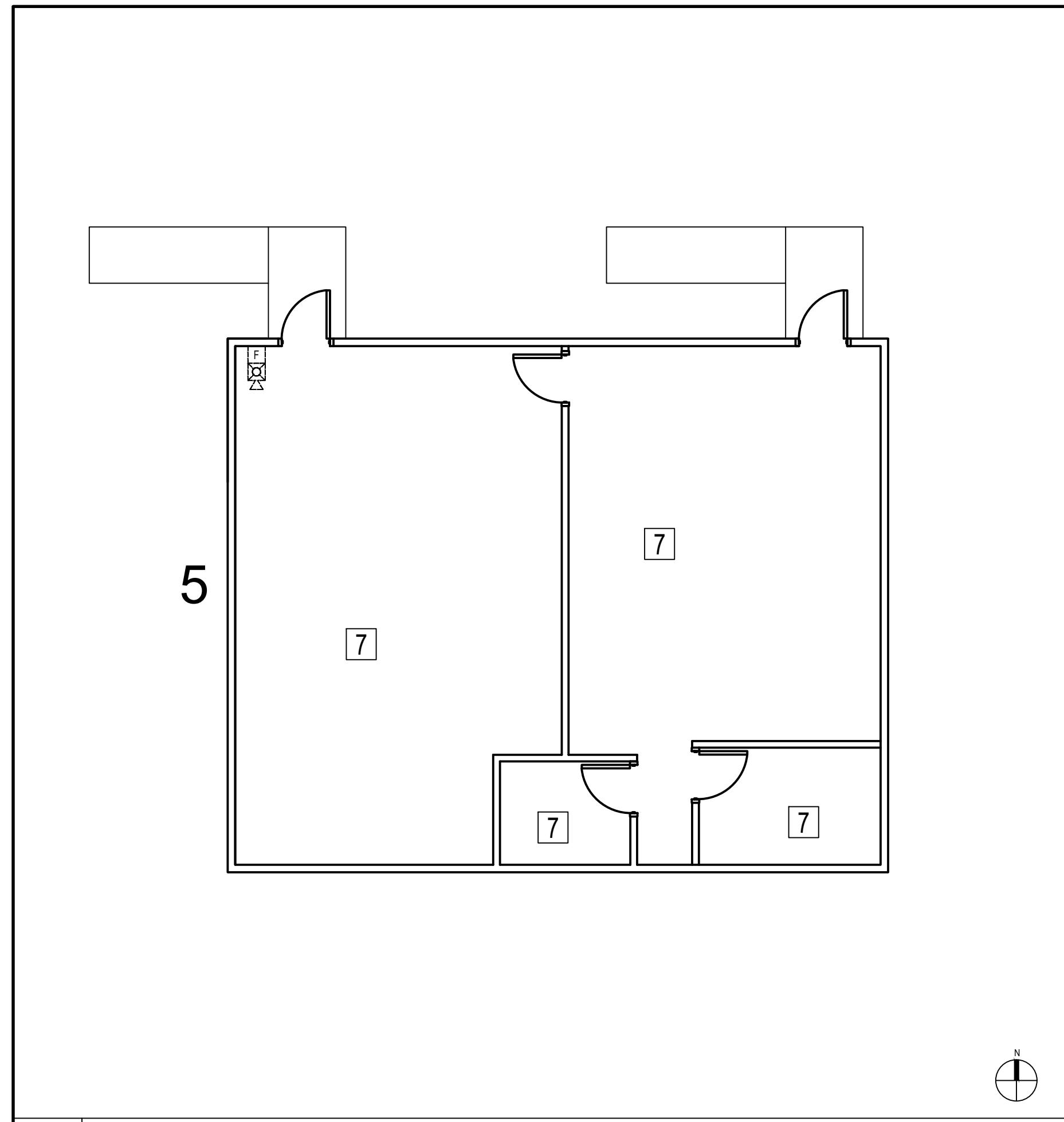
**2 FIRE ALARM EAST RELOCATABLES NEW WORK PLAN**  
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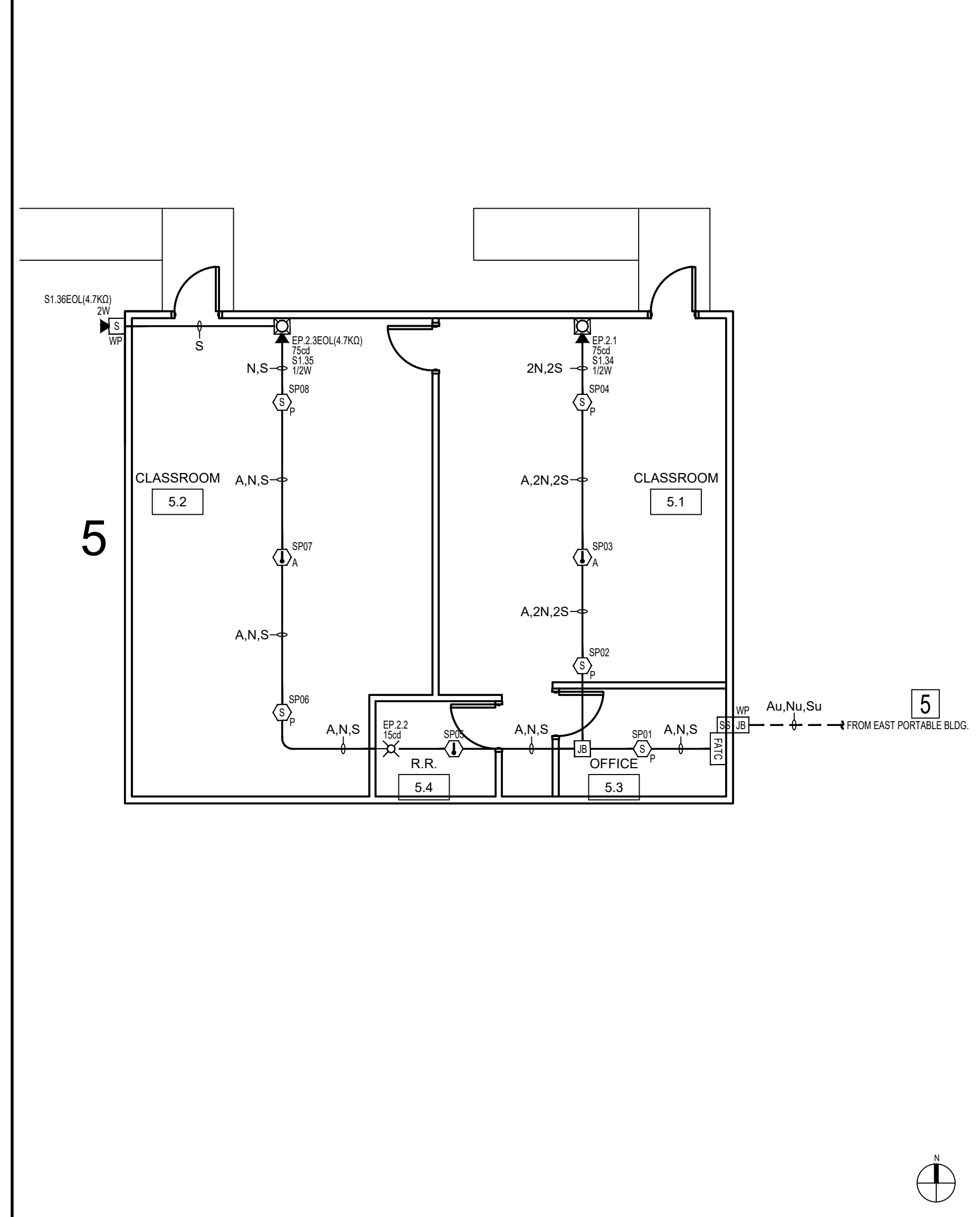
**3 FIRE ALARM X DEMOLITION PLAN**  
 SCALE: 1/8" = 1'-0"



**4 FIRE ALARM X NEW PLAN**  
 SCALE: 1/8" = 1'-0"



**5 FIRE ALARM SOUTH RELOCATABLES DEMOLITION PLAN**  
 SCALE: 1/8" = 1'-0"



**6 FIRE ALARM SOUTH RELOCATABLES NEW WORK PLAN**  
 SCALE: 1/8" = 1'-0"

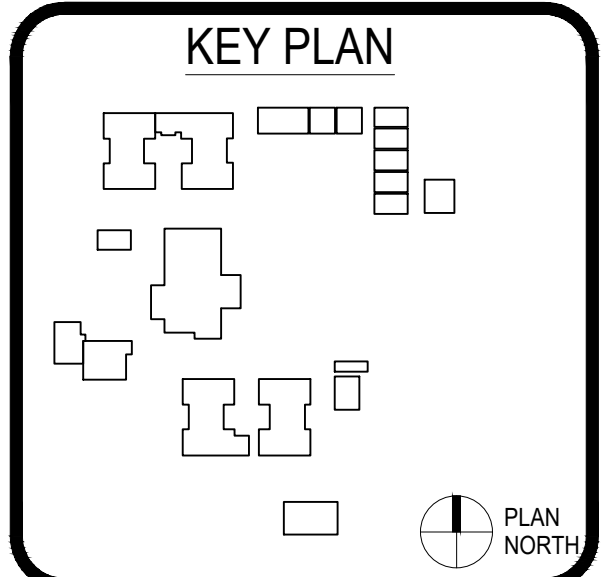




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 LEAF ENGINEERS  
 SACRAMENTO/FOLSOM  
 1110 IRON POINT ROAD, SUITE 200  
 FOLSOM, CA 95630  
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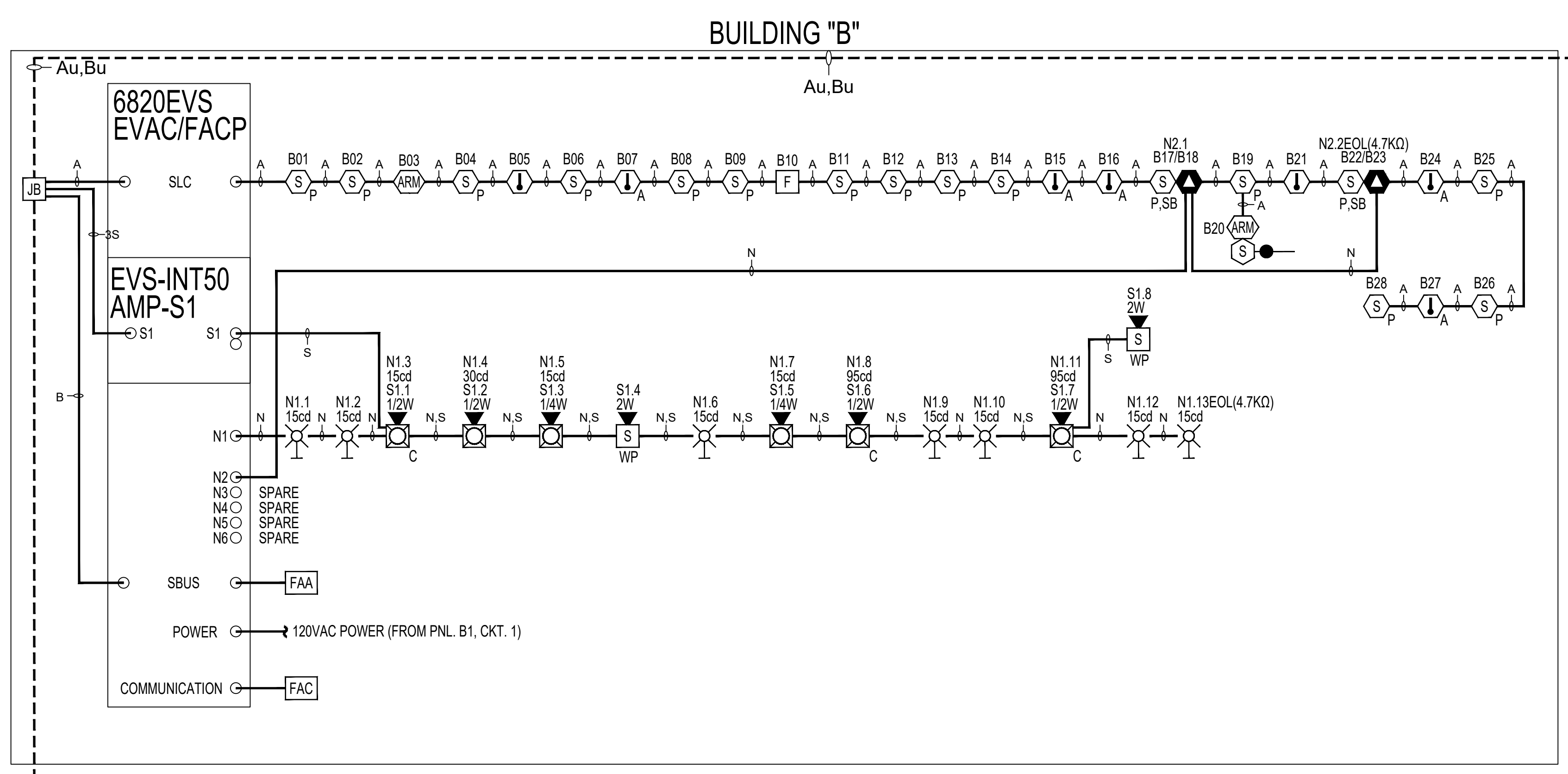
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 ROCKLIN UNIFIED SCHOOL DISTRICT  
 PARKER WHITNEY ELEMENTARY SCHOOL  
 5145 TOPAZ AVENUE  
 ROCKLIN, CA 95677  
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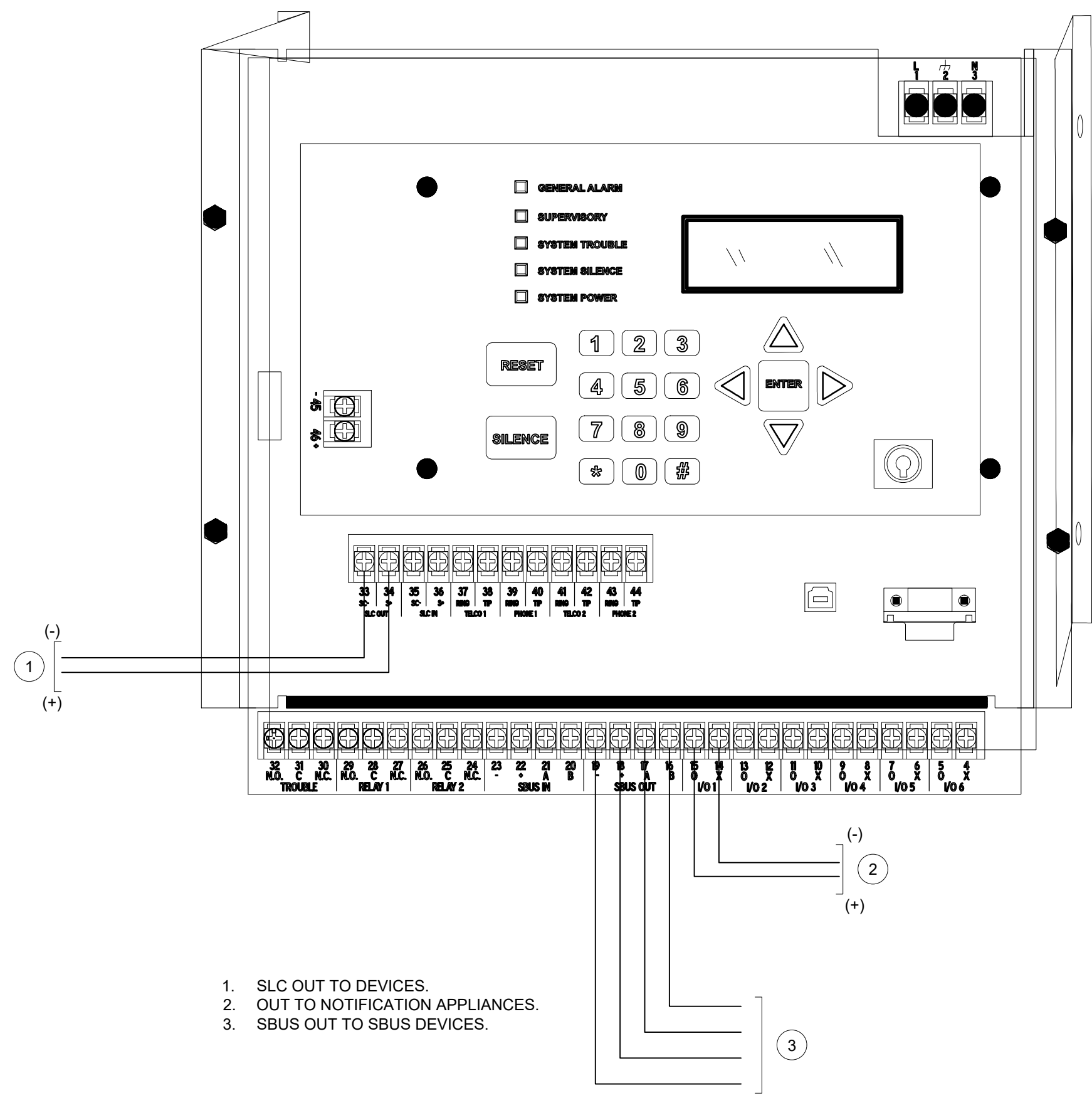
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DRAWN BY: C.Y.	CHEKED BY: L.M.	
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FIRE ALARM RISER DIAGRAM

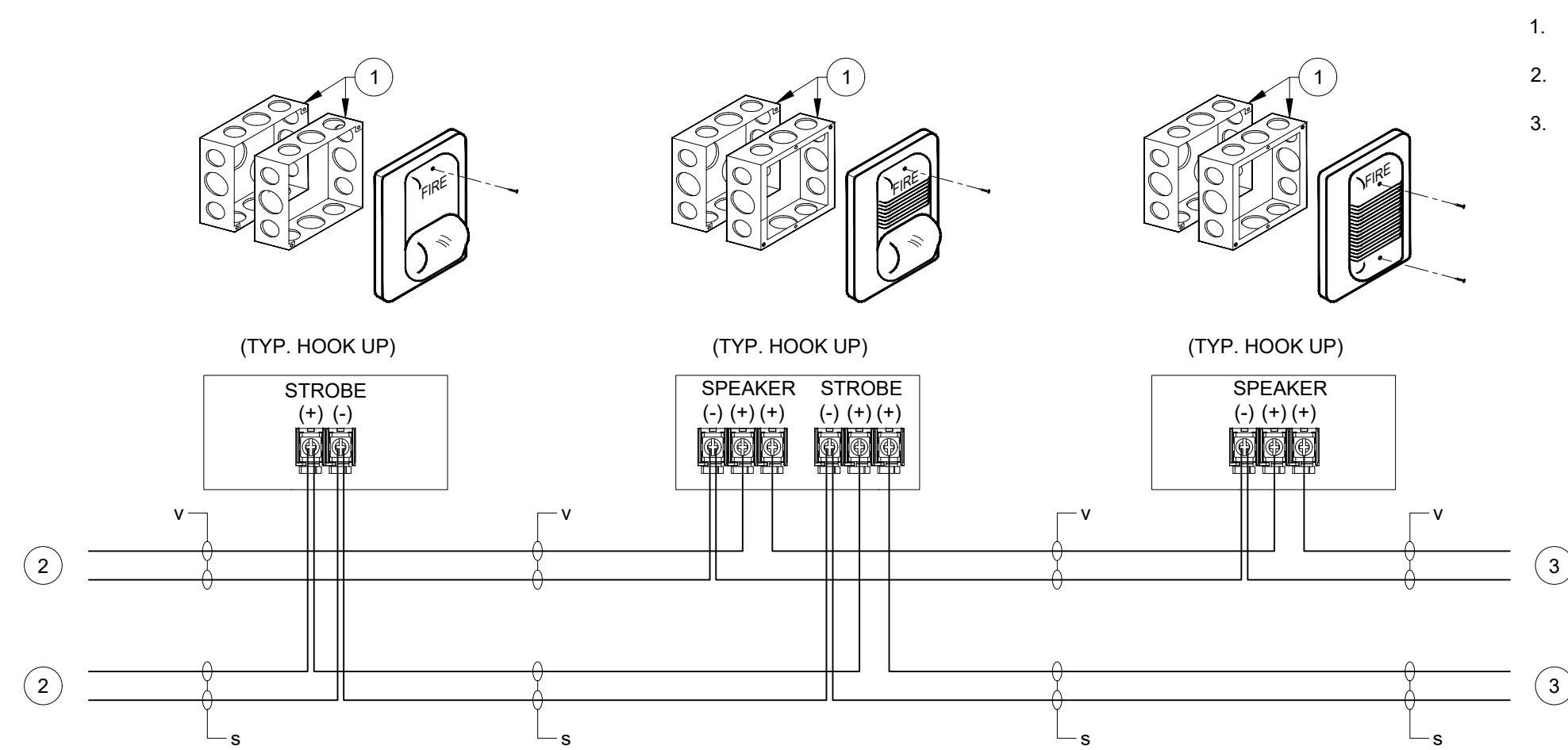






6820EVS TYPICAL DIAGRAM

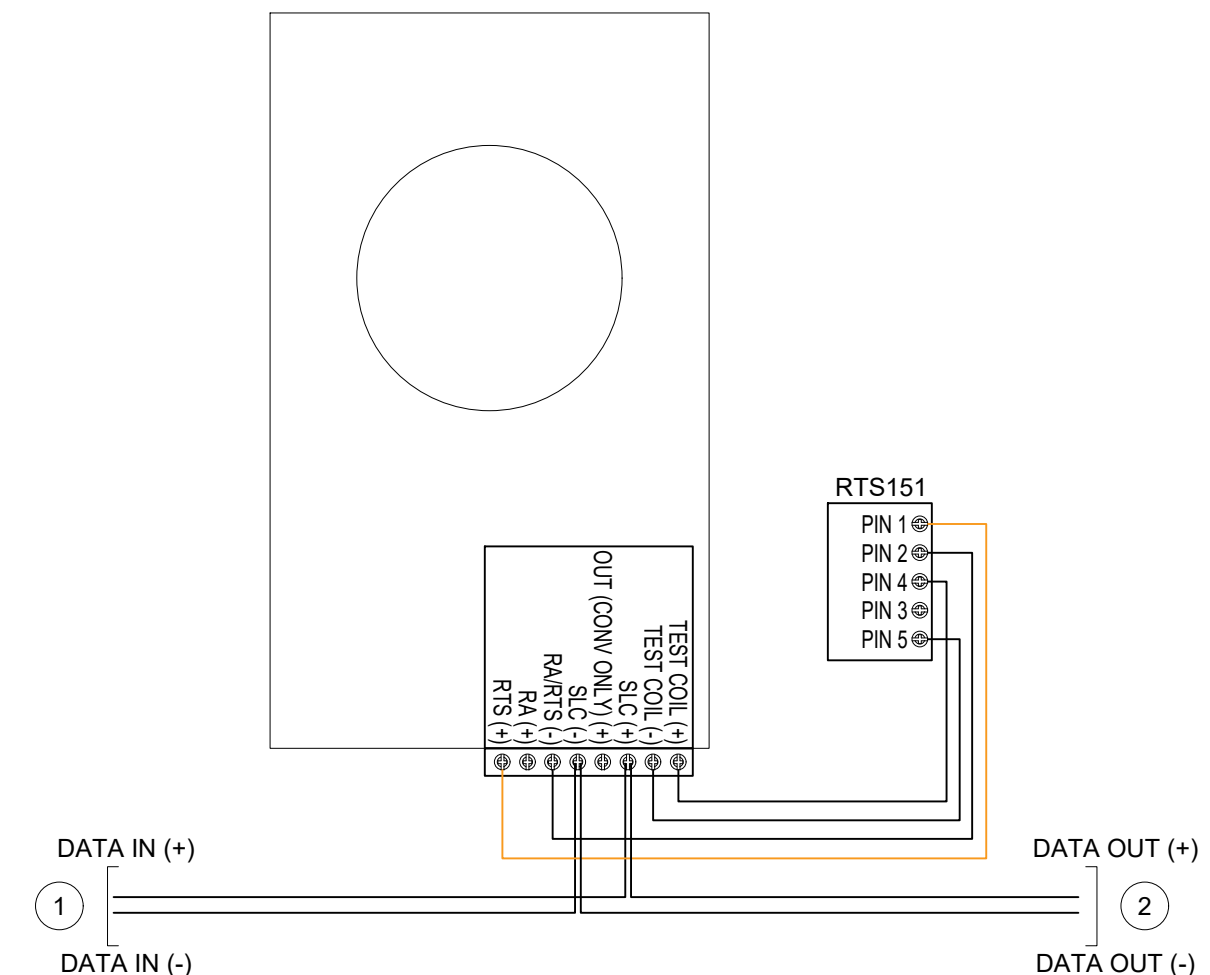
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SPEAKER/STROBE DETAIL (SYSTEM SENSOR TYPICAL)

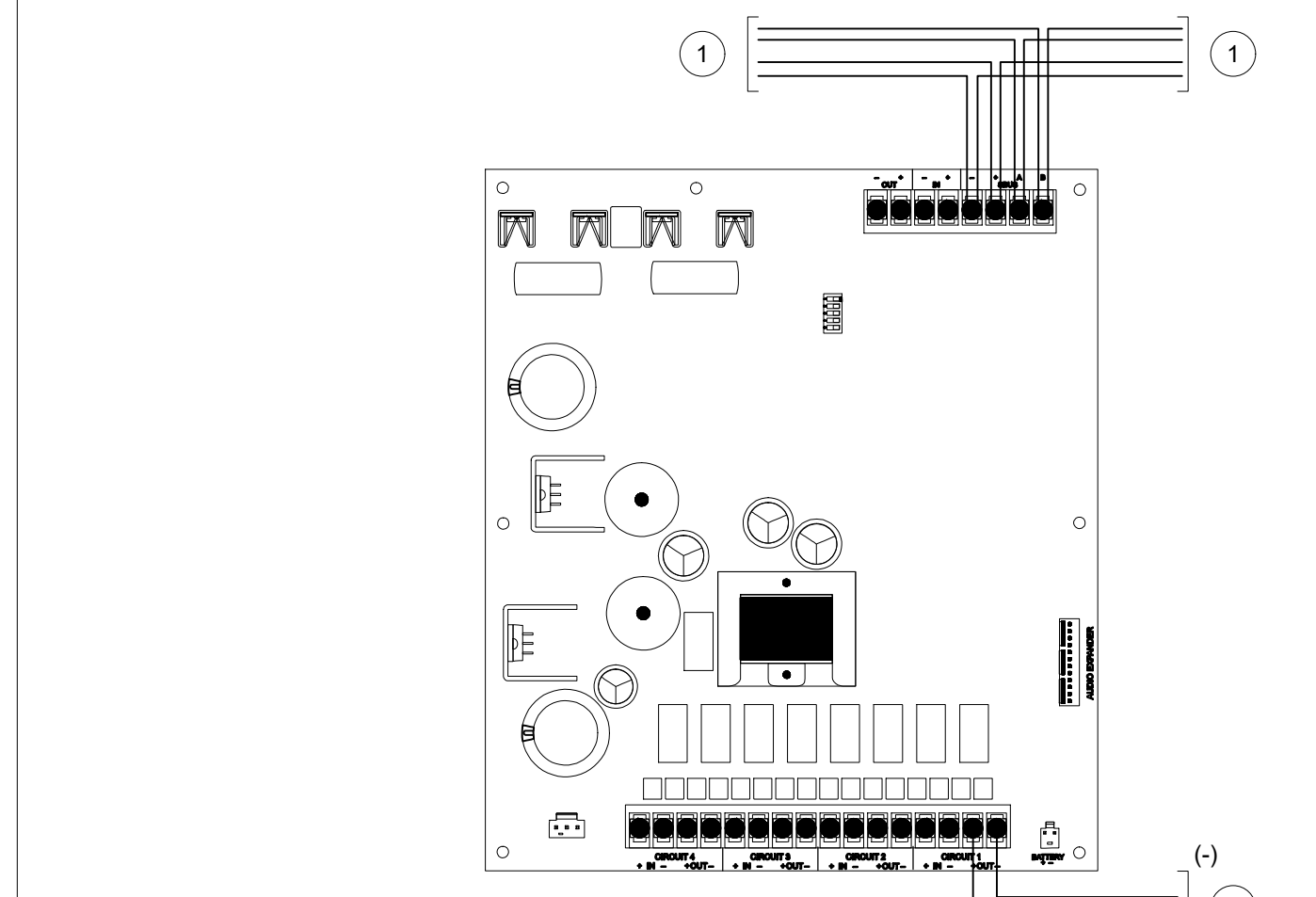
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1. FROM PREVIOUS ADDRESSABLE DEVICE AND OR CONTROL PANEL/POWER SUPPLY.
2. TO NEXT ADDRESSABLE DEVICE, RETURN TO CONTROL PANEL OR END OF LINE.



DUCT SMOKE DETECTOR/RTS DIAGRAM

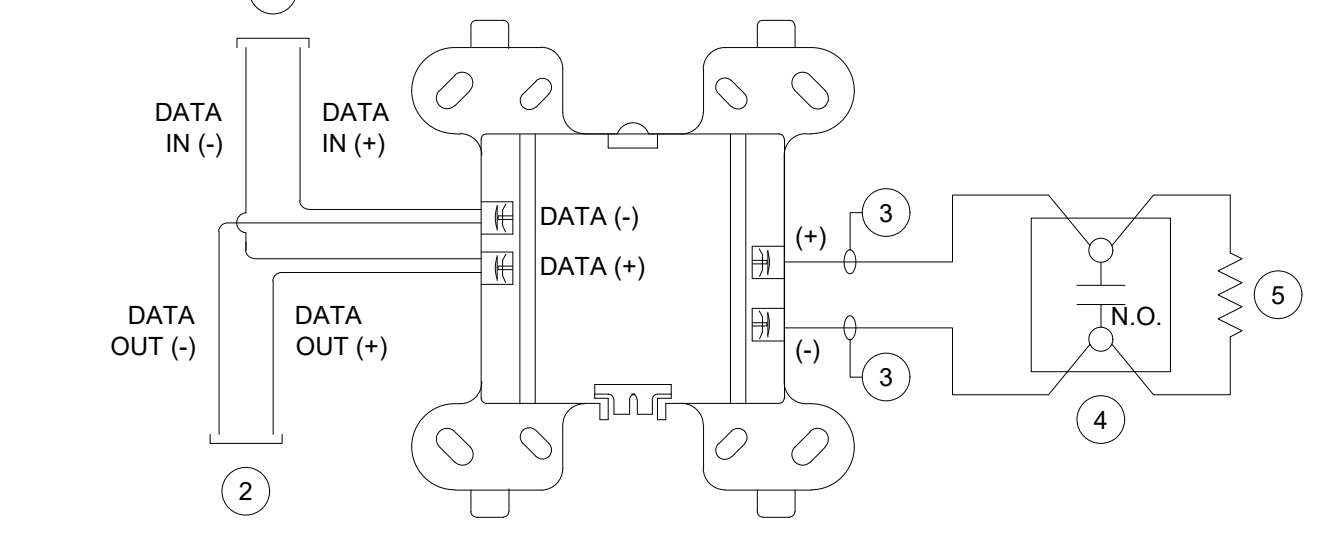
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5895XL POWER SUPPLY TYPICAL DIAGRAM

N.T.S 10

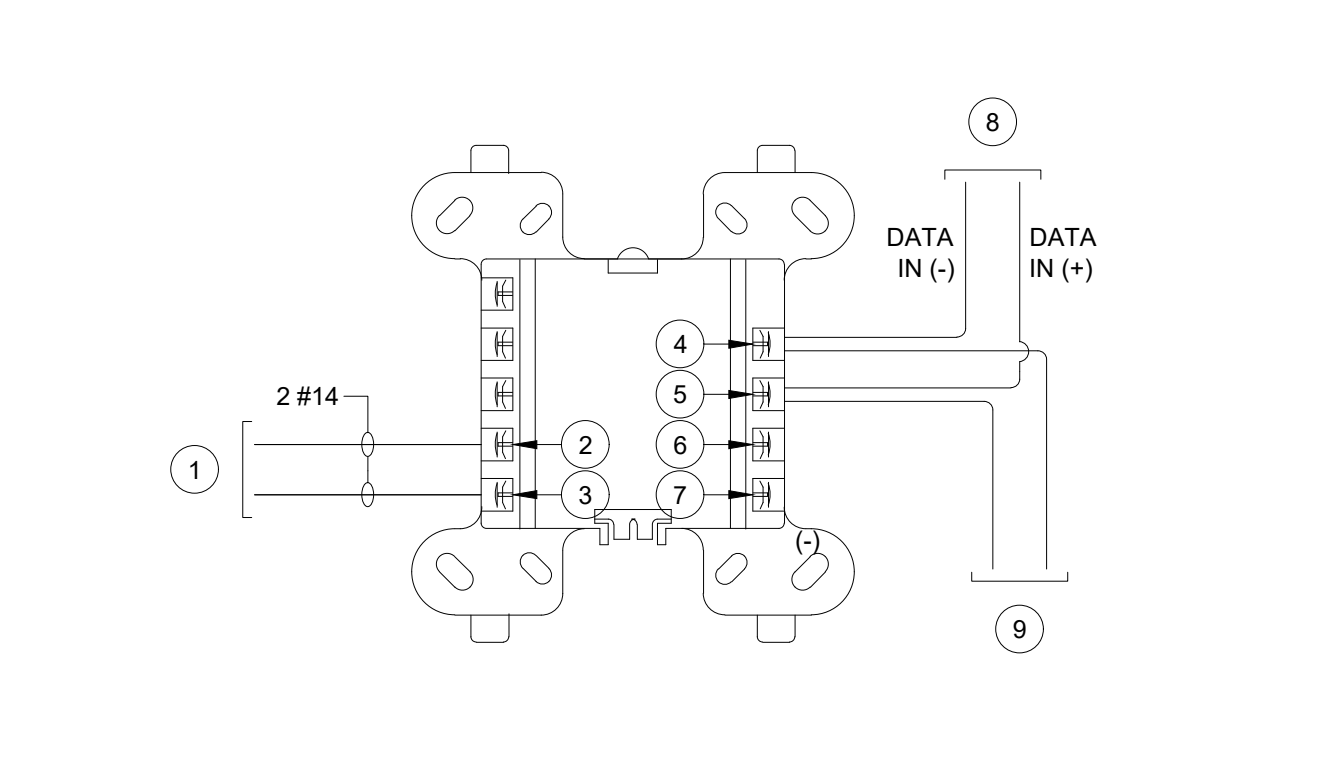
1. FROM FACP OR PREVIOUS ADDRESSABLE DEVICE
2. TO NEXT ADDRESSABLE DEVICE
- 2 #14
- NON-ADDRESSABLE DEVICE (ATTIC HEAT DETECTOR, AND AS NOTED)
- E.O.L.



MONITOR MODULE DETAIL

N.T.S 06

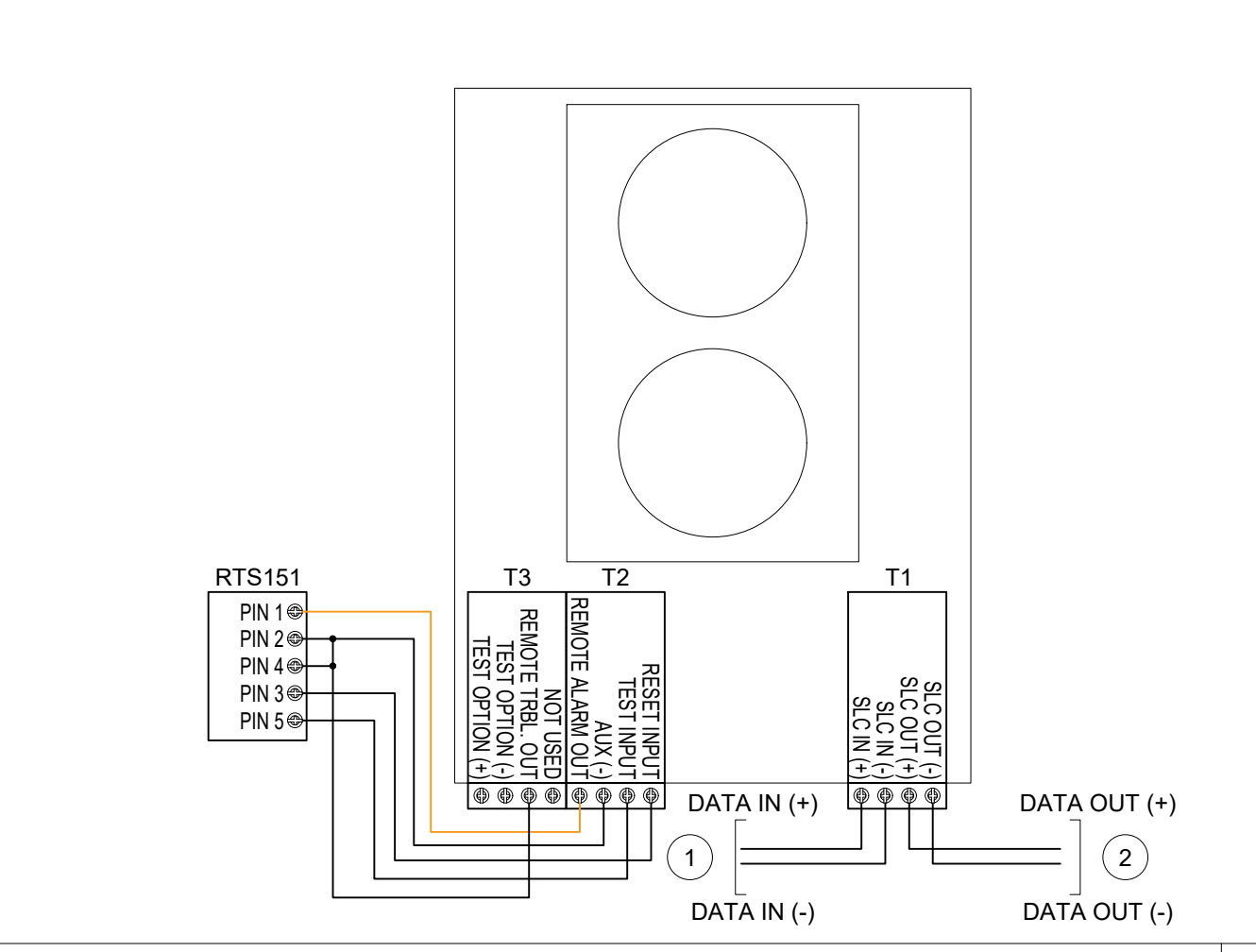
1. FROM PREVIOUS ADDRESSABLE DEVICE AND OR CONTROL PANEL/POWER SUPPLY.
2. TO NEXT ADDRESSABLE DEVICE, RETURN TO CONTROL PANEL OR END OF LINE.



ADDRESSABLE RELAY MODULE DETAIL

N.T.S 07

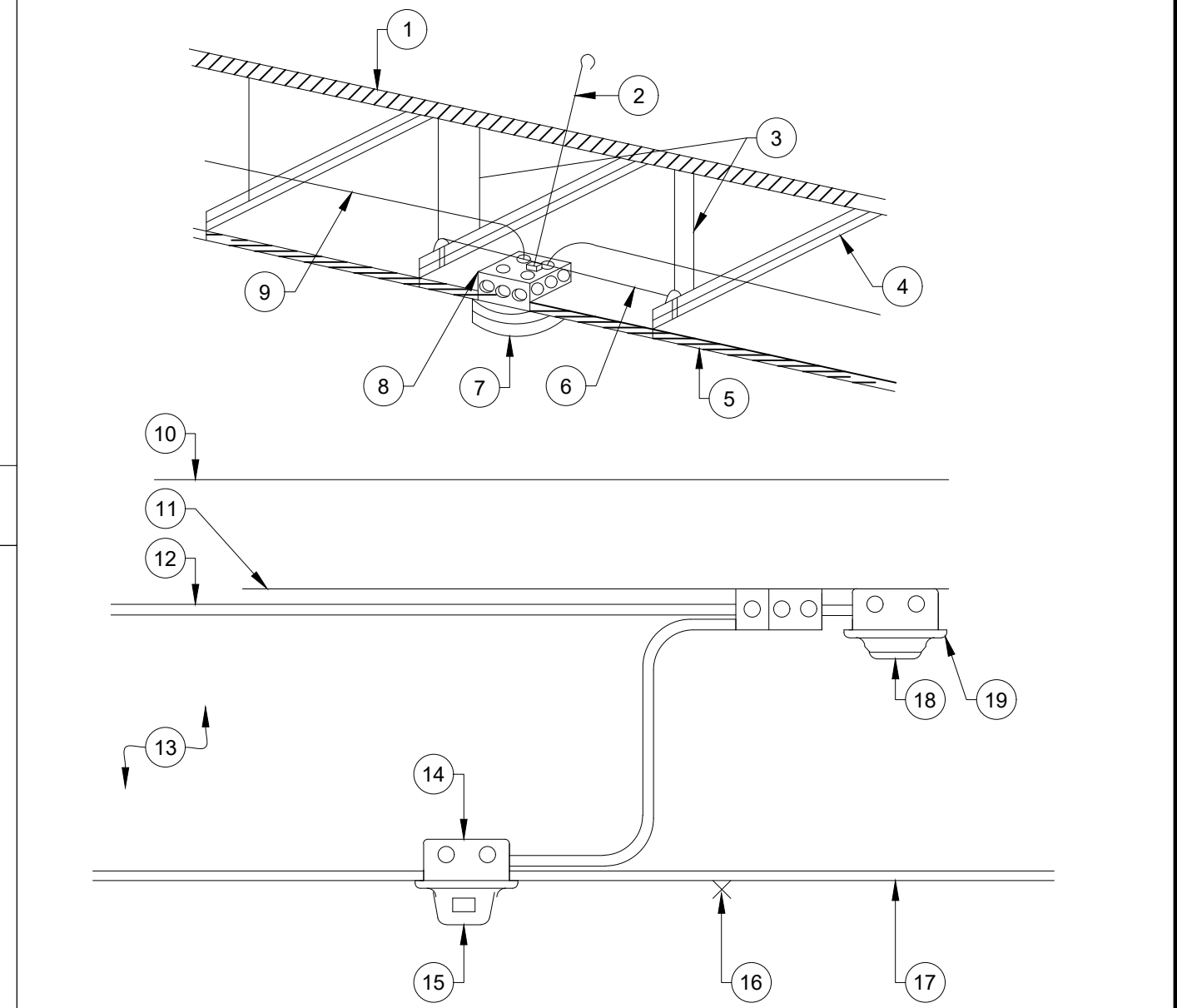
1. FROM PREVIOUS ADDRESSABLE DEVICE AND OR CONTROL PANEL/POWER SUPPLY.
2. TO NEXT ADDRESSABLE DEVICE, RETURN TO CONTROL PANEL OR END OF LINE.



BEAM DETECTOR/RTS DIAGRAM

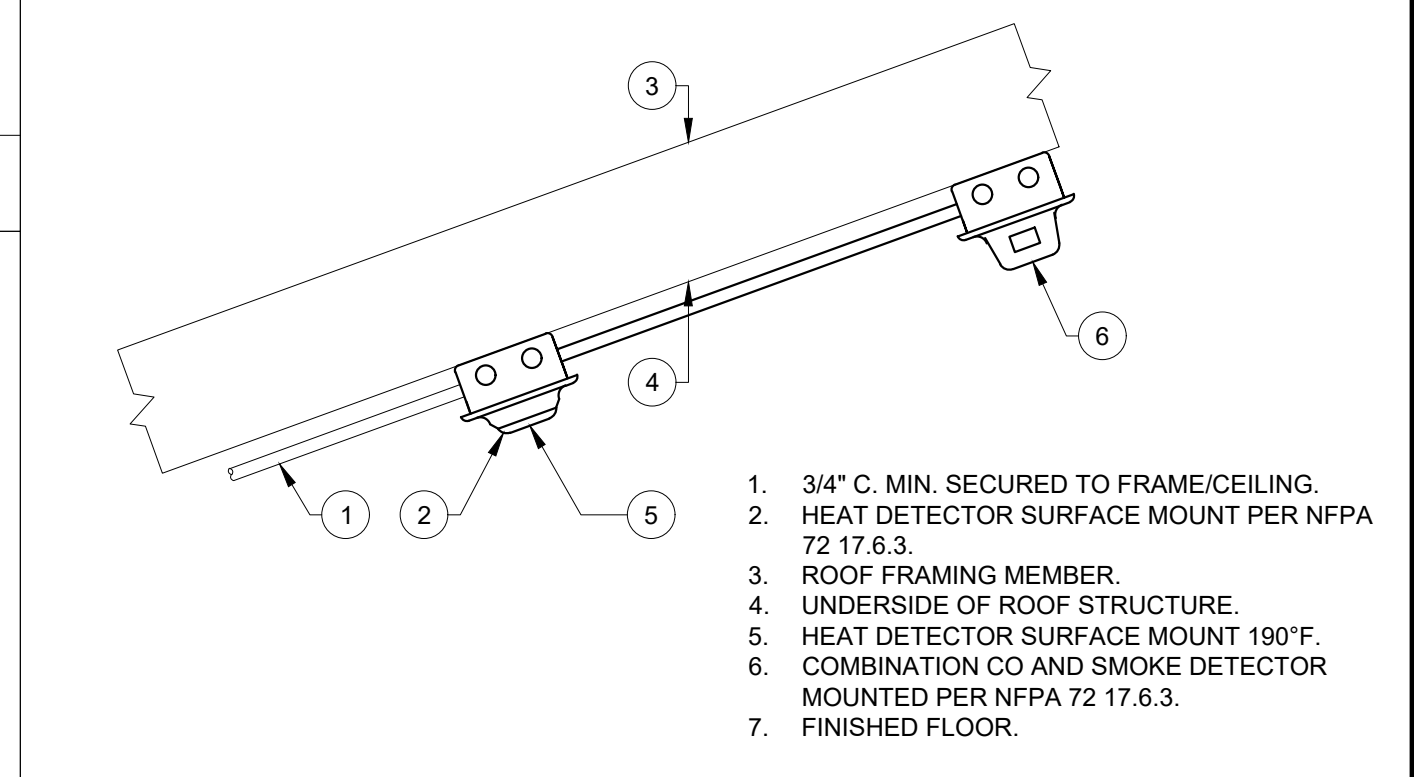
N.T.S 08

1. PERMANENT CEILING.
2. SEISMIC HANGER.
3. HANGERS
4. T-BAR
5. DROP CEILING TILE
6. T-BAR BOX SUPPORT BRACKET.
7. SMOKE DETECTOR
8. 4" S BOX
9. 3/4" MINIMUM METALLIC CONDUIT.
10. UNDERSIDE OF ROOF STRUCTURE.
11. ROOF FRAMING MEMBER.
12. 3/4" MINIMUM CONDUIT, CONCEAL IN ATTIC SPACE.
13. CEILING SPACE.
14. JUNCTION BOX MOUNTED IN CEILING (SEE NOTE)
15. SMOKE DETECTOR.
16. "PERMANENT MARKER" INDICATES THE LOCATION OF THE HEAT DETECTOR IN THE ATTIC SPACE. RED LETTER ON WHITE BACKGROUND SHALL BE 3/4" HIGH.
17. FINISH CEILING.
18. 200\"/>



DROP CEILING DEVICE INSTALLATION DETAIL

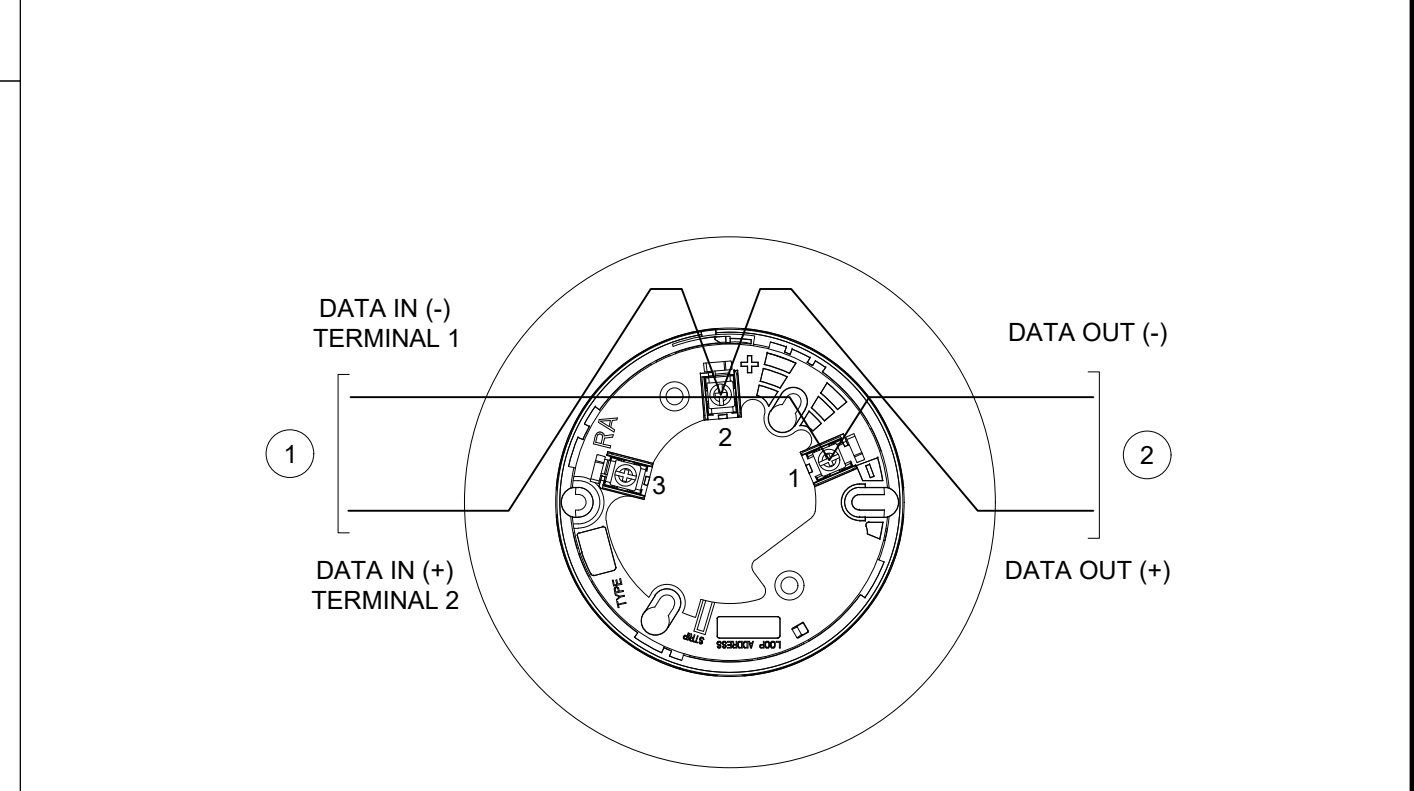
N.T.S 01



SLOPED CEILING INSTALLATION DETAIL

N.T.S 02

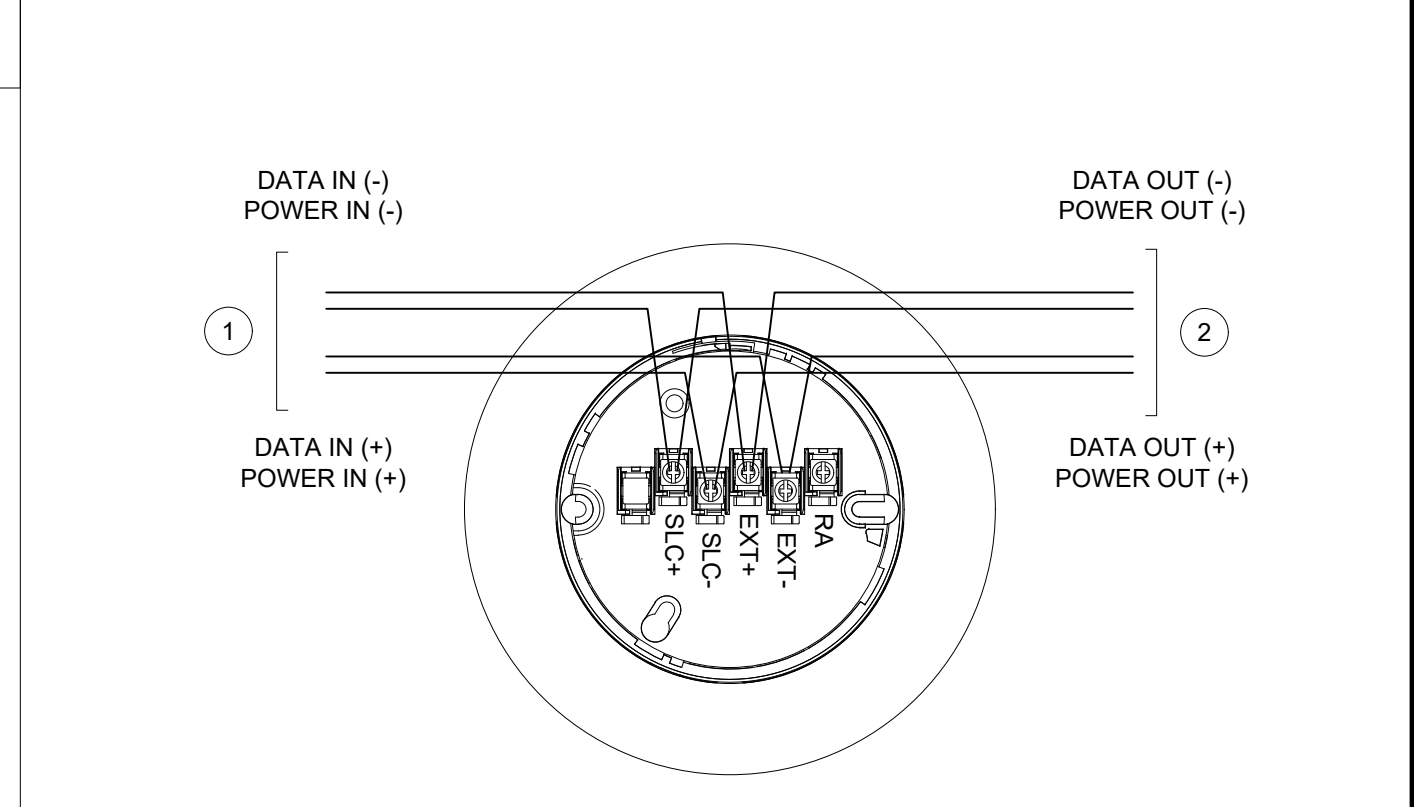
1. FROM PREVIOUS ADDRESSABLE DEVICE OR CONTROL PANEL.
2. TO NEXT ADDRESSABLE DEVICE OR RETURN TO CONTROL PANEL.



FIRE ALARM SMOKE/HEAT DETECTOR DETAIL

N.T.S 03

1. FROM PREVIOUS ADDRESSABLE DEVICE AND OR CONTROL PANEL/POWER SUPPLY.
2. TO NEXT ADDRESSABLE DEVICE, RETURN TO CONTROL PANEL OR END OF LINE.



DETECTOR SOUNDER BASE DETAIL

N.T.S 04

IDENTIFICATION STAMP  
DIV. OF THE STATE ARCHITECT  
APP: 02-120690 INC:  
REVIEWED FOR  
SS  FLS  ACS   
DATE: 02/28/2023

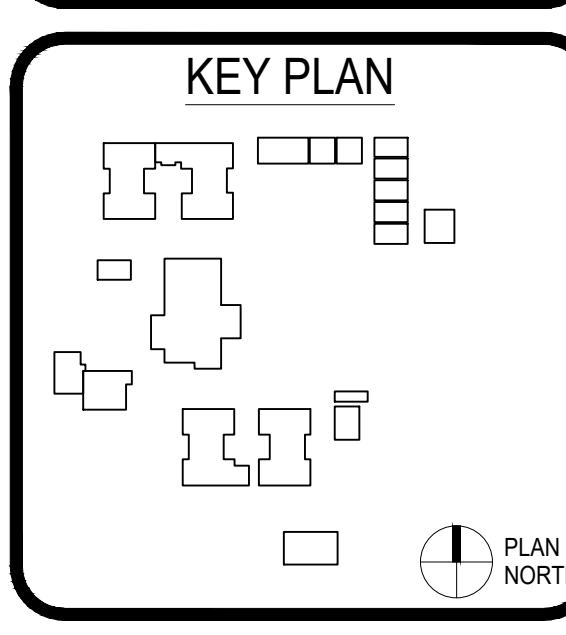
**PBK**

ARCHITECT PBK Architects, Inc.  
SACRAMENTO/FOLSOM  
1110 IRON POINT ROAD, SUITE 200  
FOLSOM, CA 95630  
916-682-9494 PH

MEP Engineering II Technology  
**LEAF**  
ENGINEERS  
SACRAMENTO/FOLSOM  
1110 IRON POINT ROAD, SUITE 200  
FOLSOM, CA 95630  
916-682-9494 PH

REPLACE FIRE ALARM SYSTEM  
ROCKLIN UNIFIED SCHOOL DISTRICT  
PARKER WHITNEY ELEMENTARY SCHOOL  
5145 TOPAZ AVENUE  
ROCKLIN, CA 95677

DSR-APPL. NO. 02-120690 FILE NO. 31-37



PROFESSIONAL ENGINEER  
No. 11382  
ELECTRICAL  
STATE OF CALIFORNIA

CLIENT	ROCKLIN USD	
PROJECT NUMBER	220394	
DATE	NOVEMBER 29, 2022	
DRAWN BY:	C.Y.	
CHECKED BY:	L.M.	
REVISIONS		
#	DESCRIPTION	DATE

DSA SUBMITTAL

**FIRE ALARM DETAILS**

**FA4.0**



Honeywell INTELLIKNIGHT										
IntelliKnight 6820-EVS Battery Calculation										
Secondary Power Source Requirements										
Device Type	Qty	Standby Current (amps)	Current Draw	Total	Qty	Standby Current (amps)	Current Draw	Total		
1. Control Panel	1	x	0.190000	=	0.190000	1	x	0.250000	=	0.250000
6820 Control Panel	1	x	0.190000	=	0.190000	1	x	0.250000	=	0.250000
2. Addressable SLR Devices										
SKP4070 (T)	93	x	0.003000	=	0.279000	93	x	0.003000	=	0.279000
SKHEAT-HIT (ROR)	90	x	0.003000	=	0.270000	90	x	0.003000	=	0.270000
SK-BEAM	2	x	0.002000	=	0.004000	2	x	0.002000	=	0.004000
SK-MONITOR	1	x	0.003075	=	0.003075	1	x	0.003075	=	0.003075
SK-FULL-SA	1	x	0.003075	=	0.003075	1	x	0.003075	=	0.003075
SK-RELAY	8	x	0.002255	=	0.002040	8	x	0.002255	=	0.002040
SK-FIRE-CO	23	x	0.000300	=	0.006900	23	x	0.000720	=	0.165600
3. SLR Accessory Bases										
B200S	23	x	0.000300	=	0.006900	23	x	0.000300	=	0.006900
RTS151	2	x	0.000000	=	0.000000	2	x	0.007500	=	0.015000
4. Auxiliary Power Draw - SLR Devices										
B200S (Aux Power)	23	x	0.000500	=	0.011500	23	x	0.035000	=	0.805000
5. Accessory Modules										
B815	1	x	0.078000	=	0.078000	1	x	0.078500	=	0.078500
S895XL	6	x	0.010000	=	0.060000	6	x	0.010000	=	0.060000
S890	1	x	0.025000	=	0.025000	1	x	0.025000	=	0.025000
EVS-INT50W@25V	1	x	0.052000	=	0.052000	1	x	0.275000	=	0.275000
EVS-INT50W@70V	1	x	0.052000	=	0.052000	1	x	0.310000	=	0.310000
EVS-INT50W VIA TS USED @70V	30	x	0.000000	=	0.000000	30	x	0.051800	=	1.554000
EVS-50W	1	x	0.010000	=	0.010000	1	x	0.010000	=	0.010000
EVS-VCM	1	x	0.070000	=	0.070000	1	x	0.100000	=	0.100000
EVS-LOC	1	x	0.100000	=	0.100000	1	x	0.150000	=	0.150000
EVS-RCU	1	x	0.090000	=	0.090000	1	x	0.125000	=	0.125000
EVS-CE4	1	x	0.020000	=	0.020000	1	x	0.180000	=	0.180000
6. Output Circuits										
NAC 1	1	x	0.000000	=	0.000000	1	x	0.579000	=	0.579000
NAC 2	1	x	0.000000	=	0.000000	1	x	0.035000	=	0.035000
Total Standby Load		0.781990		Total Alarm Load		4.635740				

Honeywell INTELLIKNIGHT									
IntelliKnight 6820-EVS Battery Calculation									
Calculation in Total Sheet									
Required Standby Time in Hours					Required Alarm Time in Minutes				
Standby Load Current	0.78199 Amps				Standby Hours	24			
Alarm Load Current (Amps)	4.53574 Amps				Alarm Minutes	15			
Total Current Load	19.902 AH				Total Standby Time	1.2			
Multiply by the Derating Factor	1.2				Total Alarm Time	0.25			
Total Ampere Hours Required					23.88 AH				
Recommended Batteries:					BAT-12260 - 26AH Batteries				
The batteries can be charged by the 6820-EVS Charger.									
These batteries will require a RBB, Remote Battery Backbox.									

NOTIFICATION CIRCUIT - N1 - VOLTAGE DROP CALCULATIONS									
1) STARTING VOLTAGE (24Vdc) AT 85% EFFICIENCY: Vdc = 24Vdc x .85 = 20.4Vdc									
2) WIRE RESISTANCE (OHMS) = (#14 FEET x 3.071000) #12 FEET x 1.931000 + #10 FEET x 1.211000 x 2									
3) UTILIZING EOL OHM'S CALCULATIONS, ACCEPTABLE VOLTAGE DROP IS NO LESS THAN 1%VDC EOL AS PER UL84 10TH EDITION									
* FORMULA = CURRENT X DISTANCE X RESISTIVITY CONSTANT / CIRCULAR MILLS / VOLTAGE X 1000 = % OF DROP									
PART #	DEVICE TYPE	NO. OF DEVICES ON CKT	TOTAL LINEAR FEET OF WIRE	RES. OF WIRES (OHMS)	DEVICE LOAD (AMPS)	TOTAL LOAD (AMPS)	VOLTAGE DROP (VOLTS)		
SPSRL-15	SPKRSTROBE SET @ 15CD	5	0.043	0.215	0.043	0.215	0.043		
SPSRL-30	STROBE SET @ 30CD	2	0.063	0.315	0.063	0.315	0.063		
SL-15	STROBE SET @ 15CD	7	0.043	0.301	0.043	0.301	0.043		
TOTAL AMPS:		3.50		TOTAL % DROP:		1.351		TOTAL V-DROP: 0.579	
STARTING VOLTAGE 24.0VDC		ACTUAL FINISH VOLTAGE				19.82		VDC	

NOTIFICATION CIRCUIT - N2 - VOLTAGE DROP CALCULATIONS									
1) STARTING VOLTAGE (24Vdc) AT 85% EFFICIENCY: Vdc = 24Vdc x .85 = 20.4Vdc									
2) WIRE RESISTANCE (OHMS) = (#14 FEET x 3.071000) #12 FEET x 1.931000 + #10 FEET x 1.211000 x 2									
3) UTILIZING EOL OHM'S CALCULATIONS, ACCEPTABLE VOLTAGE DROP IS NO LESS THAN 1%VDC EOL AS PER UL84 10TH EDITION									
* FORMULA = CURRENT X DISTANCE X RESISTIVITY CONSTANT / CIRCULAR MILLS / VOLTAGE X 1000 = % OF DROP									
PART #	DEVICE TYPE	NO. OF DEVICES ON CKT	TOTAL LINEAR FEET OF WIRE	RES. OF WIRES (OHMS)	DEVICE LOAD (AMPS)	TOTAL LOAD (AMPS)	VOLTAGE DROP (VOLTS)		
B200S	SOUNDER BASE-HIGH dba	2	0.035	0.070	0.035	0.070	0.035		
TOTAL AMPS:		1.25		TOTAL % DROP:		0.483		TOTAL V-DROP: 0.07	
STARTING VOLTAGE 24.0VDC		ACTUAL FINISH VOLTAGE				23.37		VDC	

SILENT KNIGHT									
Global Project Master:									
Project Name: PARKER WHITNEY									
Project #: 220394									
Prepared by: [Signature]									
Date: 11/21/2022									
Panel ID: EVS-50W Model: EVS-50W Audio Amplifier									
Location: BLDG 10									
Circuit Name: [Blank]									
Standby Hours: 24									
Alarm Min: 15									
Derating: 1.2									
Watts: [Blank]									
Total Standby Current (AMPS): 0.782									
Total Standby Time in Hours: 24									
Total Standby AH Required: 18.888									
Total Alarm Current (AMPS): 4.636									
Total Alarm Time in Hours: 1.25									
Total Alarm AH Required: 5.795									
Multiply by the Derating Factor: 1.2									
Minimum Battery Amperage Required: 4.09									

DECIBEL LOSS CALCULATOR									
ROOM # / NAME: PARKER WHITNEY CAMPUS									
SPEAKER #: ALL									
SPEAKER TAP: 1/2 WATT									
MODEL #	VOLTAGE	REVERBERANT DBA AT 10 FEET PER UL 1480 (RATED WATTS)							
SPSRL	25/70	1/8W	1/4W	1/2W	1W	2W			
		N/A	77	80	83	86			
Decibel Loss Formula L=20Xlog10(V2/V1)									
L=loss									
V1=Value of Starting Reference									
V2=Value of Distance from Reference									
Ambient Noise Level dB at 10' from Source	60 Enter Ambient Noise here								
	80 Enter Audio Device Decibel level here								

SPEAKER LOSS SUMMARY									
COMBINED AMP-S1 & S-2									
BUILDING	Quantity at 25 W	Quantity at 50 W	Quantity at 2 W						
BUILDING A	2	10	5						
BUILDING B	4	4	2						
BUILDING C	1	10	2						
BUILDING D	2	9	3						
S. PORTABLES	3	3	3						
NINE PORTABLES	11	3							
Total Speakers	5	47	18						
Total Watts	x .25	x .5	x 2						
	1.25	23.5	36						
Total Watts Used:		60.75							
Amplifier to be installed:		100							
Remaining Watts:		39.25							
Start Reference Point in Feet	Farthest Distance from Reference Point in Feet	Decibel Loss Between Start & Finish Points	Decibel Level at Reference Point	dB Above Ambient (must be 15dB above Ambient)					
10	10	0.00	80.00	20.00					
	11	-0.83	79.17	19.17					
	12	-1.58	78.42	18.42					
	13	-2.28	77.72	17.72					
	14	-2.92	77.08	17.08					
	15	-3.52	76.48	16.48					
	16	-4.08	75.92	15.92					
	17	-4.61	75.39	15.39					
	18	-5.11	74.89	14.89					

RPS-1000 NAC-A BATTERY CALCULATIONS FOR 24 HOUR STANDBY									
PANEL CONTROLLER AND CARDS	RPS-1000	SILENT KNIGHT POWER EXPANDER	1	0.01000	0.01000	0.01000	0.01000	0.01000	0.01000
PANEL TOTALS		0.010		0.010		0.010		0.010	
24V AUXILIARY DEVICES									
PANEL CIRCUIT FIELD NOTIFICATION APPLIANCE CIRCUITS									
N1	NOTIFICATION APPLIANCE CIRCUIT -N1	1	0.000	0.000	0.000	0.000	0.000	0.000	0.000
N2	NOTIFICATION APPLIANCE CIRCUIT -AUX	1	0.000	0.000	0.000	0.000	0.000	0.000	0.000
N3	NOTIFICATION APPLIANCE CIRCUIT -N3	1	0.000	0.000	0.000	0.350	0.350	0.350	0.350
NAC TOTALS		0.000		0.000		0.350		0.350	
OVERALL TOTALS		0.010		0.010		0.360		0.360	
TOTAL ALARM AMPS 1.653 X 15 MINS= 0.413									
TOTAL STANDBY AMPS 0.010 X 24 HOURS= 0.240									
TOTAL AMP HOURS REQUIRED= 0.653									
RECOMMENDED MINIMUM BATTERY SIZE= 7.0 AMP HOURS									
LESS 20% DERATING FACTOR= 5.6 AMP HOURS									
SPARE AMP HOURS 4.9 AMP HOURS									
5 MINS = 0.083									
15 MINS = 0.250									

NOTIFICATION CIRCUIT - A.1 - VOLTAGE DROP CALCULATIONS									
1) STARTING VOLTAGE (24Vdc) AT 85% EFFICIENCY: Vdc = 24Vdc x .85 = 20.4Vdc									
2) WIRE RESISTANCE (OHMS) = (#14 FEET x 3.071000) #12 FEET x 1.931000 + #10 FEET x 1.211000 x 2									
3) UTILIZING EOL OHM'S CALCULATIONS, ACCEPTABLE VOLTAGE DROP IS NO LESS THAN 1%VDC EOL AS PER UL84 10TH EDITION									
* FORMULA = CURRENT X DISTANCE X RESISTIVITY CONSTANT / CIRCULAR MILLS / VOLTAGE X 1000 = % OF DROP									
PART #	DEVICE TYPE	NO. OF DEVICES ON CKT	TOTAL LINEAR FEET OF WIRE	RES. OF WIRES (OHMS)	DEVICE LOAD (AMPS)	TOTAL LOAD (AMPS)	VOLTAGE DROP (VOLTS)		
SPSRL-15	SPKRSTROBE SET @ 15CD	5	0.043	0.129	0.043	0.129	0.043		
SPSRL-75	SPKRSTROBE SET @ 75CD	5	0.107	0.535	0.107	0.535	0.107		
TOTAL AMPS:		300		TOTAL % DROP:		1.158		TOTAL V-DROP: 0.664	
STARTING VOLTAGE 24.0VDC		ACTUAL FINISH VOLTAGE				19.63		VDC	

NOTIFICATION CIRCUIT - A.2 - VOLTAGE DROP CALCULATIONS									
1) STARTING VOLTAGE (24Vdc) AT 85% EFFICIENCY: Vdc = 24Vdc x .85 = 20.4Vdc									
2) WIRE RESISTANCE (OHMS) = (#14 FEET x 3.071000) #12 FEET x 1.931000 + #10 FEET x 1.211000 x 2									
3) UTILIZING EOL OHM'S CALCULATIONS, ACCEPTABLE VOLTAGE DROP IS NO LESS THAN 1%VDC EOL AS PER UL84 10TH EDITION									
* FORMULA = CURRENT X DISTANCE X RESISTIVITY CONSTANT / CIRCULAR MILLS / VOLTAGE X 1000 = % OF DROP									
PART #	DEVICE TYPE	NO. OF DEVICES ON CKT	TOTAL LINEAR FEET OF WIRE	RES. OF WIRES (OHMS)	DEVICE LOAD (AMPS)	TOTAL LOAD (AMPS)	VOLTAGE DROP (VOLTS)		
SPSRL-15	SPKRSTROBE SET @ 15CD	1	0.043	0.043	0.043	0.043	0.043		
SPSRL-75	SPKRSTROBE SET @ 75CD	5	0.107	0.535	0.107	0.535	0.107		
SL-15	STROBE SET @ 15CD	2	0.043	0.086	0.043	0.086	0.043		
TOTAL AMPS:		365		TOTAL % DROP:		1.409		TOTAL V-DROP: 0.938	
STARTING VOLTAGE 24.0VDC		ACTUAL FINISH VOLTAGE				19.46		VDC	

NOTIFICATION CIRCUIT - A.3 - VOLTAGE DROP CALCULATIONS									
1) STARTING VOLTAGE (24Vdc) AT 85% EFFICIENCY: Vdc = 24Vdc x .85 = 20.4Vdc									
2) WIRE RESISTANCE (OHMS) = (#14 FEET x 3.071000) #12 FEET x 1.931000 + #10 FEET x 1.211000 x 2									
3) UTILIZING EOL OHM'S CALCULATIONS, ACCEPTABLE VOLTAGE DROP IS NO LESS THAN 1%VDC EOL AS PER UL84 10TH EDITION									
* FORMULA = CURRENT X DISTANCE X RESISTIVITY CONSTANT / CIRCULAR MILLS / VOLTAGE X 1000 = % OF DROP									
PART #	DEVICE TYPE	NO. OF DEVICES ON CKT	TOTAL LINEAR FEET OF WIRE	RES. OF WIRES (OHMS)	DEVICE LOAD (AMPS)	TOTAL LOAD (AMPS)	VOLTAGE DROP (VOLTS)		
B200S	SOUNDER BASE-HIGH dba	9	0.035	0.315	0.035	0.315	0.035		
TOTAL AMPS:		610		TOTAL % DROP:		2.356		TOTAL V-DROP: 0.742	
STARTING VOLTAGE 24.0VDC		ACTUAL FINISH VOLTAGE				19.66		VDC	

RPS-1000 NAC-C BATTERY CALCULATIONS FOR 24 HOUR STANDBY									
PANEL CONTROLLER AND CARDS	RPS-1000	SILENT KNIGHT POWER EXPANDER	1	0.01000	0.01000	0.01000	0.01000	0.01000	0.01000
PANEL TOTALS		0.010		0.010		0.010		0.010	
24V AUXILIARY DEVICES									
PANEL CIRCUIT FIELD NOTIFICATION APPLIANCE CIRCUITS									
N1	NOTIFICATION APPLIANCE CIRCUIT -N1	1	0.000	0.000	0.000	0.000	0.000	0.000	0.000
N2	NOTIFICATION APPLIANCE CIRCUIT -AUX	1	0.000	0.000	0.000	0.350	0.350	0.350	0.350
N3	NOTIFICATION APPLIANCE CIRCUIT -N3	1	0.000	0.000	0.000	0.350	0.350	0.350	0.350
NAC TOTALS		0.000		0.000		0.700		0.700	
OVERALL TOTALS		0.010		0.010		0.71			