

# CITY OF TURLOCK, CALIFORNIA

## NOTICE TO CONTRACTORS

### City Project No. 15-88 Turlock Public Safety Facility Water Damage Repairs

The City of Turlock invites you to submit a bid for the project listed above. The enclosed documents describe the requirements of the project. Bids are required to be complete and for the entire work, materials and improvements unless the contrary is indicated in the specifications.

No verbal, telegraphic, electronic mail, facsimile, or telephone Proposals shall be considered.

**A Non-mandatory Pre-Bid meeting will be held on Friday, November 18, 2016, 2:00 PM at Turlock Public Safety Facility, 244 N. Broadway Turlock, CA 95380.** Sub-contractors and suppliers may attend but are not required to do so. The purpose of the pre-bid meeting is to provide contractors and subcontractors the opportunity to examine the areas of work.

Proposals are required to be complete and for the entire work, materials and improvements unless the contrary is indicated in the specifications.

In accordance with the provisions of the California Business and Professions Code, Section 7028, the Contractor shall possess one of the following contractor license(s) at the time of the bid submission and for the duration of the contract:

#### 1. B-General Building Contractor

Failure to possess the specified license(s) shall render the Bid as non-responsive, shall act as a bar to award of the contract to any Bidder not possessing said license(s) at the time of Bid opening and shall result in the forfeiture of the security of said Bidder. Furthermore, any Bidder or Contractor not so licensed shall be subject to all legal penalties imposed by law, including, but not limited to, any appropriate disciplinary action by the Contractor's License Board.

Pursuant to Section 1773 of the Labor Code, the general prevailing wage rates in the county Stanislaus in which the work is to be done have been determined by the Director of the California Department of Industrial Relations. These wages are set forth in the General Prevailing Wage Rates for this project are available from the California Department of Industrial Relations' Internet web site at <http://www.dir.ca.gov/DLSR/PWD>.

Bidders' attention is directed to the insurance requirements in the contract. It is highly recommended that bidders confer with their respective insurance carriers or brokers to determine in advance of bid submission the availability of insurance certificates and endorsements prescribed and provided herein.

If an apparent low bidder fails to comply strictly with the insurance requirements, that bidder may be disqualified from award of the contract.

Proposals may not be withdrawn for a period of sixty (60) days after the time fixed for opening of proposals. The City Council of the City of Turlock reserves the right to reject any and all proposals or any part thereof and to waive any errors or informalities in any proposals and to set and act as sole judge of the merit and qualifications of the equipment, supplies or services offered.

At the request and expense of Contractor, pursuant to Division 2, Part 5, Section 22300, et. seq., of the Public Contracts Code, securities equivalent to any funds withheld as retention from progress payments made under this contract may be deposited with the City of Turlock or with a State or Federally chartered bank as escrow agent, who shall pay such moneys to Contractor upon completion of the contract.

No contractor or subcontractor may be listed on a bid proposal for a public works unless registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5. No contractor or subcontractor may be awarded a contract for public work on a public works unless registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5.

This project is subject to compliance monitoring and enforcement by the Department of Industrial Relations. The contractors and subcontractors must furnish electronic certified payroll records to the Labor Commissioner.

The contractor shall post job site notices prescribed by regulation. (*See* 8 Calif. Code Reg. §16451(d) for the notice that previously was required for projects monitored by the CMU.)

This project has been estimated to cost \$36,300 or less, which allows the City of Turlock, in accordance with Public Contract Code § 22032, to suspend formal bidding procedures and solicit informal bids. These bids may lead to a negotiated contract.

Interested bidders shall complete and submit the attached bid form via mail, fax, or email to:

**City of Turlock**  
**Engineering Division**  
**Attn: Anthony R. Orosco, P.E.**  
**156 S. Broadway, Suite 150**  
**Turlock, CA 95380**  
Phone: (209) 668-5520  
Fax: (209) 668-5563  
Email: aorosco@turlock.ca.us

Bid submission deadline: (November 22, 2016) @ (1:00 PM). No bids will be accepted after this time.

In accordance with the Notice to Contractors, the undersigned, as bidder, declares that he has carefully examined the location of the proposed work, the plans, specifications and technical requirements therefore, together with the prevailing rate of per diem wages for each craft or type of workmen needed to execute said contract; and he proposes and agrees that if this proposal is accepted, he will furnish all labor, materials, equipment, plant transportation, service, sales taxes, permit fees and other costs necessary to complete the construction in strict conformity to the plans and specifications and he will enter into a written contract with the City of Turlock in the form of contract on file in the Office of the City Engineer for such purposes, and that he will execute and/or provide all insurance certificates required by law and/or by said contract and/or mentioned in said Notice to Contractors all in accordance with and subject to all applicable laws, and that he will take in full payment therefore the following unit prices, to wit:

COMPANY'S NAME: \_\_\_\_\_

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

ADDRESS: \_\_\_\_\_  
(Number) (Street)  
\_\_\_\_\_  
(City) (State) (ZIP)

CONTRACTOR'S PHONE #: \_\_\_\_\_

**NOTE: CONTRACTOR WILL BE REQUIRED TO LIST THEIR LICENSE NUMBER, EXPIRATION DATE, AND APPROPRIATE STATEMENT REGARDING PERJURY AND SIGNED BY INDIVIDUAL AUTHORIZED TO DO SO. FAILURE TO INCLUDE THE ABOVE ITEMS MAY CAUSE SAID CONTRACTOR'S BID TO BE REJECTED.**

\_\_\_\_\_, Contractor's License #\_\_\_\_\_, Class\_\_\_\_\_  
(Company's Name)

Expires\_\_\_\_\_. This information is true, is provided as per section 7028.15 of the Business and Professions Code, and is made herein under penalty of perjury.

X \_\_\_\_\_  
(Bidder's Signature) (Date)

If the proposal is accepted and the undersigned shall fail to contract as aforesaid and fail to file with the City insurance certificates as required by said contract, within fourteen (14) days after the bidder has received notice from the City Engineer or his representative of the City of Turlock that the contract has been awarded to bidder and is ready for signature, the City of Turlock may, at its option,

determine that the bidder has abandoned his contract, and thereupon this proposal and the acceptance thereof shall be null and void.

*Also accompanying this proposal is an affidavit of non collusion and questionnaire to general contractors, a statement of proposed sub contractors, if any, the address of mill, shop or office of any sub contractor, and a statement of work to be performed by sub contractors.*

The names and addresses of persons interested in the foregoing proposal as principals are as follows:

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

Licensed in accordance with an act providing for the registration of Contractors,  
License No. \_\_\_\_\_ Expiration Date \_\_\_\_\_.

DATED: \_\_\_\_\_, 20\_\_\_\_

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

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

X \_\_\_\_\_  
Signature of Bidder

NOTE: If bidder is a corporation, the legal name of the corporation shall be set forth above together with the signature of the officers authorized to sign contracts on behalf of the corporation; if bidder is a co 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 in behalf of the co partnership; and, if bidder is an individual, his signature shall be placed above. If a signature is by an agent other than an officer of a corporation or a member of the partnership, a Power of Attorney must be on file with the City Clerk prior to opening or submitted with the bid; otherwise, the bid will be disregarded as irregular and unauthorized.

**AFFIDAVIT**

The undersigned bidder, being first duly sworn, deposes and says that he/she are the party making the foregoing proposal or bid, that this bid is genuine and not collusive or sham, that said bidder has not colluded, conspired, connived or agreed, directly or indirectly, with any other person or bidder, to put in a sham bid, or that said other person shall refrain from bidding, and has not in any manner sought by collusion to secure any advantage against the said City or any person interested in said improvement, for him/herself or any other person.

X \_\_\_\_\_  
Signature of Bidder

Jurat (Government Code Section 8202)

State of California

County of \_\_\_\_\_

Subscribed and sworn to (or affirmed) before me on this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_

by \_\_\_\_\_ proved to me on the basis of satisfactory evidence to be the person(s) who appeared before me.

(AFFIX SEAL)

\_\_\_\_\_  
NOTARY PUBLIC SIGNATURE

\_\_\_\_\_  
NOTARY PUBLIC PRINTED NAME



**AGREEMENT  
FOR PUBLIC IMPROVEMENT**

**Project No. 15-88**

**Turlock Public Safety Facility  
Water Damage Repairs**

**THIS AGREEMENT** is entered into by and between the CITY OF TURLOCK, a Municipal Corporation, hereinafter called "City," and \_\_\_\_\_ hereinafter called "Contractor" on this \_\_\_\_ day of \_\_\_\_\_, 20\_\_ (hereinafter called the "Agreement").

**RECITALS**

A City has taken appropriate proceedings to authorize construction of the public work and improvements herein provided and execution of this contract.

B A notice was duly published for bids for the contract for the improvement hereinafter described.

C On \_\_\_\_\_, 20\_\_, after notice duly given, the City Council of the City of Turlock awarded the contract for the construction of the improvements hereinafter described to Contractor, which Contractor said Council found to be the lowest responsible bidder for said improvements.

D City and Contractor desire to enter into this Agreement for the construction of said improvements.

**IT IS AGREED AS FOLLOWS:**

**1. Scope Of Work:**

Contractor shall perform the work described briefly as follows:

The work consists, in general, of: removal and replacement of water damaged carpet, ceiling tiles, gypsum board, batt insulation, plywood, drywall texturing, painting, lighting fixtures, floor sink, re-grout tile floor, grout sealing, loss of warranty life assessment and other associated work and furnishing all necessary labor, materials, tools, equipment and incidentals needed to perform the improvements as shown on the contract plans complete and in place. This work shall be completed in accordance with the Standard Specifications, standard Drawings and these Special Provisions.

The aforesaid improvements are further described in the plans, specifications and technical requirements for such project, copies of which are on file in the office of the City Engineer, and which are incorporated herein by reference as if set forth fully herein.

**2. The Contract:**

The complete contract consists of the following documents: This agreement, the notice to contractors, the contractor's accepted proposal, general conditions, special provisions, plans and detailed drawings, addendums, faithful performance bond, labor and materials bond, and any and all supplemental agreements amending, decreasing, or extending the work contemplated or which may be required to complete the work in a substantial and acceptable manner. The current edition of the "City of Turlock Standard Specifications and Drawings" is hereby incorporated as a part of the contract.

All rights and obligations of City and Contractor are set forth and described in the contract.

All of the above named documents are intended to incorporate the terms of the others so that any work called for in one and not mentioned in the other, or vice versa, is to be executed the same as if mentioned in all said documents. The documents comprising the complete contract will hereinafter be referred to as the "contract". In case of any dispute, the decision of the City Engineer shall be final.

**3. Schedule:**

All work shall be performed in accordance with the schedule approved by the City Engineer and under his direction.

**4. Equipment & Performance Of Work:**

Contractor shall furnish all tools, equipment, facilities, labor and materials necessary to perform and complete in good workmanlike manner the work of general construction as called for and in the manner designated in and in strict conformity with the plans and specifications for said work, which said specifications are entitled, "General Conditions and Special Provisions for **City Project No. 15-88, "Turlock Public Safety Facility Water Damage Repairs."**

The equipment, apparatus, facilities, labor and material shall be furnished, and said work performed and completed as required in said plans and specifications under the direction and supervision, and subject to the approval of the City Engineer of said City, or City Engineer's designated agent.

**5. Contract Price:**

City shall pay, and Contractor shall accept in full payment for the work above agreed to be done, an amount not to exceed \_\_\_\_\_ **and XX/100ths Dollars (\$\_\_\_\_\_.)**. Said amount shall be paid in installments as hereinafter provided.

**6. Time For Performance:**

The time fixed for the commencement of such work is within ten (10) working days after the "Notice to Proceed" has been issued. The work on this project, including all punch list items, shall be completed on or before the expiration of **Twenty (20)** working days beginning on the first day of work or no later than the tenth day after the "Notice to Proceed" has been issued.

**7. Rights Of City To Increase Working Days:**

If such work is not completed within such time, the City Engineer shall have the right to increase the number of working days in the amount the City Engineer may determine will best serve the interests of the City, and if the City Engineer desires to increase said number of working days, the City Engineer shall have the further right to charge the Contractor and deduct from the final payment for the work the actual cost of engineering, inspection, superintendence, and other overhead expenses which are directly chargeable to Contractor, and which accrue during the period of such extension, except that the cost of the final service and preparation of the final estimates shall not be included in such charges; provided, however, that no extension of time for completion of such work shall ever be allowed unless requested by Contractor at least twenty (20) calendar days prior to the time herein fixed for the completion thereof, in writing, with the City Engineer. In this connection, it is understood that the City Engineer shall not consider any such requests if not filed within the time herein prescribed.

**8. Option Of City To Terminate Agreement In Event Of Failure To Complete Work:**

If Contractor shall have refused or failed to prosecute the work, or any severable part thereof, with such diligence as will ensure its completion within the time specified or any extensions thereof, or shall have failed to complete said work within such time if Contractor should be adjudged a bankrupt, or if Contractor should make a general assignment for the benefit of Contractor's creditors, or if a receiver should be appointed in the event of Contractor's insolvency, or if Contractor or any subcontractor should violate any of the provisions of this agreement, the City Engineer or the City Council may give written notice to Contractor and Contractor's sureties of its intention to terminate this agreement, and unless within five (5) days after the serving of such notice such violation shall cease and satisfactory arrangements for the correction thereof made, this agreement may, at the option of City, upon the expiration of said time, cease and terminate.

**9. Delay Damages:**

In the event the Contractor, for any reason, shall have failed to perform the work herein specified to the satisfaction of the City Engineer within the time herein required, the City may, in accordance with Section 7203 of the Public Contract Code, in lieu of any other of its rights authorized by paragraph 8 of this agreement, deduct from payments or credits due Contractor after such breach, a sum equal to **Two Hundred Fifty** and no/100ths Dollars (**\$250.00**) for each calendar day beyond the date herein provided for the completion of such work. This deduction shall not be considered a penalty but shall be considered as delay damages. The aforementioned rate of deduction is an amount agreed to by the Contractor and the City as reasonably representing additional construction engineering costs incurred by the City if the Contractor fails to complete the work within the contract time. However, any deduction

assessed as delay damages shall not relieve the Contractor from liability for any damages or costs resulting from delays to other contractors on the project or other projects caused by a failure of the assessed Contractor to complete the work within the contract time. Due account shall be taken of any time extensions granted to the Contractor by the City. Permitting the Contractor to continue work beyond the contract completion date shall not operate as a waiver on the part of the City of any of its rights under the contract nor shall it relieve the Contractor from liability for any damages or costs resulting from delays to other contractors on the project or other projects caused by a failure of the assessed Contractor to complete the work within the contract time.

**10. Performance By Sureties:**

In the event of any termination as hereinbefore provided, City shall immediately give written notice thereof to Contractor and Contractor's sureties, and the sureties shall have the right to take over and perform the agreement; provided, however, that if the sureties within five (5) days after giving them said notice of termination, do not give the City written notice of their intention to take over the performance of the agreement and do not commence performance thereof within five (5) days after notice to the City of such election, City may take over the work and prosecute the same to completion by contract or by any other method it may deem advisable for the account, and at the expense of Contractor and the sureties shall be liable to City for any excess cost or damages occasioned City thereby; and, in such event, City may, without liability for so doing, take possession of and utilize in completing the work such materials, appliances, plant and other property belonging to Contractor as may be on the site of the work and necessary therefor.

**11. Disputes Pertaining To Payment For Work:**

Should any dispute arise respecting the true value of any work done, of any work omitted, or of any extra work which Contractor may be required to do, or respecting the size of any payment to Contractor during the performance of this contract, such dispute shall be decided by the City Engineer, and the decision of the latter shall be final and conclusive.

**12. Permits, Compliance With Law:**

Contractor shall, at Contractor's expense, obtain all necessary permits and licenses for the construction of each improvement, give all necessary notices and pay all fees and taxes required by law, except those City fees set forth in the Special Provisions Section 1.

**13. Superintendence By Contractor:**

Contractor shall give personal superintendence to the work on said improvement or have a competent foreman or superintendent satisfactory to the City Engineer on the work at all times during progress, with authority to act for him.

**14. Inspection By City:**

Contractor shall at all times maintain proper facilities and provide safe access for inspection by City to all parts of the work and to the shops wherein the work is in preparation.

**15. Extra And/Or Additional Work And Changes:**

Should City at any time during the progress of said work request any alterations, deviations, additions, or omissions from said specifications or plans or other contract documents, it shall be at liberty to do so, and the same shall in no way affect or make void the contract, but will be added to or deducted from the amount of said contract price as the case may be, by fair and reasonable valuation. Request for such change must be made in writing signed by the City Engineer, shall be accompanied by plans and specifications for such purpose, shall be accepted in writing by Contractor and Contractor's surety.

In the event work is performed or materials furnished in addition to those set forth in Contractor's bid and the specifications herein, said work and materials shall be paid for at the unit price therein contained. Said amount shall be paid in installments as hereinafter provided.

**16. Change Of Contract Price:**

The contract price may only be changed by a contract change order. The value of any work covered by a contract change order for an adjustment in the contract price will be determined in the City's sole discretion as follows:

- (a) If the work performed is on the basis of unit prices contained in the contract documents, the change order will be determined in accordance with the provisions in Section 4-1.05, "Changes and Extra Work", of the Caltrans Standard Specifications; or
- (b) If the work performed is not included on the engineers estimate associated with a unit price, the change order will be by a mutually agreed lump sum; or
- (c) If the change order is not determined as described above in either 16 (a) or 16 (b), the change order will be determined on the basis of force account in accordance with the provisions below.

**FORCE ACCOUNT**

For work paid by force account, the Engineer compares the City's records to the Contractor's daily force account work report. When the Engineer and the Contractor agree on the contents of the daily force account work reports, the Engineer accepts the report and the City pays for the work. If the records differ, the City pays for the work based only on the information shown on the City's records.

If a subcontractor performs work at force account, accept an additional 2 percent markup to the total cost of that work paid at force account, including markups specified as below, as reimbursement for additional administrative costs.

The markups specified in labor, materials, and equipment includes compensation for all delay costs, overhead costs, and profit.

If an item's unit price is adjusted for work-character changes, the City excludes the Contractors cost of determining the adjustment.

Payment for owner-operated labor and equipment is made at the market-priced invoice submitted.

## **Labor**

Labor payment is full compensation for the cost of labor used in the direct performance of the work plus a 5 percent markup. Force account labor payment consists of:

1. Employer payment to the worker for:
  - 1.1. Basic hourly wage
  - 1.2. Health and welfare
  - 1.3. Pension
  - 1.4. Vacation
  - 1.5. Training
  - 1.6. Other State and federal recognized fringe benefit payments
2. Labor surcharge percentage in *Labor Surcharge and Equipment Rental Rates* current during the work paid at force account for:
  - 2.1. Workers' compensation insurance
  - 2.2. Social security
  - 2.3. Medicare
  - 2.4. Federal unemployment insurance
  - 2.5. State unemployment insurance
  - 2.6. State training taxes
3. Subsistence and travel allowances paid to the workers
4. Employer payment to supervisors, if authorized

The 5 percent markup consists of payment for all overhead costs related to labor but not designated as costs of labor used in the direct performance of the work including:

1. Home office overhead
2. Field office overhead
3. Bond costs
4. Profit
5. Labor liability insurance
6. Other fixed or administrative costs that are not costs of labor used in the direct performance of the work

## **Materials**

Material payment is full compensation for materials the Contractor furnishes and uses in the work. The Engineer determines the cost based on the material purchase price, including delivery charges, except:

1. A 5 percent markup is added
2. Supplier discounts are subtracted whether the Contractor takes them or not
3. If the Engineer believes the material purchase prices are excessive, the City pays the lowest current wholesale price for a similar material quantity

4. If the Contractor procured the materials from a source the Contractor wholly or partially own, the determined cost is based on the lower of the:
  - 4.1. Price paid by the purchaser for similar materials from that source on Contract items
  - 4.2. Current wholesale price for those materials
5. If the Contractor does not submit a material cost record within 30 days of billing, the determined cost is based on the lowest wholesale price:
  - 5.1. During that period
  - 5.2. In the quantities used

## **Equipment Rental**

Equipment rental payment is full compensation for:

1. Rental equipment costs, including moving rental equipment to and from the change order work site using its own power.
2. Transport equipment costs for rental equipment that cannot be transported economically using its own power. No payment is made during transport for the transported equipment.
3. 5 percent markup.

If the Contractor wants to return the equipment to a location other than its original location, the payment to move the equipment must not exceed the cost of returning the equipment to its original location. If the Contractor uses the equipment for work other than work paid by force account, the transportation cost is included in the other work.

Before moving or loading the equipment, obtain authorization for the equipment rental's original location.

The Engineer determines rental costs:

1. Using rates in *Labor Surcharge and Equipment Rental Rates*:
  - 1.1. By classifying equipment using manufacturer's ratings and manufacturer-approved changes.
  - 1.2. Current during the work paid by force account.
  - 1.3. Regardless of equipment ownership; but the City uses the rental document rates or minimum rental cost terms if:
    - 1.3.1. Rented from equipment business the Contractor does not own.
    - 1.3.2. The Labor Surcharge and Equipment Rental Rates hourly rate is \$10.00 per hour or less.
2. Using rates established by the Engineer for equipment not listed in *Labor Surcharge and Equipment Rental Rates*. The Contractor may submit cost information that helps the Engineer establish the rental rate; but the City uses the rental document rates or minimum rental cost terms if:
  - 2.1. Rented from equipment business the Contractor does not own.
  - 2.2. The Engineer establishes a rate of \$10.00 per hour or less.

3. Using rates for transport equipment not exceeding the hourly rates charged by established haulers.

Equipment rental rates include the cost of:

- |   |                            |
|---|----------------------------|
| 1. Fuel                                     | 7. Repairs and maintenance |
| 2. Oil                                      | 8. Depreciation            |
| 3. Lubrication                              | 9. Storage                 |
| 4. Supplies                                 | 10. Insurance              |
| 5. Small tools that are not consumed by use | 11. Incidentals            |
| 6. Necessary attachments                    |                            |

The City pays for small tools consumed by use. The Engineer determines payment for small tools consumed by use based on Contractor-submitted invoices.

The Engineer may authorize rates in excess of those in the *Labor Surcharge and Equipment Rental Rates* if:

1. The Contractor submits a request to use rented equipment
2. Equipment is not available from the Contractors normal sources or from one of the Contractors subcontractors
3. Rented equipment is from an independent rental company
4. Proposed equipment rental rate is reasonable
5. The Engineer authorizes the equipment source and the rental rate before the Contractor uses the equipment

### **Equipment on the Job Site**

For equipment on the job site at the time required to perform work paid by force account, the time paid is the time:

1. To move the equipment to the location of work paid by force account plus an equal amount of time to move the equipment to another location on the job site when the work paid by force account is completed
2. To load and unload equipment
3. Equipment is operated to perform work paid by force account and:
  - 3.1. Hourly rates are paid in 1/2-hour increments
  - 3.2. Daily rates are paid in 1/2-day increments

### **Equipment Not On the Job Site Required for Original-Contract Work**

For equipment not on the job site at the time required to perform work paid by force account and required for original-Contract work, the time paid is the time the equipment is operated to perform work paid by force account and the time to move the equipment to a location on the job site when the work paid by force account is completed.

The minimum total time paid is:

1. 1 day if daily rates are paid
2. 8 hours if hourly rates are paid

If daily rates are recorded, equipment:

1. Idled is paid as 1/2 day
2. Operated 4 hours or less is paid as 1/2 day
3. Operated 4 hours or more is paid as 1 day

If the minimum total time exceeds 8 hours and if hourly rates are listed, the City rounds up hours operated to the nearest 1/2-hour increment and pays based on the hours shown the following table. The table does not apply when equipment is not operated due to breakdowns, in which case rental hours are the hours the equipment was operated.

Hours operated	Hours paid
0.0	4.00
0.5	4.25
1.0	4.50
1.5	4.75
2.0	5.00
2.5	5.25
3.0	5.50
3.5	5.75
4.0	6.00
4.5	6.25
5.0	6.50
5.5	6.75
6.0	7.00
6.5	7.25
7.0	7.5
7.5	7.75
≥8.0	hours used

**Equipment Not On the Job Site Not Required for Original-Contract Work**

For equipment not on the job site at the time required to perform work paid by force account and not required for original-Contract work, the time paid is the time:

1. To move the equipment to the location of work paid by force account plus an equal amount of time to return the equipment to its source when the work paid by force account is completed
2. To load and unload equipment
3. Equipment is operated to perform work paid by force account

**Non-Owner-Operated Dump Truck Rental**

Submit the rental rate for non-owner-operated dump truck rental. The Engineer determines the payment rate. Payment for non-owner-operated dump truck rental is for the cost of renting a dump truck, including its driver. For the purpose of markup payment only, the non-owner-operated dump truck is rental equipment and the owner is a subcontractor.

The above markups shall constitute full compensation for all home office overhead, field office overhead, bond costs, profit, labor liability insurance, and other fixed or administrative costs that are not costs specifically designated as cost or equipment rental as stated above. The total

payment made as provided above shall be deemed to be the actual cost of the work and shall constitute full compensation therefor.

When extra work to be paid for on a force account basis is performed by a subcontractor, approved in conformance with the provisions in Section 5-1.13, "Subcontracting," an additional markup of 2 percent will be added to the total cost of that extra work including all markups specified in this Section. The additional 2 percent markup shall reimburse the Contractor for additional administrative costs, and no other additional payment will be made by reason of performance of the extra work by a subcontractor.

**17. Change Of Contract Time:**

The contract time may only be changed by a contract change order. The value of any work covered by a contract change order for an adjustment in the contract time will be determined as follows:

- (a) Additional working days will be awarded where the amount of time is mutually agreed upon by Contractor and Engineer; or
- (b) Additional working days will be awarded where Contractor is prevented from completing any part of the work identified on the critical path and:
  - a. where the delay is caused by acts of public enemy, fire, floods, tsunamis, earthquakes, epidemics, quarantine restrictions, strikes, labor disputes, shortage of materials and freight embargos, provided that Contractor shall notify Engineer in writing of the causes of delay within 15 days from the beginning of that delay; or
  - b. where the delay is caused by actions beyond the control of Contractor; or
  - c. where the delay is caused by actions or failure to act by Engineer.

Contractor shall not be entitled to an adjustment in contract time for delays within the control of Contractor. Delays resulting from and within the control of a Subcontractor or Supplier shall be deemed to be delays within the control of Contractor.

**18. Inspection And Testing Of Materials:**

Contractor shall notify City a sufficient time in advance of the manufacture of production materials to be supplied by Contractor under this contract in order that City may arrange for mill or factory inspection and testing of same.

Any materials shipped by Contractor from factory prior to having satisfactorily passed such testing and inspection by City's representative or prior to the receipt of notice from such representative that such testing and inspection will not be required shall not be incorporated on the job of said improvement. Contractor shall also furnish City, in triplicate, certified copies of all factory and mill test reports upon request.

**19. Permits And Care Of The Work:**

Contractor has examined the site of the work and is familiar with its topography and condition, location of property lines, easements, building lines, and other physical factors and limitations affecting the performance of this agreement. Contractor, at Contractor's expense, shall obtain any permission necessary for any operations conducted off the property owned or controlled by City. Contractor shall be responsible for the proper care and protection of all materials delivered and work performed until completion and final acceptance.

**20. Other Contracts:**

City may award other contracts for additional work, and Contractor shall fully cooperate with such other Contractors and carefully fit Contractor's own work to that provided under other contracts as may be directed by the City Engineer. Contractor shall not commit or permit any act which will interfere with the performance of work by any other Contractor.

**21. Payments To Contractor:**

Payments are to be made to the Contractor in accordance with the provisions of Section 9 of the General Conditions of said specifications in legally executed and regularly issued warrants of the city, drawn on the appropriate fund or funds as required by law and order of the City Council thereof. The Contractor shall be administered a progress payment approximately every 30 calendar days from the time work begins according to the payment schedule furnished by the City Engineer at the time work begins.

Pursuant to Division 2, Part 5, Section 22300, *et seq.*, of the Public Contracts Code, the Contractor may request the right to substitute securities for any moneys withheld by the City of Turlock to ensure the performance required of the Contractor under the contract, or that the City of Turlock make payment of retentions earned directly into an escrow account established at the expense of the Contractor.

**22. Contract Security:**

Concurrently with the execution hereof, Contractor shall furnish on the forms provided (1) a surety bond in an amount equal to at least one hundred percent (100%) of the contract price as security for the faithful performance of this contract; and (2) a separate surety bond in an amount equal to at least one hundred percent (100%) of the contract price as security for the payment of all persons performing labor and furnishing materials in connection with this contract. Sureties on each of said bonds thereof shall be satisfactory to the City.

**23. Hold-Harmless Agreement And Contractor's Insurance:**

Contractor shall indemnify, defend, and hold harmless City and its elective and appointive boards, officers, agents, employees, and volunteers from and against all claims, damages, losses and expenses including attorney fees arising out of the performance of the work described herein, caused in whole or in part by any negligent act or omission of Contractor, any subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, except where caused by the active negligence, sole negligence, or willful misconduct of City.

**24. Contractor's Insurance:**

Contractor shall not commence work under this Agreement until Contractor has obtained City's approval regarding all insurance requirements, forms, endorsements, amounts, and carrier ratings, nor shall Contractor allow any subcontractor to commence work on a subcontract until all similar insurance required of the subcontractor shall have been so obtained and approved. Contractor shall procure and maintain for the duration of this Agreement insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work hereunder by Contractor, its agents, representatives, employees or subcontractors. Failure to maintain or renew coverage or to provide evidence of renewal may constitute a material breach of contract.

(a) Minimum Scope of Insurance: Coverage shall be at least as broad as:

- (1) Insurance Services Office Commercial General Liability coverage (occurrence Form CG 00 01) with additional insured endorsements (form CG 20 10 for ongoing operations and CG 20 37 for products/completed operations), to be approved by the City of Turlock.
- (2) Insurance Services Office Form CA 00 01 covering Automobile Liability, Code 1 (any auto).
- (3) Workers' Compensation insurance as required by the State of California and Employer's Liability Insurance.
- (4) Insurance Service Office Form CP 00 20 with Causes of Loss – Special Form CP 10 30 covering Builder's Risk (Course of Construction) insurance covering all risks of loss less policy exclusions.
- (5) Surety bonds as described below.
- (6) Errors and Omissions/Professional Liability Insurance (if *Design/Build*).

(b) Minimum Limits of Insurance: Contractor shall maintain limits no less than:

- (1) General Liability (including operations, products and completed operations): \$1,000,000 per occurrence for bodily injury, personal injury and property damage. If Commercial General Liability Insurance or other form with a general aggregate limit is used, either the general aggregate limit shall apply separately to this project/location or the general aggregate limit shall be twice the required occurrence limit.
- (2) Automobile Liability: \$1,000,000 per occurrence for bodily injury and property damage.
- (3) Workers' Compensation: As statutorily required by the State of California.

- (4) Employer's Liability: \$1,000,000 per accident for bodily injury or disease.
- (5) Builder's Risk: Completed value of the project with no coinsurance penalty provisions.
- (6) Errors and Omissions/Professional Liability: \$1,000,000 per claim as needed for design/build.
- (c) Deductibles and Self-Insured Retentions: Upon request of City, any deductibles or self-insured retentions must be declared to and approved by City. At the option of City, either: (1) the insurer shall reduce or eliminate such deductibles or self-insured retentions as respects City, its elective and appointive boards, officers, agents, employees, and volunteers; or (2) Contractor shall provide a financial guarantee satisfactory to City guaranteeing payment of losses and related investigations, claim administration and defense expenses.
- (d) Other Insurance Provisions: The commercial general liability policy shall contain, or be endorsed to contain, the following provisions:
- (1) City, its elective and appointive boards, officers, agents, employees, and volunteers are to be covered as additional insureds with respect to liability arising out of work or operations performed by or on behalf of Contractor, including materials, parts or equipment furnished in connection with such work or operations, which coverage shall be maintained in effect for at least three (3) years following the completion of the work specified in the contract. General liability coverage can be provided in the form of an endorsement to Contractor's insurance (at least as broad as CG 20 10 for ongoing operations and CG 20 37 for products/completed operations), or as a separate Owners and Contractors Protective Liability policy providing both ongoing operations and completed operations coverage.
- (2) For any claims related to this project, Contractor's insurance coverage shall be primary insurance as respects City and any insurance or self-insurance maintained by City shall be excess of Contractor's insurance and shall not contribute with it.
- (3) In the event of cancellation, non-renewal, or material change that reduces or restricts the insurance coverage afforded to City under this Agreement, the insurer, broker/producer, or Contractor shall provide City with thirty (30) days' prior written notice of such cancellation, non-renewal, or material change.
- (4) Coverage shall not extend to any indemnity coverage for the active negligence of the additional insured in any case where an agreement to indemnify the additional insured would be invalid under Subdivision (b) of Section 2782 of the Civil Code.
- (e) Builder's Risk (Course of Construction) Insurance: City shall be named as loss payee.

- (f) Acceptability of Insurers: Insurance is to be placed with insurers with a current A.M. Best's rating of no less than A:VII or with an insurer to which the City has provided prior approval.
- (g) Verification of Coverage: Consultant shall furnish City with original certificates and amendatory endorsements or copies of the applicable policy language effecting coverage required by this clause. All certificates and endorsements are to be received and approved by City before work commences. However, failure to obtain the required documents prior to the work beginning shall not waive Contractor's obligation to provide them. City reserves the right, at any time, to require complete, certified copies of all required insurance policies and endorsements.
- (h) Waiver of Subrogation: With the exception of professional liability, Contractor hereby agrees to waive subrogation which any insurer of Contractor may acquire from Contractor by virtue of the payment of any loss. The commercial general liability policy and workers' compensation policy shall be endorsed to contain a waiver of subrogation in favor of City for all work performed by Contractor, its agents, employees, independent contractors and subcontractors. Contractor agrees to obtain any endorsement that may be necessary to effect this waiver of subrogation.
- (i) Subcontractors: Contractor shall include all subcontractors as insureds under its policies or shall furnish separate certificates and endorsements for each subcontractor. All coverages for subcontractors shall be subject to all of the requirements stated herein.
- (j) Surety Bonds: Contractor shall provide a Performance Bond and a Payment Bond.

**25. Proof Of Carriage Of Insurance:**

Contractor shall furnish City concurrently with the execution hereof, satisfactory proof of carriage of the insurance required, and that Contractor shall give City at least sixty (60) days prior notice of the cancellation of any policy during the effective period of this contract.

**26. Wages & Hours Of Employment:**

In the performance of this contract, eight (8) hours shall be the maximum hours of labor on any calendar day, and the minimum wages of compensation of persons performing labor in the execution of this agreement shall be the current prevailing scale of wages determined by the Director of the Department of Industrial Relations for the community.

The Contractor shall forfeit as penalty to the City, Twenty-five and no/100ths Dollars (\$25.00) to be paid to the City of Turlock for each workman employed in the execution of this agreement by him or by any subcontractor, for each calendar day during which any workman is required or permitted to labor more than eight (8) hours, in violation of provisions of Article 3, Chapter 1, Part 7, a Division 2, of the Labor Code of the State of California, and all amendments thereto.

**27. Emergency - Additional Time For Performance - Procurement Of Materials:**

If, because of war or other declared national emergency, the Federal or State Government restricts, regulates, or controls the procurement and allocation of labor or materials, or both, and if solely because of said restrictions, regulations or controls, Contractor is through no fault of the Contractor, unable to perform this agreement, or the work is thereby suspended or delayed, any of the following steps may be taken.

- (a) City may, pursuant to resolution of the Council, grant Contractor additional time for the performance of this agreement, sufficient to compensate in time, for delay or suspension.

To qualify for such extension in time, Contractor within ten (10) days of Contractor's discovering such inability to perform, shall notify City Engineer in writing thereof, and give specific reasons therefore; City Engineer shall thereupon have sixty (60) days within which to procure such needed materials or labor as is specified in this agreement, or permit substitution, or provide for changes in the work in accordance with other provisions of this agreement.

Substituted materials, or changes in the work, or both, shall be ordered in writing by City Engineer, and the concurrence of the Council shall not be necessary. All reasonable expenses of such procurement incurred by the City Engineer shall be defrayed by the Contractor; or

- (b) If such materials or labor cannot be procured through legitimate channels within sixty (60) days after the filing of the aforesaid notice, either party may, upon thirty (30) days' written notice to the other, terminate this agreement. In such event, Contractor shall be compensated for all work executed upon a unit basis in proportion to the amount of the work completed, or upon a cost-plus-ten-percent (10%) basis, whichever is the lesser. Materials on the ground, in process of fabrication or in route upon the date of notice of termination specially ordered for the project and which cannot be utilized by Contractor, shall be compensated for by City at cost, including freight, provided the Contractor shall take all steps possible to minimize this obligation; or
- (c) City Council, by resolution, may suspend this agreement until the cause of inability to perform is removed but for a period of not to exceed sixty (60) days.

If this agreement is not canceled, and the inability of Contractor to perform continues without fault on Contractor's part, beyond the time during which the agreement may have been suspended, as herein above provided, City Council may further suspend this agreement, or either party hereto may, without incurring any liability, elect to declare this agreement terminated upon the ground of impossibility of performance. In the event City declares this agreement terminated, such declaration shall be authorized by the City Council by resolution, and Contractor shall be notified in writing thereof

within five (5) days after the adoption of such resolution. Upon such termination, Contractor shall be entitled to proportionate compensation at the agreement rate for such portion of the agreement as may have been performed, or

- (d) City may terminate this agreement, in which case Contractor shall be entitled to proportionate compensation at the agreed rate for such portion of the agreement as may have been performed. Such termination shall be authorized by resolution of the Council. Notice thereof shall be forthwith given in writing to Contractor, and this agreement shall be terminated upon receipt by Contractor of such notice.

In the event of the termination provided in this sub-paragraph (d), none of the covenants, conditions or provisions hereof shall apply to the work not performed, and City shall be liable to Contractor for the proportionate compensation last herein mentioned.

**28. Provisions Cumulative:**

The provisions of this agreement are cumulative, and in addition to and not in limitation of, any other rights or remedies available to City.

**29. Taxes:**

Contractor shall cooperate with City to the full extent possible to maximize the local allocation of California sales and use tax to the City. Such cooperation shall include but not be limited to:

**(a) Use Tax Direct Payment Permits.** Contractor shall apply for, obtain and utilize, to the maximum extent reasonable, a California Use Tax Direct Payment Permit.

**(b) Purchases of \$500,000 or More.** Contractor shall require vendors and suppliers located outside California from whom Contractor makes purchase of \$500,000 or more to allocate the use tax to the City.

Additional information regarding use tax and the Permit can be found in the State of California Board of Equalization, Sales and Use Tax Regulations, Regulation 1699.6, Use Tax Direct Payment Permits, or on the web site for the Board of Equalization at <http://www.boe.ca.gov/sutax/sutprograms.htm>

**30. Notices:**

All notices shall be in writing and delivered in person or transmitted by certified mail, postage prepaid.

Notices required to be given to City shall be addressed as follows:

**City of Turlock  
City Engineer**

156 S. Broadway, Suite 150  
Turlock, CA 95380-5454

Notices required to be given to Contractor shall be addressed as follows:

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

Notices required to be given sureties of Contractor shall be addressed as follows:

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

**31. CITY CONTRACT ADMINISTRATOR:**

The City's contract administrator and contact person for this Agreement is:

Name of City Employee \_\_\_\_\_  
Department \_\_\_\_\_  
156 S. Broadway, Suite \_\_\_\_  
Turlock, California 95380-5456  
or 244 N. Broadway  
Turlock, California 95380-4737  
Telephone: (209) 668-\_\_\_\_\_  
E-mail: \_\_\_\_\_@turlock.ca.us

**32. Interpretation:**

As used herein, any gender includes each other gender, the singular includes the plural and vice versa.

**33. Antitrust Claims:**

The Contractor or subcontractor offers and agrees to assign to the City all rights, title and interest to any causes of action under Section Four of the Clayton Act and the Cartwright Act concerning antitrust claims.

**34. USE OF CITY PROJECT NUMBER:**

The Contractor or subcontractor agrees to use the aforementioned City project number on all maps, drawings, submittals, billing, and written correspondence that involve City staff or contracted consultants. Nothing in this section shall preclude the Contractor or subcontractor from using their own project numbers for their own internal use.

**IN WITNESS WHEREOF**, three identical counterparts of this agreement, consisting of a total of 21 pages, each of which counterparts shall for all purposes be deemed an original of said agreement, have been duly executed by the parties hereinabove named, on the day and year first herein above written.

**CONTRACTOR**

**CITY OF TURLOCK, a municipal corporation**

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

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

Gary Soiseth, Mayor

or

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

\_\_\_\_\_  
Gary R. Hampton, City Manager

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

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

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

APPROVED AS TO SUFFICIENCY:

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

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

Michael G. Pitcock, P.E., Development  
Services Director / City Engineer

Federal Tax ID or Social Security No:  
\_\_\_\_\_

APPROVED AS TO FORM:

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

Phaedra A. Norton, City Attorney

Attach Contractor's Seal Here

ATTEST:

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

Kellie E. Weaver, City Clerk

**BOND FOR FAITHFUL PERFORMANCE**

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**KNOW ALL BY THESE PRESENTS:**

That \_\_\_\_\_, as Principal, and \_\_\_\_\_, incorporated under the laws of the State of \_\_\_\_\_, and authorized to execute bonds and undertakings as sole Surety, in the State of California, and held and firmly bound unto the City of Turlock, a municipal corporation of the State of California, in the sum of \_\_\_\_\_ Dollars (\$ \_\_\_\_\_) for the payment thereof, well and truly to be made, said Principal and Surety bind themselves, their administrators, successors and assigns, jointly and severally, firmly by these presents.

The condition of the foregoing obligation is such that: Whereas the above bounden Principal has entered, or is about to enter, into a certain contract with the City of Turlock, entitled "Agreement for **City Project No. 15-88, "Turlock Public Safety Facility Water Damage Repairs,"** a true and correct copy of which agreement is presently on file in the office of the City Clerk of the City of Turlock, which said agreement is hereby referred to and made a part hereof.

NOW, THEREFORE, if the above bounden Principal shall well and truly perform the work contracted to be performed under said contract, then this obligation shall be void, otherwise to remain in full force and effect.

No prepayment or delay in payment and no changes, extension, addition or alteration of any provision of said contract or in any plans and specifications referred to herein, and no forbearance on the part of the City shall operate to release the Surety from liability on this Bond, and consent to make such alterations without further notice to or consent by the Surety is hereby given, and the Surety hereby waives the provisions of Section 2819 of the Civil Code of the State of California.

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

\_\_\_\_\_  
(Principal)

**By: X**\_\_\_\_\_

**By: X**\_\_\_\_\_

\_\_\_\_\_  
(Surety)

**By: X**\_\_\_\_\_

**By: X**\_\_\_\_\_

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

\_\_\_\_\_  
(Zip)

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

(Attach Acknowledgment  
Both Principal's and Surety's  
Attorney In Fact)

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## BOND FOR LABOR AND MATERIAL

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**KNOW ALL BY THESE PRESENTS:**

That \_\_\_\_\_, as Principal, and \_\_\_\_\_, incorporated under the laws of the State of \_\_\_\_\_ and authorized to execute bonds and undertakings as sole Surety, in the State of California, as Surety, are held and firmly bound unto any and all material, men, persons, companies or corporations furnishing materials, provisions, provender or other supplies used in, upon, for or about the performance of the work contracted to be executed or performed under the contract hereinafter mentioned, and all persons, companies or corporations renting or hiring teams, or implements or machinery, for or contributing to said work to be done, and all persons who perform work or labor upon the same, and all persons who supply both work and materials, and whose claim has not been paid by the Contractor, company, or corporations in the just and full sum of \_\_\_\_\_ Dollars (\$\_\_\_\_\_) for payment thereof, well and truly to be made, said Principal and Surety bind themselves, their administrators, successors and assigns, jointly and severally, firmly by these presents.

The condition of the foregoing obligation is such that: Whereas the above bounden Principal has entered, or is about to enter, into a certain contract with the City of Turlock, entitled "Agreement for **City Project No. 15-88, "Turlock Public Safety Facility Water Damage Repairs,"** a true and correct copy of which agreement is presently on file in the office of the City Clerk of the City of Turlock, which said agreement is hereby referred to and made a part hereof.

NOW, THEREFORE, if the above bounden Principal or said Principal's subcontractors, fail to pay for any materials, provisions provender or other supplies, or teams, 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 Act with respect to such work or labor, the Surety will pay for the same, in an amount not exceeding the sum specified in this bond, provided that any and all claims hereunder shall be filled and proceedings had in connection therewith as required by the provisions of Sections 5100, et. seq., inclusive, of the Public Contracts Code of the State of California, and any amendments thereof; provided, also, that in case suit is brought upon this bond, a reasonable attorney's fee shall be awarded by the court to the prevailing party in said suit, said attorney's fee to be fixed as costs in said suit, and to be included in the judgment therein rendered.

No prepayment or delay in payment and no change, extension, addition, or alteration of any provision of said contract or in said plans and specifications agreed to between the Principal and the City, and no forbearance on the part of the City, shall operate to release the Surety from liability on this bond, and consent to make such alterations without further notice to or consent by

the Surety is hereby given, and the Surety hereby waives the provisions of Section 2819 of the Civil Code of the State of California.

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

\_\_\_\_\_  
(Principal)

**By: X**\_\_\_\_\_

**By: X**\_\_\_\_\_

\_\_\_\_\_  
(Surety)

**By: X**\_\_\_\_\_

**By: X**\_\_\_\_\_

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

\_\_\_\_\_  
(Zip)

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

(Attach Acknowledgment  
Both Principal's and  
Surety's Attorney In Fact)

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# SPECIAL PROVISIONS

## SECTION 1 SPECIFICATIONS AND PLANS

### 1.01 SPECIFICATIONS:

The work described herein shall be done in accordance with the current City of Turlock Standard Specifications and the 2010 Edition of the State of California, Department of Transportation Standard Specifications and Standard Plans (with exception that English units are to be used in place of metric) and in accordance with the following Special Provisions.

The Contract Documents are complementary; what is required by one is as binding as if required by all.

It is the intent of the Contract Documents to describe a functionally complete project (or part thereof) to be constructed in accordance with the Contract Documents. Any labor, documentation, services, materials, or equipment that may reasonably be inferred from the Contract Documents or from prevailing custom or trade usage as being required to produce the intended result will be provided whether or not specifically called for at no additional cost to City.

Clarifications and interpretations of the Contract Documents shall be issued by Engineer.

In case of conflict or discrepancy between any of the Contract Documents, the order of documents listed below shall be the order of precedence, with the first item listed having the highest precedence.

1. Contract Change Order (Modifications or changes last in time are first in precedence).
2. Addenda to Contract Agreement
3. Contract Agreement
4. Permits
5. Special Provisions
6. Notice Inviting Bids and Instructions to Bidders
7. Project Drawings
8. City of Turlock Standard Specifications
9. Caltrans Standard Specifications
10. City of Turlock Standard Drawings
11. Caltrans Standard Plans

With regards to discrepancies or conflicts between written dimensions given on drawings and the scaled measurements, the written dimensions shall govern.

With regards to discrepancies or conflicts between large-scale drawings and small-scale drawings, the larger scale shall govern.

With regards to discrepancies or conflicts between detailed drawings and referenced standard drawings or plans, the detailed drawings shall govern.

In the event where provisions of codes, safety orders, contract documents, referenced manufacturer's specifications or industry standards are in conflict, the more restrictive and higher quality shall govern.

Should it appear that the work to be done or any of the matters relative thereto are not sufficiently detailed or explained in these specifications, the special provisions, or the plans, the Contractor shall apply to the Engineer in writing for such further explanations as may be necessary and shall conform to them as part of the contract. All responses from the Engineer shall also be in writing. In the event of any doubt or question arising respecting the true meaning of these specifications, the special provisions or the plans, reference shall be made to the Engineer, whose decision thereon shall be final.

#### **1.02 CONTRACTOR'S RESPONSIBILITY:**

The Contractor shall examine carefully the site of the work and the plans and specifications therefore. The Contractor shall investigate to their satisfaction as to conditions to be encountered, the character, quality and quantity of surface, subsurface materials or obstacles to be encountered, the work to be performed, materials to be furnished, and as to the requirements of the bid, plans and specifications of the contract.

#### **1.03 COMPLETENESS AND ACCURACY OF PLANS AND SPECIFICATIONS:**

Pursuant to the California Public Contract Code, the bidder is required to review architectural or engineering plans and specifications prior to submission of a bid, and report any errors and omissions noted by Contractor to the architect, engineer or owner five days prior to the bid opening date.

## **SECTION 2 PROPOSAL REQUIREMENTS AND CONDITIONS**

#### **2.01 GENERAL:**

The bidder's attention is directed to the provisions in Proposal for this bid for the requirements and conditions which the bidder must observe in the preparation of and the submission of the bid.

In conformance with Public Contract Code Section 7106, a Noncollusion Affidavit is included in the Bid book. Signing the Bid book shall also constitute signature of the Noncollusion Affidavit.

The contractor, sub recipient or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of Title 49 CFR (Code of Federal Regulations) part 26 in the award and administration of US DOT assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy, as the recipient deems appropriate. Each subcontract signed by the bidder must include this assurance.

Failure of the bidder to fulfill the requirements of the Special Provisions for submittals required to be furnished after bid opening, including but not limited to escrowed bid documents, where applicable, may subject the bidder to a determination of the bidder's responsibility in the event it is the apparent low bidder on a future public works contracts.

## **2.02 EXISTING UTILITIES, FACILITIES, AND SITE CONDITIONS:**

The actual sizes, locations and materials of existing utilities and facilities shown on the plans may vary from what is shown on the plans. Attention is directed to the possible existence of underground facilities not indicated on the plans or in the special provisions. Contractor shall be responsible for verifying the locations and nature of the existing utilities, protecting them from damage and notifying Engineer of their location and nature.

Contractor shall examine carefully the site of the work. It is assumed that Contractor has investigated and is satisfied as to the conditions to be encountered as to the character, quality and quantities of work to be performed.

Although the City of Turlock's soil conditions are homogenous and sandy in nature, various subsurface conditions such as hardpan, and ground water may be encountered. The City of Turlock will not be held responsible in any way for the type and character of subsurface conditions encountered. If a subsurface report is desired by Contractor, it will be Contractor's responsibility and expense to verify the subsurface conditions by boring or other means necessary prior to bidding and/or performing work. Attention is directed to Section 5.17, "Preservation of Property," of these special provisions during boring and other miscellaneous operations.

Full compensation for furnishing all labor, materials, tools, equipment (including dewatering devices), and incidentals, and for doing all the work involved with and/or in verifying existing utilities, facilities, site and subsurface conditions as specified above, shall be considered as included in the prices paid for the various contract items of work and no additional compensation will be allowed therefore

## **SECTION 3 AWARD AND EXECUTION OF CONTRACT**

### **3.01 GENERAL:**

The Contractor's attention is directed to the provisions in the Contract for the requirements and conditions concerning award and execution of contract.

The contract shall be executed by the successful bidder and shall be returned, together with the contract bonds and insurance, to the City so that it is received within 10 working days after the bidder has received the contract for execution. Failure to do so shall be just cause for forfeiture of the proposal guaranty. The executed contract documents shall be delivered to the following address:

Attention: Yolanda Gardini  
City of Turlock, Engineering Division  
156 S Broadway, Suite 150  
Turlock, CA 95380

## **SECTION 4 BEGINNING OF WORK, TIME OF COMPLETION AND LIQUIDATED DAMAGES**

Attention is directed to Section 6 "Time For Performance" of the Contract.

At no time shall construction begin prior to the issuance of the Notice to Proceed. Any work performed prior to the Notice to Proceed shall be done at the Contractor's own risk and payment will not be made therefor.

The Contractor shall follow the sequence of construction and progress of work as specified in Section "Order of Work," of these Special Provisions.

Should the Contractor choose to work on a Saturday, Sunday or Legal Holiday as defined in Section "Working Hours," of these Special Provisions, the Contractor shall reimburse the City of Turlock the actual cost of engineering, inspection, testing, superintendent, and/or other overhead expenses which are directly chargeable to the contract. Should such work be undertaken at the request of the City, reimbursement will not be required.

Attention is directed to Section 9 "Liquidated Damages" of the Contract.

A pre-construction meeting will be held between Contractor and City prior to the beginning of construction. The exact time and place of this conference will be determined by City after award of the construction contract.

City shall furnish to Contractor five hard copies of the Contract Documents and plans. Contractor may produce additional copies as needed at Contractor's expense.

## **SECTION 5 GENERAL**

### **5.01 LABOR NONDISCRIMINATION:**

Attention is directed to the following Notice that is required by Chapter 5 of Division 4 of Title 2, California Code of Regulations.

#### **NOTICE OF REQUIREMENT FOR NONDISCRIMINATION PROGRAM (GOV. CODE, SECTION 12990)**

Your attention is called to the "Nondiscrimination Clause", set forth in Section 7 1.01A(4), "Labor Nondiscrimination," of the Caltrans Standard Specifications, which is applicable to all nonexempt state contracts and subcontracts, and to the "Standard California Nondiscrimination Construction Contract Specifications" set forth therein. The Specifications are applicable to all nonexempt state construction contracts and subcontracts of \$5,000 or more.

### **5.02 PREVAILING WAGE:**

Attention is directed to Section 7-1.02K "Labor Code," of the Caltrans Standard Specifications.

Pursuant to Section 1773 of the Labor Code, the general prevailing wage rates in the county Stanislaus in which the work is to be done have been determined by the Director of the California Department of Industrial Relations. These wages are set forth in the General Prevailing Wage Rates for this project, available at 156 S. Broadway St, Turlock, CA 95380 and available from the California Department of Industrial Relations' Internet web site at <http://www.dir.ca.gov/DLSR/PWD>.

### **5.03 REMOVAL OF ASBESTOS AND HAZARDOUS SUBSTANCES:**

When the presence of asbestos or hazardous substances are not shown on the plans or indicated in the specifications and the Contractor encounters materials which the Contractor reasonably believes to be asbestos or a hazardous substance as defined in Section 25914.1 of the Health and Safety Code, and the asbestos or hazardous substance has not been rendered harmless, the Contractor may continue work in unaffected areas reasonably believed to be safe. The Contractor shall immediately cease work in the affected area and report the condition to the Engineer in writing.

In conformance with Section 25914.1 of the Health and Safety Code, removal of asbestos or hazardous substances including exploratory work to identify and determine the extent of the asbestos or hazardous substance will be performed by separate contract.

If delay of work in the area delays the current controlling operation, the delay will be considered a right of way delay and the Contractor will be compensated for the delay in conformance with the provisions in Section 8 1.09, "Right of Way Delays," of the Standard Specifications.

### **5.04 SUBCONTRACTING:**

No subcontract releases the Contractor from the contract or relieves the Contractor of their responsibility for a subcontractor's work.

If the Contractor violates Pub Cont Code § 4100 et seq., the City may exercise the remedies provided under Pub Cont Code § 4110. The City may refer the violation to the Contractors State License Board as provided under Pub Cont Code § 4111.

Each subcontract must comply with the contract.

Each subcontractor must have an active and valid State contractor's license with a classification appropriate for the work to be performed (Bus & Prof Code, § 7000 et seq.).

At the pre-construction meeting, prior to starting work, Contractor shall submit a complete listing of subcontractors and the value of the work each subcontractor will perform.

Do not use a debarred contractor; a current list of debarred contractors is available at the Department of Industrial Relations' Web site.

Upon request by the Engineer, immediately remove and not again use a subcontractor who fails to prosecute the work satisfactorily.

### **5.05 PROMPT PROGRESS PAYMENT TO SUBCONTRACTORS:**

A prime contractor or subcontractor shall pay any subcontractor not later than 10 days of receipt of each progress payment in accordance with the provision in Section 7108.5 of the California Business and Professions Code concerning prompt payment to subcontractors. The 10 days is applicable unless a longer period is agreed to in writing. Any delay or postponement of payment over 30 days may take place only for good cause and with the agency's prior written approval. Any violation of Section

7108.5 shall subject the violating contractor or subcontractor to the penalties, sanction and other remedies of that section. This requirement shall not be construed to limit or impair any contractual, administrative, or judicial remedies otherwise available to the contractor or subcontractor in the event of a dispute involving late payment or nonpayment by the prime contractor, deficient subcontract performance, or noncompliance by a subcontractor.

#### **5.06 PROMPT PAYMENT OF FUNDS WITHHELD TO SUBCONTRACTORS::**

The agency shall hold retainage from the prime contractor and shall make prompt and regular incremental acceptances of portions, as determined by the agency, of the contract work, and pay retainage to the prime contractor based on these acceptances. The prime contractor, or subcontractor, shall return all monies withheld in retention from a subcontractor within 30 days after receiving payment for work satisfactorily completed and accepted including incremental acceptances of portions of the contract work by the agency. Federal law (49CFR26.29) requires that any delay or postponement of payment over 30 days may take place only for good cause and with the agency's prior written approval. Any violation of this provision shall subject the violating prime contractor or subcontractor to the penalties, sanctions and other remedies specified in Section 7108.5 of the Business and Professions Code. These requirements shall not be construed to limit or impair any contractual, administrative, or judicial remedies otherwise available to the prime contractor or subcontractor in the event of a dispute involving late payment or nonpayment by the prime contractor, deficient subcontract performance, or noncompliance by a subcontractor.

#### **5.07 PAYMENTS:**

Attention is directed to Section 19, "Payments to Contractor," of the Contract.

At the end of each month the Contractor shall submit a proposed progress invoice. The invoice shall delineate each bid item, the amount of work performed for the invoice period (previous month) and the total amount of work performed to date. A sample invoice with all of the required items will be given to the Contractor at the pre-construction meeting.

The Engineer will review the progress invoice and after any changes the Engineer makes, will issue an official invoice for the Contractor to sign. The Contractor shall sign the official invoice and return to the Engineer. After the Engineer receives the signed, official invoice, the progress payment will be processed.

Retention in the amount of 5% of the progress payment amount shall be held from all progress payments. Retention will be released 35 days after the Notice of Completion has been filed, insofar as no stop notices were filed.

#### **5.08 GUARANTY:**

Attention is directed to Section 9-4, "Guaranty," of the City of Turlock Standard Specifications.

#### **5.09 PUBLIC SAFETY:**

In addition to any other measures taken by Contractor pursuant to the provisions of the Standard Specifications and the General Conditions, Contractor shall install temporary precast concrete barrier

rail between any lane carrying public traffic and any excavation, obstacle or storage area when the following conditions exist:

Excavations: Any excavation, the near edge of which is 12 feet or less from the edge of the lane, except;

- (a) Excavations covered with sheet steel or concrete covers of adequate thickness to prevent accidental entry by traffic or the public.
- (b) Excavations less than one foot deep.
- (c) Trenches less than one foot wide for irrigation pipe or electrical conduit or excavations less than one foot in diameter.
- (d) Excavations parallel to the lane for the purpose of pavement widening or reconstruction.
- (e) Excavations in side slopes where the slope is steeper than 4:1.
- (f) Excavations protected by existing barrier or railing.

At the end of each working day, if a difference of 0.50 feet exists between the elevation of the existing pavement and the elevation of any excavation within 2 feet of the traveled way, material shall be placed and compacted against the vertical cuts adjacent to the traveled way. During excavation operations, native material may be used for this purpose, however, once the placing of the structural section commences, structural material shall be used. The material shall be placed to the level of the elevation of the top of the existing pavement and tapered at a slope of 4:1 or flatter to the bottom of the excavation. Treated base shall not be used for the taper. Full compensation for placing the material on a 4:1 slope, regardless of the number of times it is required, and subsequent removing or reshaping of the material to the lines and grades shown on the plans shall be considered as included in the cost for other contract items of work and no additional compensation will be allowed therefore.

Personal vehicles of Contractor's employees shall not be parked on the traveled way or shoulders, including any section closed to public traffic. Whenever vehicles or equipment are parked on the shoulder within 6 feet of a traffic lane, the shoulder area shall be closed with traffic cones or portable delineators placed on a taper in advance of the parked vehicles or equipment and along the edge of the pavement at 25 foot intervals to a point not less than 25 feet past the last vehicle or piece of equipment.

A minimum of one paved traffic lane, not less than 12 feet wide, shall be open for use by public traffic in each direction of travel. The full width of the traveled way shall be open for use by public traffic on Saturdays, Sundays and designated legal holidays, after 4:00 p.m. on Fridays and the day preceding designated legal holidays and when construction operations are not actively in progress.

#### **5.10 SOUND CONTROL REQUIREMENTS:**

Sound control shall be in accordance with Section 7 1.01I, "Sound Control Requirements," of the Caltrans Standard Specifications and these special provisions.

The noise level from Contractor's operations, between the hours of 9:00 p.m. and 6:00 a.m., shall not exceed 86 dba at a distance of 50 feet. This requirement in no way relieves Contractor from responsibility for complying with local ordinances regulating noise level.

Said noise level requirements shall apply to all equipment on the job or related to the job, including but not limited to trucks, transit mixers or transient equipment that may or may not be owned by Contractor. The use of loud sound signals shall be avoided in favor of light warnings except those required by safety law for the protection of personnel.

Full compensation for conforming to the requirements of this section shall be considered as included in the prices paid for the various contract items of work involved and no additional compensation will be allowed therefore.

#### **5.11 WORKING HOURS:**

Contractor's working hours shall be between 7:00 a.m. and 5:00 p.m., Monday through Friday, excluding legal holidays.

Contractor shall notify Engineer 48 hours prior to beginning work.

Contractor shall not work outside the above-mentioned working hours without prior written consent of Engineer.

Designated legal holidays are: January 1st, the third Monday in January, the third Monday in February, the last Monday in May, July 4th, the first Monday in September, November 11th, Thanksgiving Day, the day after Thanksgiving, and December 25th. When a designated legal holiday falls on a Sunday, the following Monday shall be a designated legal holiday. When a designated legal holiday falls on a Saturday, the preceding Friday shall be a designated legal holiday.

#### **5.12 UNDERGROUND SERVICE ALERT REQUIREMENTS:**

Contractor shall contact Underground Service Alert of Northern California at least 48 hours in advance of any construction activity, will or could damage or affect any underground utility or subsurface improvement, and obtain an inquiry identification number. Contractor shall notify Underground Service Alert in the event of change in the project limits or change in original work previously shown on the plans or indicated in the specifications. Contractor shall not commence construction prior to City Inspector receiving City's notice from USA North regarding this construction activity.

#### **5.13 DUST CONTROL:**

Dust Control shall conform to the provisions in Section 10, "Dust Control", of the Standard Specifications and these special provisions.

Full compensation for Dust Control will be considered as included in the various contract items of work requiring Dust Control, as determined by Engineer, and no separate payment will be made therefor.

**5.14 WATERING:**

Watering shall be in accordance with Section 17, “Watering,” of the Caltrans Standard Specifications.

Full compensation for Watering will be considered as included in the various contract items of work requiring Watering, as determined by Engineer, and no separate payment will be made therefor.

**5.15 USE OF HYDRANTS FOR CONSTRUCTION PURPOSES:**

City will permit the use of a hydrant for construction purposes provided that the following are abided by:

1. A spanner wrench shall be the only type of wrench used on fire hydrants.
2. Contractor shall be liable for the damages to or loss of all hydrants and associated water lines and equipment which result from the use of this equipment.
3. Water shall only be used within City limits.
4. The vehicle must be approved by Engineer for approved backflow device.
5. Contractor shall pay a deposit on a water meter provided by the City. After the project ended the Contractor shall return the meter to the City for the release of the deposit.

However, use of city hydrants does not exempt Contractor from providing a water truck where hydrants cannot be utilized due to unsafe working conditions as deemed by Engineer.

**5.16 PROGRESS SCHEDULE:**

Contractor shall furnish City with a Critical Path Method progress schedule. The progress schedule shall show the construction activities extending for the duration of the working days. Any deviation from the outline must be approved by Engineer. Contractor shall not be allowed to start construction activities until the progress schedule is accepted by Engineer.

**5.17 PRESERVATION OF PROPERTY:**

The work performed in connection with various existing facilities shall be in accordance with Section 7-8, “Preservation of Property,” of the Standard Specifications and these special provisions.

Due care shall be exercised to avoid injury or damage to existing improvements or facilities, utility facilities, adjacent property, and roadside trees, shrubs and other plants that are to remain in place.

Roadside trees, shrubs and other plants that are not to be removed and pole lines, fences, signs, markers and monuments, buildings and structures, conduits, pipelines under or above ground, sewer and water lines, sprinkler systems above or below ground, all roadway facilities, and any other improvements or facilities within or adjacent to the right-of-way shall be protected from injury or damage, and if ordered by Engineer, Contractor shall provide and install suitable safeguards, approved by Engineer, to protect such objects from injury or damage. If such objects are injured or damaged by

reason of Contractor's operations they shall be replaced or restored at Contractor's expense. The facilities shall be replaced or restored to a condition as good or better as when Contractor entered upon the work, or as good as required by the specifications accompanying the contract, if any such objects are a part of the work being performed under the contract. Engineer may make or cause to be made such temporary repairs as necessary to restore to service any damaged facility. The cost of such repairs shall be borne by Contractor and may be deducted from any moneys due or to become due to Contractor under the contract.

The fact that any underground facility is not shown upon the plans shall not relieve Contractor of his responsibility under Section 2.02, "Existing Utilities and Facilities", of these provisions. It shall be Contractor's responsibility, pursuant thereto, to ascertain the location of such underground improvements or facilities that may be subject to damage by reason of his operations.

Full compensation for furnishing all labor materials, tools, equipment, and incidentals, and for doing all the work involved in protecting or repairing property as specified above, shall be considered as included in the prices paid for the various contract items of work and no additional compensation will be allowed therefore.

#### **5.18 ORDER OF WORK:**

Order or work shall be in accordance with the provisions in Section 5-1.05, "Order of Work," of the Caltrans Standard Specifications and these special provisions.

#### **5.19 AS-BUILTS:**

When the job is complete, Contractor shall provide City with as-built drawings. These as-built drawings shall show any and all differences (revisions, additions, etc.) between the signed improvement plans and the installed improvements. The Contractor shall identify all utilities that are located in the field. The as-builts will consist of redlined signed improvement plans. The NOC will not be issued until acceptable as-builts have been received by the Engineer.

#### **5.20 SURVEYING:**

Construction survey staking shall be provided by City. Contractor shall provide a staking request no less than 1 week prior to Contractor starting work and not less than 48 hours before the staking is required to continue construction. The Contactor shall provide unimpeded access to the site and allow City survey crew to perform their work.

Contractor shall protect all survey stakes and markers during construction. If survey stakes and/or markers are damaged or destroyed during the course of construction, by vandalism or by any other means, Contractor may submit a request to have the survey re-staked. If re-staking is required, Contractor shall be back charged at the fully burdened hourly rate for the survey crew and shall fully reimburse City for all necessary materials and equipment.

#### **5.21 TESTING:**

Unless otherwise noted, City of Turlock will supply all acceptance testing. Coordination of said testing is the responsibility of Contractor through the project's inspector. The Contractor shall provide at least 24 hours' notice to the Engineer in advance of needing acceptance testing. If the

Contractor request testing and the Contractor is not ready for the testing to occur, the Contractor shall be back charged the cover the cost of the testing firm.

At sites chosen by the project inspector, City's testing laboratory will conduct all tests. Contractor shall supply any necessary equipment and or labor required to obtain all samples for the completion of the testing process.

City of Turlock shall compensate the testing laboratory for all initial tests. Secondary and all other follow-up tests required due to failure of initial testing shall be reimbursed to City of Turlock based on the following schedule:

Water sample test: \$300.00 Per Test

Compaction test: \$100.00 Per Test

## **5.22 SUBMITTALS:**

Before making submittals, Contractor shall ensure that products and materials will be available in the quantities and in the time required by the Contract and the approved outline of construction activity. Each submittal shall clearly identify, by highlighting, arrows or other defined and permanent mark, the products and materials proposed for use.

All Submittals shall be made to Engineer by Contractor, including those generated by subcontractors and suppliers. Contractor shall carefully review all subcontractor and supplier submittals before submitting to Engineer for review. Submittals received from sources other than Contractor's office shall be returned without action. If a submittal contains extraneous information, unmarked options or is incomplete, it will be returned to Contractor for correction and require re-submittal.

Submittals will be processed by Engineer within ten (10) working days after receipt from Contractor. Engineer will review submittals for general conformance with the Contract Documents and standards. Such review by Engineer shall not relieve Contractor or any subcontractor of any responsibility for full compliance with the Contract Documents. Unless specifically authorized to do so by Engineer, Contractor shall not procure, manufacture, or fabricate any part of the contract work until submittals related to said contract work have been favorably reviewed by Engineer.

Contractor shall deliver five copies of each submittal to Engineer. Each submittal shall contain, at a minimum, the following information:

1. Title page including the following information:

Project Number and Name.

Name of Contractor.

Name of subcontractor (if applicable).

Description of item.

Item Number on Bid Schedule.

Date of Submittal.

Contractor's initials and date indicating approval of item for submittal to Engineer.

2. Index Sheet (For submittals containing information on multiple components. Each component shall be cross-identified with reference to a divider tab number).
3. Divider Tabs (For submittals containing information on multiple components. Tab numbers shall correspond to the index sheet for each component in the submittal).
4. The brochure, product data sheet or catalog cut (For each component in the submittal, separated by their respective divider tabs).
5. For shop drawings, Contractor shall submit five (5) clean, low background reproducible prints. Shop drawings larger than 11 x 17 in. shall be rolled, not folded.
6. Submittals that involve engineering computations or original design work shall show the name, the California State registration number, seal, and signature of the Professional Engineer certifying that such computations or design work are correct and in conformance with applicable standards, codes and accepted engineering practices.
7. For product samples, Contractor shall submit two (2) representative samples, one of which may be retained for the duration of the project or indefinitely at the discretion of Engineer. Although a reasonable attempt will be made to maintain the samples in good condition, neither City nor its representative will be responsible for the condition of the samples if returned to Contractor.
8. For material samples, unless a specific quantity is called for in the contract documents, Contractor shall submit a representative sample of the material, which may be retained for the duration of the project or indefinitely at the discretion of Engineer.
9. Certificates of compliance shall be submitted by Contractor to Engineer for those materials and products for which no sample and test results are specified. Certificates of compliance shall include the following information:

Statement that the product complies with the respective contract specifications.

Producer's name and address, product trade name and catalog number (if applicable), place of product origin, quantity of product to be furnished, and related contract plans and specification section numbers.

A certified copy of test results pertaining to the product from a certified independent testing laboratory. At the option of Engineer certified test results shall be signed and sealed by a Professional Engineer licensed to practice in the state of California.

Contractor shall submit Material Safety Data Sheets (MSDS) for all materials used or stored on the site that possess a MSDS, including materials used by Contractor for maintenance of equipment.

### **5.23 NOTICE OF POTENTIAL CLAIM:**

Attention is directed to Section 5-1.43 “Potential Claims and Dispute Resolution,” of the Caltrans Standard Specifications.

### **5.24 PRESERVATION OF EXISTING MONUMENTS:**

Preservation of existing monuments shall be Contractor’s responsibility. Contractor shall notify Engineer of all monuments that may/will be disturbed by construction operations. Engineer will tie off said monuments and provide Contractor a notice to proceed.

Once Contractor is finished with its construction operations, Engineer will relocate the monuments. Contractor shall install a monument will with concrete collar at each location which shall conform to the provisions in Section 22-1 “Survey Monuments” and Drawing M-1 “Monument Detail”, of the Standard Specifications and these special provisions.

Full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved with protecting existing monuments as specified above, shall be considered as included in the prices paid for the various contract items of work and no additional compensation will be allowed therefore.

## **SECTION 6 (BLANK)**

## **SECTION 7 (BLANK)**

## **SECTION 8 MATERIALS (BLANK)**

## **SECTION 9 DESCRIPTION OF WORK**

The work consists, in general of: removal and replacement of water damaged carpet, ceiling tiles, gypsum board, batt insulation, plywood, drywall texturing, painting, lighting fixtures, floor sink, re-grout tile floor, grout sealing, loss of warranty life assessment and other associated work.

The work includes all necessary labor, materials, tools, equipment and any incidentals needed to perform the improvements as shown on the contract plans.

## **SECTION 10 CONSTRUCTION DETAILS**

### **10.01 WATER DAMAGE REPAIRS**

All work proposed in the contract plans and contract specifications shall be defined as water damage repairs and shall be performed in accordance with the contract plans and contract specifications. Contractor shall coordinate access to the work with public safety personnel throughout the project to completion. Contractor shall perform the work in a manner that minimizes the impact to public safety personnel and operations to the greatest extent practicable. Areas of the work that require demolition shall be performed with extreme care to protect framing, utilities and fixtures. Contractor shall notify the Engineer if the limits of water damage appear to extend beyond the areas

shown on the plans. All areas of work shall be covered and left in a clean and safe condition at the end of each work day.

The contract lump sum price paid for water damage repairs shall include full compensation for furnishing all labor, materials, tools, equipment, warrant life assessment and incidentals and for doing all the work involved in completing the proposed water damage repairs, complete in place, as shown on the plans, and as required by law, as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer.

**APPENDIX A      SUPPLEMENTAL SPECIFICATIONS**

## SECTION 07 21 15

### BATT INSULATION

#### PART 1 GENERAL

##### 1.1 SUMMARY

- A. Section Includes:
  - 1. Batt insulation in wall, ceiling and roof assemblies.
- B. Related Sections:
  - 1. Section 09 29 00 Gypsum Board.

##### 1.2 REFERENCES

- A. ASTM International (ASTM):
  - 1. C665 - Standard Specification for Mineral Fiber Blanket Thermal Insulation for Wood Frame and Light Construction Buildings.
  - 2. E84 - Standard Test Method for Surface Burning Characteristics of Building Materials.
  - 3. E136 - Standard Test Method for Behavior of Materials in a Vertical Tube Furnace at 750 Degrees C.
- B. 2013 California Building Code, Section 720

##### 1.3 SUBMITTALS

- A. Quality Control Submittals:
  - 1. Certificates of Compliance: Certification from an independent testing laboratory that insulation meets fire hazard classification requirements.

##### 1.4 QUALITY ASSURANCE

- A. Fire Hazard Classification:
  - 1. Noncombustible, tested to ASTM E136.
  - 2. Flame spread/smoke developed rating for exposed insulation of 25/450 or less per 2013 CBC 720.3, tested to ASTM E84.

##### 1.5 DELIVERY, STORAGE AND HANDLING

- A. Store insulation in clean, dry, sheltered area, off ground or floor, until used. Protect against wetting and moisture absorption.

##### 1.6 PROJECT CONDITIONS

- A. Do not install insulation until building is substantially water and weather tight.

#### PART 2 PRODUCTS

##### 2.1 MANUFACTURERS

- A. Acceptable Manufacturers:
  - 1. Johns Manville.
  - 2. Certainteed
  - 3. Owens Corning.

## 2.2 MATERIALS

- A. Thermal Batt Insulation:
  - 1. Type: ASTM C665, glass fiber composition.
  - 2. Facing: Reinforced Kraft paper vapor barrier on one side with stapling flanges.
  - 3. Thermal resistance:
    - a. 3-1/2 inches thick: R-value of 11.00.
    - b. 3-5/8 inches thick: R-value of 13.00.
    - c. 6-1/4 inches thick: R-value of 19.00.
    - d. 10 inches thick: R-value of 30.00.
    - e. 12 inches thick: R-value of 38.00.

## 2.3 ACCESSORIES

- A. Tape: Minimum 2 inches wide, polyester self-adhering type, mesh reinforced.
- B. Fasteners: Hot-dip galvanized steel staples or type best suited to application, minimum 5/8 inch penetration into framing.
- C. Impale Fasteners: Steel impaling fasteners on metal base with lock washers, length to suit insulation thickness.
- D. Wire Mesh: Hexagonal steel wire, galvanized.

## **PART 3 EXECUTION**

### 3.1 INSTALLATION

- A. Staple or nail in place at maximum 12 inches on center.
- B. Butt insulation to adjacent construction. Butt ends and edges.
- C. Carry insulation around pipes, wiring, boxes, and other components.
- D. Ensure complete enclosure of spaces without voids.
- E. Apply with vapor barrier facing towards interior of structure.
- F. Tape seal lapped flanges, butt ends, and tears and holes in facings.
- G. At metal stud walls, the insulation shall be wired in place with two #9 wire, one within 12 inches of the top and one at the mid-point of each stud bay.

END OF SECTION

## SECTION 07 92 00

### JOINT SEALERS

#### PART 1 GENERAL

##### 1.1 SUMMARY

- A. Section Includes:
  - 1. Joint backup materials.
  - 2. Joint sealers.
  
- B. Related Sections:
  - 1. Section 09-29-00 – Gypsum Board

##### 1.2 REFERENCES

- A. ASTM International (ASTM):
  - 1. C510 - Standard Test Method for Staining and Color Change of Single- or Multicomponent Joint Sealants.
  - 2. C719 - Standard Test Method for Adhesion and Cohesion of Elastomeric Joint Sealants Under Cyclic Movement (Hockman Cycle).
  - 3. C794 - Standard Test Method for Adhesion-In-Peel of Elastomeric Joint Sealants.
  - 4. C834 - Standard Specification for Latex Sealing Compounds.
  - 5. C919 - Standard Practice for Use of Sealants in Acoustical Applications.
  - 6. C920 - Standard Specification for Elastomeric Joint Sealants.
  - 7. C1193 - Standard Guide for Use of Joint Sealants.
  - 8. C1248 - Standard Test Method for Staining of Porous Substrate by Joint Sealants.
  - 9. C1330 - Standard Specification for Cylindrical Sealant Backing for Use with Cold Liquid Applied Sealants.
  - 10. D2203 - Standard Test Method for Staining from Sealants.

##### 1.3 SUBMITTALS

- A. Submittals for Review:
  - 1. Product Data: Indicate sealers, primers, backup materials, bond breakers, and accessories proposed for use.
  - 2. Samples:
    - a. Submit manufacturer's standard color ranges of exposed sealant materials for Architect's selection.
  - 3. Warranty: Sample warranty form.
  - 4. Closeout Submittals: Cleaning and maintenance data

##### 1.4 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Firm specializing in manufacturing products specified in this Section.
- B. Applicator Qualifications: Firm specializing in installing work specified in this Section with experience on at least 5 projects of similar nature in the past 3 years.
  
- C. Maximum Volatile Organic Compound (VOC) Content; interior sealers and accessories:
  - 1. Sealants: 250grams per liter.
  - 2. Primers for non-porous substrates: 250grams per liter.

3. Primers for porous substrates: 775grams per liter.

## 1.5 PROJECT CONDITIONS

- A. Do not apply sealers at temperatures below 40 degrees F unless approved by sealer manufacturer.

## 1.6 WARRANTIES

- A. Furnish manufacturer's warranty against material defects, air and water tightness, loss of adhesion, cohesion, and staining as follows:
  1. Silicone sealants – 20 years
  2. Urethane sealants – 5 years
  3. Other sealants – 2 years

## PART 2 PRODUCTS

### 2.1 MANUFACTURERS

- A. Acceptable Manufacturers:
  1. BASF Building Systems. ([www.buildingsystems.basf.com](http://www.buildingsystems.basf.com))
  2. Dow Corning Corp. ([www.dowcorning.com](http://www.dowcorning.com))
  3. GE Silicones. ([www.siliconeforbuilding.com](http://www.siliconeforbuilding.com))
  4. Pecora Corp. ([www.pecora.com](http://www.pecora.com))
  5. Tremco, Inc. ([www.tremcosealants.com](http://www.tremcosealants.com))
  6. Henry Company ([www.henry.com](http://www.henry.com))
  7. Hilti. ([www.us.hilti.com](http://www.us.hilti.com))
  8. Sonneborn. ([www.chemrex.com](http://www.chemrex.com))
  9. USG: ([www.usg.com](http://www.usg.com))

- B. Substitutions: Not permitted.

### 2.2 MATERIALS

- A. General:
  1. Provide sealants that have been tested and found suitable for the substrates to which it will be applied.
  2. Color: As selected by Architect from manufacturer's full range of colors.

### 2.3 ACCESSORIES

- A. Primers: Nonstaining, quick-drying type and consistency recommended by the sealant manufacturer for the particular application.
- B. Bond Breakers: Type and consistency recommended by the sealant manufacturer for the particular application.
- C. Bond Breaker Tape: Self-adhesive, polyethylene tape.
- D. Joint Backing: Non-adhering backing to sealant; nonstaining, compatible with sealant and primer such as round, closed cell polyethylene foam rod; oversized 30 percent to 50 percent larger than joint width. Materials impregnated with oil, bitumen or similar materials are not permitted.
- E. Joint Cleaner: Non-corrosive and nonstaining type, recommended by sealant manufacturer and compatible with joint forming materials.

## 2.4 MIXES

- A. Mix multiple component sealers in accordance with manufacturer's instructions.
  - 1. Mix with mechanical mixer; prevent air entrainment and overheating.
  - 2. Continue mixing until color is uniform.

## PART 3 EXECUTION

### 3.1 PREPARATION

- A. Clean, prepare, and prime joints in accordance with manufacturer's instructions.
- B. Remove loose materials and foreign matter that might impair sealant adhesion. Clean porous materials such as concrete or masonry by grinding, sand or water blast cleaning, mechanical abrading, acid washing or a combination of these methods as required to provide a clean, sound base surface for sealant adhesion.
  - 1. Remove laitance by acid washing, grinding or mechanical abrading.
  - 2. Remove form oils, release agents, chemical retardants, by sand or water blast cleaning.
  - 3. Blow out joints with oil-free compressed air loose particles resulting from grinding, abrading, or blast cleaning prior to sealant application.
- C. Mechanically or chemically clean nonporous surfaces such as metal and glass. Remove temporary protective coatings on metallic surfaces using solvents that leave no residue as recommended by metal surface manufacturer. When masking tape or strippable films are used, remove the tape or film and clean any residual adhesive. Apply and wipe-dry cleaning solvents using clean, lint-free cloths or paper towels, do not allow solvent to air dry without wiping.
- D. Protect elements surrounding the work of this Section from damage or disfiguration.

### 3.2 APPLICATION

- A. Apply sealants in accordance with ASTM C1193, manufacturer's instructions, and accepted shop drawings.
- B. Apply acoustical sealants in accordance with ASTM C919, manufacturer's instructions, and accepted shop drawings.
- C. Apply sealant where indicated on the drawings and at all exterior joints and openings in the building envelope that are observable sources of air or water infiltration.
  - D. Measure joint dimensions and size materials to achieve required width-to-depth ratios.
- E. Install joint backing to achieve desired joint width-to-depth ratio. Roll the material into the joint to avoid lengthwise stretching. Do not twist or braid rod stock.
- F. Install bond breaker where joint backing is not used.
- G. Prime surfaces to receive joint sealant with primer recommended by sealant manufacturer.
- H. Apply sealant within recommended application temperature ranges. Consult manufacturer when sealant cannot be applied within these temperature ranges. Apply masking tape where required to protect adjacent surfaces from sealant application.
- I. Install sealant free of air pockets, foreign embedded matter, ridges, and sags.
- J. Tool joints concave. Use dry tooling method.

### 3.3 CLEANING AND REPAIRING

- A. Clean adjacent soiled surfaces. Use a solvent or cleaning agent as recommended by the sealant manufacturer. Remove any masking tape immediately after tooling joints, leaving finished work in neat and clean condition.
- B. Repair or replace defaced or disfigured caused by work of this Section.

### 3.4 PROTECTION OF FINISHED WORK

- A. Protect finished installation under provisions of Section 01 50 00.
- B. Protect sealant until cured.
- C. Do not paint sealants until sealant is fully cured.
- D. Do not paint silicone sealant.
- E. Protect joint sealants from contact with contaminating substances and from damage. Cut out, remove and replace contaminated or damaged sealants, immediately, so that they are without contamination or damage at time of project completion

END OF SECTION

## SECTION 09 29 00

### GYPSUM BOARD

#### PART 1 GENERAL

##### 1.1 SUMMARY

- A. Section Includes:
  - 1. Gypsum board.
  - 2. Cementitious panels.
  - 3. Taping and bedding of gypsum board.
- B. Related Sections:
  - 1. Division 01: General Requirements
  - 2. Section 07 9200 - Joint Sealers.

##### 1.2 REFERENCES

- A. American National Standards Institute (ANSI):
  - 1. A108.11 - Interior Installation of Cementitious Backer Units.
  - 2. A118.9 - Test Methods and Specifications for Cementitious Backer Units.
- B. ASTM International (ASTM):
  - 1. C475 - Standard Specification for Joint Compound and Joint Tape for Finishing Gypsum Board.
  - 2. C514 - Standard Specification for Nails for the Application of Gypsum Wallboard.
  - 3. C665 - Standard Specification for Mineral Fiber Blanket Thermal Insulation for Wood Frame and Light Construction Buildings.
  - 4. C1002 - Standard Specification for Steel Drill Screws for the Application of Gypsum Board.
  - 5. C1047 - Standard Specifications for Accessories for Gypsum Wallboard and Gypsum Veneer Base.
  - 6. C1178 - Standard Specification for Glass Mat Water-Resistant Gypsum Backing Panel.
  - 7. C1396 - Standard Specification for Gypsum Board.
  - 8. C1629 - Standard Classification for Abuse-Resistant Nondecorated Interior Gypsum Panel Products and Fiber-Reinforced Cement Panels.
  - 9. D3273 - Standard Test Method for Resistance to Growth of Mold on the Surface of Interior Coatings in an Environmental Chamber.
  - 10. E90 - Standard Test Method for Airborne Sound Transmission Loss of Building Partitions.
  - 11. E413 - Standard Test Method for Classification for Rating Sound Insulation.
- C. Gypsum Association (GA):
  - 1. GA-214 - Levels of Gypsum Board Finish.
  - 2. GA-216 - Recommended Specifications for the Application and Finishing of Gypsum Board.
  - 3. GA-600 - Fire Resistance Design Manual.
- D. Underwriters Laboratories, Inc. (UL) - Fire Resistance Directory.

##### 1.3 SUBMITTALS

- A. Submittals for Review:
  - 1. Product Data: Illustrate panel product types, thicknesses, and locations; acoustical insulation; and accessories.

## 1.4 QUALITY ASSURANCE

- A. Fire Resistance Ratings:
  - 1. Construct assemblies to achieve fire resistance ratings indicated on Drawings, in accordance with applicable GA or U design number.
  - 2. If requirements of assembly numbers referenced conflict with Contract Document requirements, conform to assembly requirements.
- B. Acoustic Ratings: Construct assemblies to achieve acoustic ratings indicated on Drawings, tested to ASTM E90 and classified in accordance with ASTM E413.

## 1.5 PROJECT CONDITIONS

- A. Do not install gypsum board until building is substantially weathertight.

## PART 2 PRODUCTS

### 2.1 MANUFACTURERS

- A. Acceptable Manufacturers - Gypsum Panels:
  - 1. CertainTeed Gypsum, Inc.
  - 2. GP Gypsum Corporation.
  - 3. National Gypsum Co.
  - 4. Temple-Inland.
  - 5. USG Corporation.
- B. No Substitutions
- C. Substitutions: Under provisions of Division 01

### 2.2 MATERIALS - GYPSUM PANELS

- A. Regular Gypsum Board: ASTM C1396; 48 inches wide x 5/8 inch thick, or thickness as indicated in drawings, maximum practical length, tapered edge.
- B. Water Resistant Gypsum Board: ASTM C1396; 48 inches wide x 5/8 inch thick, maximum practical length, water resistant; apply to walls to receive tile, sanitary wall panels, and walls at janitor closets and toilet rooms.

### 2.3 ACCESSORIES

- A. Fasteners: ASTM C1002, Type W and S Screws, minimum 5/8 inch penetration into wood framing.
- B. Acoustical Insulation:
  - 1. ASTM C665, Type I, glass fiber composition, unfaced.
  - 2. Free from urea-formaldehyde resins, phenol, acrylics, and artificial colors.
- C. Adhesive:
  - 1. Type recommended by gypsum panel manufacturer.
- D. Trim Accessories: ASTM C1047.
  - 1. Corner reinforcement: GA-216, Type CB-100 x 100.
  - 2. Casing: GA-216, Type LC. Reinforcing tape and joint compound; ASTM C475.

## **PART 3 EXECUTION**

### **3.1 INSTALLATION OF GYPSUM PANELS**

- A. Install panels and accessories in accordance with ASTM C754, GA-216, and manufacturer's instructions.
- B. Accurately cut panels to fit around openings and projections. Do not tear face paper or break gypsum core.
- C. Apply panels [at non fire-rated assemblies] in most economical manner, with ends and edges occurring over supports.
- D. Apply panels at fire-rated assemblies as required by design assembly.
- E. Stagger joints on opposite sides of partitions.
- F. Do not locate joints to align with edges of openings unless a control joint is installed.
- G. Mechanically fasten panels to framing. Place fasteners minimum 3/8 inch from edges of panels; drive heads slightly below surface. Stagger fasteners at abutting edges.
- H. Apply face layer of double layer applications with joints offset from those in base layer; secure with mechanical fasteners to framing or with adhesive to base layer.
- I. At deflection compensating head tracks, cut panels 1/2 inch short of structure at head; do not secure panels to top runner channel.
- J. Treat cut edges and holes in moisture resistant gypsum board with joint sealer.
- K. Where recessed items occur in fire rated partitions, box item on all sides with gypsum board as required to maintain continuity of fire rating.

### **3.2 INSTALLATION OF ACOUSTICAL PARTITIONS**

- A. Extend acoustical partitions past intersecting non-acoustical partitions.
- B. Install acoustical insulation:
  - 1. Butt to framing members and adjacent construction.
  - 2. Carry around pipes, wiring, outlets, and other construction without voids.
  - 3. Press against one gypsum board surface to form slight air space on opposite side.
- C. Seal acoustical partitions at perimeter and around penetrations:
  - 1. Apply continuous bead of sealer between gypsum panel edges and adjacent construction.
  - 2. Seal space between gypsum panels at control joints, prior to installing metal control joint.
  - 3. Apply sealer to penetrations through partitions.

### **3.3 INSTALLATION OF ACOUSTICAL INSULATION ABOVE CEILINGS**

- A. Install acoustical insulation in continuous layer. Butt tightly to adjacent insulation and to other construction.
- B. Carry over pipes, wiring, boxes, and other construction without voids.

### **3.4 INSTALLATION OF CEMENTITIOUS PANELS**

- A. Install in accordance with ANSI A108.11 and manufacturer's instructions.
- B. Apply panels horizontally, with ends occurring over supports. Stagger end joints in adjacent rows.

- C. Cut panels to fit around openings and projections.
- D. Mechanically fasten panels to framing at maximum 12 inches on center.

### 3.5 INSTALLATION OF ACCESSORIES

- A. Install in accordance with manufacturer's instructions.
- B. Install corner reinforcement at outside corners. Use single lengths where length of corner does not exceed standard length.
- C. Install casings where indicated and where gypsum board abuts dissimilar materials or stops with edge exposed.
- D. Install control joints at ceilings:
  - 1. Where indicated on drawings
- E. Install control joints at walls and partitions:
  - 1. At changes in backup material.

### 3.6 JOINT TREATMENT

- A. Treat joints and fasteners in gypsum board in accordance with GA-214.
- B. Levels of Finish:
  - 1. Surfaces to receive tile or stone: Level 2 finish.
  - 2. Surfaces to receive flat, eggshell paints or wall coverings, or as indicated: Level 4 finish.
  - 3. Surfaces to receive semigloss, gloss paints, or as indicated: Level 5 finish.
  - 4. See construction documents for additional information and specific locations for level 4 or level 5 finishes.

END OF SECTION

## SECTION 09 3000

### TILING

#### PART 1 GENERAL

##### 1.1 SUMMARY

- A. Section Includes:
  - 1. Ceramic tile floor finishes.
- B. Related Sections:
  - 1. Section 07 9200 - Joint Sealers.

##### 1.2 REFERENCES

- A. American National Standards Institute (ANSI):
  - 1. A108/A118/A136.1 - American National Standard for Installation of Ceramic Tile.
  - 2. A137.1 - Specifications for Ceramic Tile.
- B. ASTM International (ASTM):
  - 1. A82/A82M - Standard Specification for Steel Wire, Plain, for Concrete Reinforcement.
  - 2. A185/A185M - Standard Specification for Welded Steel Wire Reinforcement, Plain, for Concrete.
  - 3. C144 - Standard Specification for Aggregate for Masonry Mortar.
  - 4. C150 - Standard Specification for Portland Cement.
  - 5. C207 - Standard Specification for Hydrated Lime for Masonry Purposes.
  - 6. C847 - Standard Specification for Metal Lath.
  - 7. C1028 - Standard Test Method for Static Coefficient of Friction of Ceramic Tile and Other Like Surfaces by the Horizontal Dynamometer Pull-Meter Method.
  - 8. D226 - Standard Specification for Asphalt Saturated Organic Felt Used in Roofing and Waterproofing.
  - 9. D227 - Standard Specification for Coal-Tar Saturated Organic Felt Used in Roofing and Waterproofing.
  - 10. D4263 - Standard Test Method for Indicating Moisture in Concrete by the Plastic Sheet Method.
  - 11. D4397 - Standard Specification for Polyethylene Sheeting for Construction, Industrial and Agricultural Applications.
- C. Tile Council of North America (TCNA) - Handbook for Ceramic, Glass and Stone Tile Installation.
- D. Resilient Floor Covering Institute (RFCI) - FloorScore Certification Program.

##### 1.3 SUBMITTALS

- A. Submittals for Review:
  - 1. Product Data: Manufacturer's installation, cleaning, and maintenance instructions.
  - 2. Samples:
    - a. Tile: To match existing
    - b. Grout: To match existing

##### 1.4 QUALITY ASSURANCE

- A. Installer Qualifications: Minimum 5 years' experience in work of this Section.
- B. Static Coefficient of Friction for Floor Tile: Minimum 0.60 tested to ASTM C1028 in dry condition.

## 1.5 DELIVERY, STORAGE AND HANDLING

- A. Deliver mortar, adhesive, and grout containers bearing hallmark certifying compliance with reference standards.
- B. Protect adhesive containers from freezing and overheating according to manufacturer's instructions.

## 1.6 PROJECT CONDITIONS

- A. Environmental Requirements: Maintain minimum ambient temperature of 50 degrees F during and after installation.

## 1.7 MAINTENANCE

- A. Extra Materials: One unopened carton of each tile.

## PART 2 PRODUCTS

### 2.1 MANUFACTURERS

- A. Acceptable Manufacturers - Tile:
  - 1. American Marazzi Tile, Inc. ([www.marazzitile.com](http://www.marazzitile.com))
  - 2. American Olean Tile Co., Inc. ([www.aotile.com](http://www.aotile.com))
  - 3. Dal-Tile Corp. ([www.daltileproducts.com](http://www.daltileproducts.com))
  - 4. Florida Tile Industries, Inc. ([www.floridatile.com](http://www.floridatile.com))
  - 5. Interceramic USA. ([www.interceramicusa.com](http://www.interceramicusa.com))
  - 6. Summitville Tiles, Inc. ([www.summitville.com](http://www.summitville.com))
- B. Acceptable Manufacturers - Setting and Grouting Materials:
  - 1. BASF Corporation. ([www.buildingsystems.basf.com](http://www.buildingsystems.basf.com))
  - 2. Bostik, Inc. ([www.bostik-us.com](http://www.bostik-us.com))
  - 3. Laticrete International, Inc. ([www.laticrete.com](http://www.laticrete.com))
  - 4. Mapei Corporation. ([www.mapei.us](http://www.mapei.us))
  - 5. TEC. ([www.tecspecialty.com](http://www.tecspecialty.com))
- C. Substitutions: Will be considered.

### 2.2 MATERIALS

- A. Tile:
  - 1. Size: To match existing.
  - 2. Edge: To match existing.
  - 3. Color: To match existing
  - 4. Surface finish: Top match existing.
  - 5. Trim unit: To match existing.

\*\*\*\* OR \*\*\*\*

- B. Tile: To be selected under an allowance.

## 2.3 ACCESSORIES

- A. Latex-Portland Cement Mortar: ANSI A118.4, polymer modified dry set type.
- B. Dry Set Portland Cement Mortar: ANSI A118.1, polymer modified dry set type.
- C. Epoxy Adhesive:
  - 1. ANSI A118.3, thin set bond type.
- D. Organic Adhesive:
  - 1. ANSI A136.1, Type 1 thin set bond type.
- E. Portland Cement: ASTM C150, Type 1, white color.
- F. Sand: ASTM C144, clean, free of organic matter.
- G. Lime: ASTM C207, Type S, hydrated.
- H. Water: Clean, potable.
- I. Grout:
  - 1. ANSI A118.6, polymer modified type, sanded.
  - 2. Color: To match existing.
- J. Joint Sealers: Specified in Section 07 9200.
- K. Waterproof Membrane:
  - 1. Type: Load bearing, reinforced self-adhering sheet type.
- L. Crack Suppression Membrane:
  - 1. Type: ANSI A118.12, load bearing, reinforced self-adhering sheet type.
- M. Joint Tape: Waterproof, perforated bedding tape.

## PART 3 EXECUTION

### 3.1 PREPARATION

- A. Clean surfaces to remove loose and foreign matter that could impair adhesion.
- B. Remove ridges and projections. Fill voids and depressions with patching compound compatible with setting materials.
- C. Allowable Substrate Tolerances:
  - 1. Thin set method:
    - a. Maximum variation in substrate surface: 1/8 inch in 8 feet.
- D. Test concrete substrate to ASTM D4263; do not install tile until surfaces are sufficiently dry.

### 3.2 INSTALLATION

- A. Install underlayment in accordance with manufacturer's instructions.
- B. Minimize pieces less than one half size. Locate cuts to be inconspicuous.
- C. Lay tile to pattern to match existing.
- D. Joint Width: To match existing.
- E. Make joints watertight, without voids, cracks, excess mortar, or excess grout.
- F. Fit tile around projections and at perimeter. Smooth and clean cut edges. Ensure that trim will completely cover cut edges.
- G. Install Trim:
  - 1. Inside corners: Cove units.
  - 2. Outside corners: Bead units.
  - 3. Base: Base units.
  - 4. Exposed tile ends: Bullnose units.
- H. Allow tile to set for a minimum of 48 hours before grouting.
- I. Grout tile joints in accordance with ANSI A108.10 without excess grout.

### 3.3 ADJUSTING

- A. Remove and replace pieces that have been damaged during installation.

### 3.4 PROTECTION

- A. Provide protection for completed work using nonstaining sheet coverings.
- B. Prohibit traffic on tile floors for minimum 3 days after installation.

END OF SECTION

## SECTION 09 51 00

### ACOUSTICAL CEILINGS

#### PART 1 GENERAL

##### 1.1 SUMMARY

- A. Section Includes:
  - 1. Suspended metal ceiling grid system.
  - 2. Acoustical panels.

##### 1.2 REFERENCES

- A. ASTM International (ASTM):
  - 1. A641 - Standard Specification for Zinc-Coated (Galvanized) Carbon Steel Wire.
  - 2. C635 - Standard Specification for Metal Suspension Systems for Acoustical Tile and Lay-In Panel Ceilings.
  - 3. C636 - Standard Practice for Installation of Metal Ceiling Suspension Systems for Acoustical Tile and Lay-In Panels.
  - 4. E1264 - Standard Classification of Acoustical Ceiling Products.
- B. Ceiling and Interior Systems Construction Association (CISCA) - Ceiling Systems Handbook.
- C. Underwriters Laboratories, Inc. (UL) - Fire Resistance Directory.

##### 1.3 SUBMITTALS

- A. Submittals for Review:
  - 1. Samples:
    - a. 12 x 12 inch acoustical panel samples.
    - b. 6 inch long suspension system samples showing each profile.
- B. Quality Control Submittals:
  - 1. Certificates of Compliance: Certification from an independent testing laboratory that acoustical panels meet fire hazard classification requirements.

##### 1.4 QUALITY ASSURANCE

- A. Installer Qualifications: Minimum 5 years experience in work of this Section.
- B. Fire Hazard Classification: Class A rated, tested to ASTM E1264.

##### 1.5 PROJECT CONDITIONS

- A. Environmental Requirements: Install in approximately same conditions of temperature and humidity as will prevail after installation.

##### 1.6 MAINTENANCE

- A. Extra Materials: Two unopened carton of each acoustical panel.

## **PART 2 PRODUCTS**

### **2.1 MANUFACTURERS**

- A. Acceptable Manufacturers - Acoustical Units:
  - 1. Design Basis: Contract Documents are based on products by Armstrong World Industries, Inc.
  - 2. Equivalent products by following manufacturers are acceptable:
    - a. Armstrong World Industries, Inc.
    - b. Chicago Metallic Corporation.
    - c. USG Corporation.
- B. Acceptable Manufacturers - Suspension System:
  - 1. Armstrong World Industries, Inc.
  - 2. Certainteed Corporation
  - 3. USG Corporation.

### **2.2 MATERIALS**

- A. Suspension Grid System:
  - 1. ASTM C635, heavy duty, die cut, interlocking ends.
  - 2. Grid type: Exposed T.
  - 3. Material: Galvanized steel
  - 4. Runners: 1-1/2 inches high, 15/16 inch exposed width,
  - 5. Perimeter molding: Angle
  - 6. Finish: Factory applied enamel paint, sprayed and baked, white
  - 7. Accessories: Stabilizer bars, clips, splices,
- B. Acoustical Panels:
  - 1. Source: Fine Assured by Armstrong or approved substitute.
  - 2. Size: 24 x 48 inches x 3/4" inch thick.
  - 3. Edge configuration: Tegular 1734
  - 4. Performance requirements: Tested in accordance with ASTM E1264.
    - a. NRC: 0.7.
    - b. CAC: 35.

### **2.3 ACCESSORIES**

- A. Support Channels:
  - 1. Galvanized steel; size and type to suit application.
- B. Hanger Wire:
  - 1. ASTM A641, minimum 12 gage galvanized steel.
- C. Seismic Clips: Armstrong, Berc 2 Seismic Rx
- D. Impact Clips: Minimum 24 gage spring steel, manufacturer's standard profile.
- E. Touch-Up Paint: Color to match acoustical panels and suspension grid.

## **PART 3 EXECUTION**

### **3.1 INSTALLATION**

- A. Install ceilings in accordance with ASTM C636 and CISCA Handbook.
- B. Minimize panels less than one half size.
- C. Install molding around perimeters and abutting surfaces. Miter molding at exterior corners; cut flanges and bend web to form interior corners.
- D. Space hanger wires as indicated on drawings. Install additional hangers where required to support light fixtures and ceiling supported equipment.
- E. Do not suspend hangers directly from wood deck. Attach steel channel horizontally to adjacent framing members; place hanger at regular spacing.
- F. Hang suspension system independent of walls, columns, ducts, pipes, and conduit.
- G. Where ducts or other equipment prevent regular spacing of hangers:
  - 1. Reinforce nearest related hangers to span extra distance, or:
  - 2. Suspend steel channel horizontally beneath duct or equipment; place hanger at regular spacing.
- H. Install main tees at maximum 48 inches on center.
- I. Install cross tees to form 24 x 48 inch modules. Lock cross tees to main tees.
- J. Support ends of tees on flange of perimeter molding.
- K. Place acoustical panels with edges resting flat on suspension grid.
- L. Cutting Acoustic Units:
  - 1. Cut to fit irregular grid and perimeter edge trim and around penetrations.
  - 2. Locate cuts to be concealed.
  - 3. Cut and field paint exposed edges of reveal edge units to match factory edge.
- M. Place hold down clips over cross tees at mid point of each module.
- N. Place impact clips over cross tees at mid point of each module.
- O. Installation Tolerances: Ceilings level to 1/8 inch in 12 feet measured in any direction.

### **3.2 ADJUSTING**

- A. Touch up minor scratches and abrasions to match factory finish.

END OF SECTION

## SECTION 09 65 16

### RESILIENT SHEET FLOORING

#### PART 1 - GENERAL

##### 1.01 SUMMARY

###### A. Section Includes:

1. Resilient vinyl sheet flooring

###### B. Related Documents

1. Drawings and General Provisions of the Contract (including General and Supplementary Conditions and Division 1 sections) apply to the work of this section.

###### C. Related Sections

1. Other Division 9 sections for floor finishes related to this section but not the work of this section

##### 1.02 REFERENCES

###### A. Armstrong Technical Manuals

1. Armstrong Guaranteed Installation Systems manual, F-5061

###### B. ASTM International:

1. ASTM E 648 Standard Test Method for Critical Radiant Flux of Floor-Covering Systems Using a Radiant Heat Energy Source
2. ASTM E 662 Standard Test Method for Specific Optical Density of Smoke Generated by Solid Materials
3. ASTM F 710 Standard Practice for Preparing Concrete Floors to Receive Resilient Flooring
4. ASTM F 1303 Standard Specification for Sheet Vinyl Floor Covering with Backing
6. ASTM F 1861 Standard Specification for Resilient Wall Base
7. ASTM F 1869 Standard Test Method for Measuring Vapor Emission Rate of Concrete Subfloor Using Anhydrous Calcium Chloride
8. ASTM F 1913 Standard Specification for Vinyl Sheet Floor Covering Without Backing
9. ASTM F 2170 Standard Test Method for Determining Relative Humidity in Concrete Floor Slabs Using in situ Probes

###### C. National Fire Protection Association (NFPA):

1. NFPA 253 Standard Method of Test for Critical Radiant Flux of Floor Covering Systems Using a Radiant Heat Energy Source
2. NFPA 258 Standard Test Method for Measuring the Smoke Generated by Solid Materials

##### 1.03 SYSTEM DESCRIPTION

###### A. Performance Requirements:

Provide flooring which has been manufactured, fabricated and installed to performance criteria certified by manufacturer without defects, damage, or failure.

###### B. Administrative Requirements

1. Pre-installation Meeting: Conduct an on-site pre-installation meeting to verify project requirements, substrate conditions, manufacturer's installation instructions and manufacturer's warranty requirements.

D. Sequencing and Scheduling

1. Install flooring and accessories after the other finishing operations, including painting, have been completed. Close spaces to traffic during the installation of the flooring.
2. Do not install flooring over concrete slabs until they are sufficiently dry to achieve a bond with the adhesive, in accordance with the manufacturer's recommended bond, moisture tests and pH test.

1.04 SUBMITTALS

A. Tech Data

Submit shop drawings, seaming plan, coving details, and manufacturer's technical data, installation and maintenance instructions.

B. Samples

Submit the manufacturer's standard samples showing the required colors for flooring, welding rods, and applicable accessories.

C. MSDS

Submit Material Safety Data Sheets (MSDS) available for flooring products, adhesives, weld rod, patching/leveling compounds, floor finishes (polishes) and cleaning agents.

D. Closeout

Closeout Submittals: Submit the following:

1. Operation and Maintenance Data: Operation and maintenance data for installed products in accordance with Division 1 Closeout Submittals (Maintenance Data and Operation Data) Section. Include methods for maintaining installed products, and precautions against cleaning materials and methods detrimental to finishes and performance.
2. Warranty: Warranty documents specified herein

1.05 QUALITY ASSURANCE

A. Responsibility

Single-Source Responsibility: provide types of flooring and accessories supplied by one manufacturer, including leveling and patching compounds, and adhesives.

B. Select Installer

1. Installer Qualifications: Minimum 5 years experience in work of this Section.

C. Fire Performance

Fire Performance Characteristics: Provide resilient vinyl sheet flooring with the following fire performance characteristics as determined by testing material in accordance with ASTM test methods indicated below by a certified testing laboratory or other testing agency acceptable to authorities having jurisdiction:

1. ASTM E 648 Critical Radiant Flux of 0.45 watts per sq. cm. or greater, Class I
2. ASTM E 662 (Smoke Generation) Maximum Specific Optical Density of 450 or less

## 1.06 DELIVERY, STORAGE, AND HANDLING

### A. Comply-D1

Comply with Division 1 Product Requirements Sections

### B. Comply-Manufacturer

Comply with manufacturer's ordering instructions and lead time requirements to avoid construction delays.

### C. Deliverability

Deliver materials in good condition to the jobsite in the manufacturer's original unopened containers that bear the name and brand of the manufacturer, project identification, and shipping and handling instructions.

### D. Storage

Store materials in a clean, dry, enclosed space off the ground, protected from harmful weather conditions and at temperature and humidity conditions recommended by the manufacturer. Protect adhesives from freezing. Store flooring, adhesives and accessories in the spaces where they will be installed for at least 48 hours before beginning installation.

## 1.07 PROJECT CONDITIONS

### A. Temperature

Maintain a minimum temperature in the spaces to receive the flooring and accessories of 65°F (18°C) and a maximum temperature of [100°F (38°C)][85°F (29°C)] for at least 48 hours before, during, and for not less than 48 hours after installation. Thereafter, maintain a minimum temperature of 55°F (13°C) in areas where work is completed. Protect all materials from the direct flow of heat from hot-air registers, radiators, or other heating fixtures and appliances. Refer to the Armstrong Guaranteed Installations Systems manual, F-5061 for a complete guide on project conditions.

## 1.08 WARRANTY

### A. Resilient

Resilient Flooring: Submit a written warranty executed by the manufacturer, agreeing to repair or replace resilient flooring that fails within the warranty period.

### B. Warranty Period

Warranty Period: 5 years

### C. Rights

The Warranty shall not deprive the Owner of other rights the Owner may have under other provisions of the Contract Documents and will be in addition to and run concurrent with other warranties made by the Contractor under the requirements of the Contract Documents.

### D. Validation

For the Warranty to be valid, this product is required to be installed using the appropriate Armstrong Guaranteed Installation System. Product installed not using the specific instructions from the Guaranteed Installation System will void the warranty.

## 1.09 MAINTENANCE

### A. Extra Materials

Furnish minimum 5% extra materials from same production run as products installed. Package extra materials with protective covering for storage and identified with appropriate labels.

## PART 2- PRODUCTS

### 2.01 MANUFACTURER

#### A. Acceptable Manufacturers

##### 1. Basis of Design Manufacturer:

Armstrong World Industries, Inc., 2500 Columbia Avenue, Lancaster, PA 17603,  
<http://www.armstrong.com/commflooringna/>

##### 2. Equivalent products by following manufacturers are acceptable:

- a. Forbo Flooring.
- b. Mannington Resilient Floors.
- c. Tarkett, Inc.

### 2.02 RESILIENT SHEET FLOORING

#### A. Products

Provide Homogeneous Sheet Vinyl Flooring or vinyl flooring

1. Description: An unbacked, nonlayered, homogeneous sheet vinyl flooring. Protected by a UV-cured polyurethane finish, the colors and pattern detail are dispersed uniformly throughout the thickness of the product. Color pigments are insoluble in water and resistant to cleaning agents and light. Sheet flooring shall conform to the requirements of ASTM F1913 Standard Specification for Vinyl Sheet Floor Covering Without Backing

Medley - Nothing but Beige - 82.5 x 6 x 0.080

#### B. Vinyl Weld Rod

Vinyl Weld Rod:

1. [Provide solid color or patterned vinyl weld rod as produced by Armstrong World Industries, Inc., and intended for heat welding of seams. Color shall be compatible with field color of flooring or as selected by Architect to contrast with field color of flooring. Color selected from manufacturers standard range

#### C. Seam Adhesive

Seam Adhesive:

1. Provide Armstrong S-761 Seam Adhesive at seams as recommended by the resilient flooring manufacturer.

### 2.04 WALL BASE MATERIALS

#### A. WBA Flash Cove

For integral flash cove base: Provide integral flash cove wall base by extending sheet 6 in. up the wall using adhesive, welding rod, and accessories recommended and approved by the flooring manufacturer.

### 2.05 ADHESIVES

#### A. Standard Adhesive

Provide Armstrong [S-599 Premium Commercial Vinyl Sheet Flooring Adhesive] [S-240 High-Performance Epoxy Flooring Adhesive] for field areas and Armstrong [S-580 Flash Cove Adhesive at flash coving][S-725 Wall Base Adhesive at the wall base] as recommended by the flooring manufacturer.

#### B. Abode

[For Abode: Provide Armstrong [S-288 Flooring Adhesive] [S-289 Releasable Adhesive] for field areas and Armstrong [S-725 Wall Base Adhesive at the wall base] as recommended by the flooring manufacturer].

#### C. High Moisture Adhesive

[For High-Moisture Installation Warranty, Full Spread: Provide Armstrong S-543 Premium Plus Commercial Sheet Flooring Adhesive for field areas and Armstrong [S-580 Flash Cove Adhesive at flash coving][S-725 Wall Base Adhesive at the wall base] as recommended by the flooring manufacturer].

D. Spray Adhesive Installation Warranty

[For Spray Adhesive High-Moisture Installation Warranty (Abode excluded), Full Spread: Provide Armstrong Flip™ Spray Adhesive for field areas and Armstrong [S-580 Flash Cove Adhesive at flash coving][S-725 Wall Base Adhesive at the wall base] as recommended by the flooring manufacturer].

E. Non Heat Weld

[For non heat welding, provide Armstrong S-761 Seam Adhesive at seams as recommended by the resilient flooring manufacturer].

## 2.06 ACCESSORIES

A. Patching

For patching, smoothing, and leveling monolithic subfloors (concrete, terrazzo, quarry tile, ceramic tile, and certain metals), provide Armstrong [S-184 Fast-Setting Cement-Based Patch and Underlayment] [S-194 Cement-Based Patch, Underlayment and Embossing Leveler / S-195 Underlayment Additive].

B. Sealing

For sealing joints between the top of wall base or integral cove cap and irregular wall surfaces such as masonry, provide plastic filler applied according to the manufacturer's recommendations.

C. Top Edge Trim

Provide top edge trim caps of anodized aluminum for integral flash cove as approved by the Architect.]

D. Fillet Support

Provide a fillet support strip for integral cove base with a minimum radius of 1 in. (2.54 cm) of wood or plastic.

E. Transition

Provide transition/reducing strips tapered to meet abutting materials.

F. Threshold

Provide threshold of thickness and width as shown on the drawings.

G. Resilient Edge Strips

Provide resilient edge strips of width shown on the drawings, of equal gauge to the flooring, homogeneous vinyl or rubber composition, tapered or bullnose edge, with color to match or contrast with the flooring, or as selected by the Architect from standard colors available.

H. Metal Edge Strips

Provide metal edge strips of width shown on the drawings and of required thickness to protect exposed edges of the flooring. Provide units of maximum available length to minimize the number of joints. Use butt-type metal edge strips for concealed anchorage, or overlap-type metal edge strips for exposed anchorage. Unless otherwise shown, provide strips made of extruded aluminum with a mill finish.

## PART 3 - EXECUTION

### 3.01 Manufacturer's Instructions

A. Compliance

Compliance: Comply with manufacturer's product data, including technical bulletins, product catalog, installation instructions, and product carton instructions for installation and maintenance procedures as needed.

### 3.02 EXAMINATION

A. Site Verification

Site Verification of Conditions: Verify substrate conditions (which have been previously installed under other sections) are acceptable for product installation in accordance with manufacturer's instructions (i.e. moisture tests, bond test, pH test, etc.).

**B. Visual Inspection**

Visually inspect flooring materials, adhesives and accessories prior to installation. Flooring material with visual defects shall not be installed and shall not be considered as a legitimate claim.

**C. Examine Subfloors**

Examine subfloors prior to installation to determine that surfaces are smooth and free from cracks, holes, ridges, and other defects that might prevent adhesive bond or impair durability or appearance of the flooring material.

**D. Inspect Subfloors**

Inspect subfloors prior to installation to determine that surfaces are free from curing, sealing, parting and hardening compounds; residual adhesives; adhesive removers; and other foreign materials that might prevent adhesive bond. Visually inspect for evidence of moisture, alkaline salts, carbonation, dusting, mold, or mildew.

**E. Reporting**

Report conditions contrary to contract requirements that would prevent a proper installation. Do not proceed with the installation until unsatisfactory conditions have been corrected.

**F. Failure Warning**

Failure to call attention to defects or imperfections will be construed as acceptance and approval of the subfloor. Installation indicates acceptance of substrates with regard to conditions existing at the time of installation.

**3.03 PREPARATION**

**A. Smooth Surfaces**

Subfloor Preparation: Smooth concrete surfaces, removing rough areas, projections, ridges, and bumps, and filling low spots, control or construction joints, and other defects with Armstrong [S-184 Fast-Setting Cement-Based Patch and Underlayment][ S-194 Cement-Based Patch, Underlayment and Embossing Leveler / S-195 Underlayment Additive] as recommended by the flooring manufacturer. Refer to Armstrong Guaranteed Installation Systems manual, F-5061 and ASTM F 710 Standard Practice for Preparing Concrete Floors to Receive Resilient Flooring for additional information on subfloor preparation.

**B. Subfloor Cleaning**

Subfloor Cleaning: Remove paint, varnish, oils, release agents, sealers, and waxes. Remove residual adhesives as recommended by the flooring manufacturer. Remove curing and hardening compounds not compatible with the adhesives used, as indicated by a bond test or by the compound manufacturer's recommendations for flooring. Avoid organic solvents. Refer to the Armstrong Guaranteed Installation Systems manual, F-5061 and ASTM F 710 Standard Practice for Preparing Concrete Floors to Receive Resilient Flooring for additional information on subfloor preparation.

C. Standard Moisture Test

Moisture Testing: [Perform subfloor moisture testing in accordance with [ASTM F 2170, Standard Test Method for Determining Relative Humidity in Concrete Slabs Using in-situ Probes][ASTM F 1869, Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete Subfloor Using Anhydrous Calcium Chloride] and Bond Tests as described in publication Armstrong Guaranteed Installation Systems manual, F-5061 to determine if surfaces are dry; free of curing and hardening compounds, old adhesive, and other coatings; and ready to receive flooring. [Relative humidity shall not exceed 80%.][MVER shall not exceed 5 lbs./1000 sq. ft./24 hrs.] On installations where both the Percent Relative Humidity and the Moisture Vapor Emission Rate tests are conducted, results for both tests shall comply with the allowable limits listed above. Do not proceed with flooring installation until results of moisture tests are acceptable. All test results shall be documented and retained]

D. High Moisture Test

Moisture Testing: [For High-Moisture Installation Warranty (using Armstrong S-543 Premium Plus Commercial Sheet Flooring Adhesive ), perform subfloor moisture testing in accordance with ASTM F 2170, Standard Test Method for Determining Relative Humidity in Concrete Slabs Using in-situ Probes and Bond Tests as described in publication Armstrong Guaranteed Installation Systems manual, F-5061 to determine if surfaces are dry; free of curing and hardening compounds, old adhesive, and other coatings; and ready to receive flooring. Relative humidity of the slab shall not exceed 90%. Do not proceed with flooring installation until results of moisture tests are acceptable. All test results shall be documented and retained].

E. High-Moisture Installation Warranty

Moisture Testing: [For Spray Adhesive High-Moisture Installation Warranty, using Armstrong Flip™ Spray Adhesive, perform subfloor moisture testing in accordance with ASTM F 2170, 'Standard Test Method for Determining Relative Humidity in Concrete Slabs Using in-situ Probes' and Bond Tests as described in publication F-5061, "Armstrong Guaranteed Installation System," manual to determine if surfaces are dry; free of curing and hardening compounds, old adhesive, and other coatings; and ready to receive flooring. Internal relative humidity of the concrete shall not exceed 90%. Do not proceed with flooring installation until results of moisture tests are acceptable. All test results shall be documented and retained].

F. pH Test

Concrete pH Testing: Perform pH tests on concrete floors regardless of their age or grade level. All test results shall be documented and retained.

G. Wood Subfloor

Wood subfloors: Armstrong resilient floors are recommended on suspended wood subfloors with a 1/4" underlayment (see product installation systems for exceptions) and a minimum of 18" of well-ventilated air space below. Armstrong does not recommend installing resilient flooring on wood subfloors applied directly over concrete or on sleeper-construction subfloors. Loading requirements for subfloors are normally set by various building codes on both local and national levels. Trade associations such as APA-The Engineered Wood Association provide structural guidelines for meeting various code requirements. Subfloor panels are commonly marked with span ratings showing the maximum center-to-center spacing in inches of supports over which the panels should be placed.

1. Refer to the Armstrong Guaranteed Installation Systems manual, F-5061 and ASTM F 1482, Standard Guide to Wood Underlayment Products Available for Use Under Resilient Flooring for additional information.

H. Surface Cleaning

Surface Cleaning: Vacuum or broom-clean surfaces to be covered immediately before the application of flooring. Make subfloor free from dust, dirt, grease, and all foreign materials.

### 3.04 INSTALLATION OF FLOORING

#### A. F5061

Install flooring in strict accordance with the latest edition of Armstrong Guaranteed Installation Systems manual, F-5061. Failure to comply may result in voiding the manufacturer's warranty listed in Section 1.08

#### B. Wall to Wall

Install flooring wall to wall before the installation of floor-set cabinets, casework, furniture, equipment, movable partitions, etc. Extend flooring into toe spaces, door recesses, closets, and similar openings as shown on the drawings.

#### C. Pan-type

If required, install flooring on pan-type floor access covers. Maintain continuity of color and pattern within pieces of flooring installed on these covers. Adhere flooring to the subfloor around covers and to covers.

#### D. Scribe

Scribe, cut, and fit or flash cove to permanent fixtures, columns, walls, partitions, pipes, outlets, and built-in furniture and cabinets.

#### E. Adherence

Adhere flooring to the subfloor without cracks, voids, raising and puckering at the seams. Roll with a 100-pound (45.36 kilogram) roller in the field areas. Hand-roll flooring at the perimeter and the seams to assure adhesion. Refer to specific rolling instructions of the flooring manufacturer.

#### F. Minimal Seams

Lay flooring to provide a minimum number of seams. Avoid cross seams, filler pieces, and strips. Match edges for color shading and pattern at the seams in compliance with the manufacturer's recommendations.

#### G. Tools

Install flooring with adhesives, tools, and procedures in strict accordance with the manufacturer's written instructions. Observe the recommended adhesive trowel notching, open times, and working times.

#### H. Heat Welded Seams

[Prepare heat-welded seams with special routing tool supplied for this purpose and heat weld with vinyl welding rod in seams.] [Prepare sealed seams with special seam adhesive supplied for this purpose.] Use methods and sequence of work in conformance with written instructions of the flooring manufacturer. Finish all seams flush and free from voids, recesses, and raised areas.

#### I. Integral Flash Cove

Provide integral flash cove wall base where shown on the drawings, including cove fillet support strip and top edge cap trim. Construct flash cove base in accordance with the flooring manufacturer's instructions. Heat-weld seams as specified for those on the floor.

### 3.05 INSTALLATION OF ACCESSORIES

#### A. Top Set

Apply top set wall base to walls, columns, casework, and other permanent fixtures in areas where top-set base is required. Install base in lengths as long as practical, with inside corners fabricated from base materials that are mitered or coped. Tightly bond base to vertical substrate with continuous contact at horizontal and vertical surfaces.

#### B. Voids

Fill voids with plastic filler along the top edge of the resilient wall base or integral cove cap on masonry surfaces or other similar irregular substrates.

#### C. Resilient Edge Strips - Butted

Place resilient edge strips tightly butted to flooring, and secure with adhesive recommended by the edge strip manufacturer. Install edge strips at edges of flooring that would otherwise be exposed.

#### D. Metal Edge Strips

Apply [butt-type] [overlap] metal edge strips where shown on the drawings, [before] [after] flooring installation. Secure units to the substrate, complying with the edge strip manufacturer's recommendations.

### 3.06 CLEANING

#### A. Initial Maintenance

Perform initial and on-going maintenance according to the latest edition of Armstrong Guaranteed Installation Systems manual, F-5061.

### 3.07 PROTECTION

#### A. Protection

Protect installed flooring as recommended by the flooring manufacturer against damage from rolling loads, other trades, or the placement of fixtures and furnishings. (See Finishing The Job in the latest edition of Armstrong Guaranteed Installation Systems manual, F-5061.)

- A. Install in longest practical lengths; butt ends tight.
- B. Scribe to abutting surfaces.
- C. Do not allow traffic on flooring until adhesives have set. Cover areas subject to traffic with protective covering.

END OF SECTION

## SECTION 09 68 13

### TILE CARPETING

#### PART 1 GENERAL

##### 1.1 SUMMARY

- A. Section Includes:
  - 1. Tile carpeting.

##### 1.2 REFERENCES

- A. ASTM International (ASTM):
  - 1. D2859 - Standard Test Method for Flammability of Finished Textile Floor Covering Materials.
  - 2. D4258 - Standard Practice for Surface Cleaning Concrete for Coating.
  - 3. E84 - Standard Test Method for Surface Burning Characteristics of Building Materials.
  - 4. E648 - Standard Test Method for Critical Radiant Flux of Floor Covering Systems Using a Radiant Heat Energy Source.
  - 5. E662 - Standard Test Method for Specific Optical Density of Smoke Generated by Solid Materials.
  - 6. F710 - Standard Practice for Preparing Concrete to Receive Resilient Flooring.
  - 7. F1869 - Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete Subfloor Using Anhydrous Calcium Chloride.
  - 8. F2170 - Standard Test Method for Determining Relative Humidity in Concrete Floor Slabs Using in situ Probes.
- B. Carpet and Rug Institute (CRI):
  - 1. 104 - Standard for Installation Specification of Commercial Carpet.
  - 2. Indoor Air Quality Testing Program.
- C. National Fire Protection Association (NFPA) 253 - Test for Critical Radiant Flux of Floor Covering Systems Using a Radiant Heat Energy Source.

##### 1.3 SUBMITTALS

- A. Submittals for Review:
  - 1. Shop Drawings: Indicate carpet tile locations, dye lot limitations, direction of carpet tile in each room or area, and type and location of edgings.
  - 2. Samples:
    - a. Carpet tile 18 x 18 inch samples showing available colors.
- B. Quality Control Submittals:
  - 1. Certificates of Compliance: Certification from an independent testing laboratory that carpet tiles meet fire hazard classification requirements.

##### 1.4 QUALITY ASSURANCE

- A. Installer Qualifications: Minimum 5 years experience in work of this Section.
- B. Pre-Installation Conference:
  - 1. Attendance: Contractor carpet tile installer.
  - 2. Review and discuss: Contract Documents, carpet tile manufacturer's literature, project conditions, scheduling, protection after installation, and other matters affecting application.

## 1.5 PROJECT CONDITIONS

- A. Do not begin installation until painting and finishing work have been completed..

## 1.6 WARRANTIES

- A. Furnish manufacturer's year warranty providing coverage against:
  - 1. Defective materials and workmanship.
  - 2. Excessive fading.
  - 3. Loss of static control.
  - 4. Edge raveling.
  - 5. Runs.
  - 6. Loss of tuft bind strength.
  - 7. Loss of face fiber.
  - 8. Excessive wear.

## 1.7 MAINTENANCE

- A. Extra Materials 5 percent.

## **PART 2 PRODUCTS**

### 2.1 MANUFACTURERS

- A. Acceptable Manufacturers - Carpet Tiles:
  - 1. Match existing

### 2.2 MATERIALS

- A. Carpet Tiles: To match existing

### 2.3 ACCESSORIES

- A. Adhesive:
  - 1. Waterproof, latex based cement formulated specifically for installing carpet tiles; recommended by carpet tile manufacturer.
- B. Edgings: Vinyl to match existing
- C. Cap Strip: Vinyl to match existing

## **PART 3 EXECUTION**

### 3.1 EXAMINATION

- A. Verify that concrete floors have cured a minimum 28 days and do not exhibit negative alkalinity, carbonization, or dusting.

### 3.2 PREPARATION

- A. Clean substrate; remove loose and foreign matter that could impede adhesion or performance of flooring.
- B. Fill cracks, voids, and depressions with leveling compound.
- C. Grind ridges and high spots smooth.

### 3.3 INSTALLATION OF CARPET TILES

- A. Install in accordance with CRI 104.
- B. Install carpet tile and adhesive in accordance with manufacturers' instructions.
- C. Blend carpet tiles from different cartons to ensure minimal variation in color match.
- D. Lay out each room or area to minimize tiles less than one half size.
- E. Cut tile clean. Fit tiles tight to intersection with vertical surfaces without gaps.
- F. Lay carpet tile to match existing.
- G. Locate change of color or pattern between rooms under door centerline.
- H. Fully adhere carpet tiles to substrate.

### 3.4 INSTALLATION OF EDGINGS

- A. Install strips where carpet tiles abut dissimilar flooring materials; secure to subfloor.
- B. Center strips under doors where carpet tiles terminate at door openings.
- C. Install in longest practical lengths; butt ends tight.
- D. Scribe to abutting surfaces.

### 3.5 CLEANING

- A. Clean spots as recommended by carpet tile manufacturer.
- B. Cut off loose threads flush with top surface.
- C. Clean with commercial vacuum cleaner.

END OF SECTION

## SECTION 09 91 00

### PAINTING

#### PART 1 GENERAL

##### 1.1 SECTION INCLUDES

- A. Surface preparation and field painting of exposed interior items and surfaces, including mechanical and electrical equipment that do not have a factory-applied finish.
- B. Surface preparation and field painting of exposed exterior items and surfaces.

##### 1.2 RELATED SECTIONS

- A. Section 09260 - Gypsum Board Assemblies: Surface preparation of gypsum board.
- B. Section 15050 - Basic Mechanical Materials and Methods: Mechanical identification.
- C. Section 16050 - Basic Electrical Materials and Methods: Electrical identification.

##### 1.3 REFERENCES

- A. American Society for Testing and Materials (ASTM) D 16 - Standard Terminology for Paint, Related Coatings, Materials, and Applications.
- B. Steel Structures Painting Council (SSPC) SP6 - Commercial Blast Cleaning Procedures.
- C. Steel Structures Painting Council (SSPC) SP10 - Near White Blast Cleaning Procedure.

##### 1.4 DEFINITIONS

- A. General: Standard coating terms defined within Masters Painters Institute (MPI) manual.
  - 1. Gloss level 1 - Flat with a gloss range below 5 when measured at a 60-degree meter and 10 when measured at an 85-degree meter.
  - 2. Gloss level 2 - Low Sheen with a gloss range of 5 to 10 when measured at a 60 degree meter and 10 to 35 when measured at an 85 degree meter.
  - 3. Gloss level 3 - Eggshell with a gloss range between 10 and 15 when measured at a 60-degree meter and 10 to 35 when measured at an 85-degree meter.
  - 4. Gloss level 4 - Satin with a gloss range between 25 to 35 when measured with a 60 degree meter.
  - 5. Gloss level 5 - Semi-Gloss with a gloss range between 50 and 55 when measured at a 60 degree meter.
  - 6. Gloss level 6 - Gloss with a gloss range more than 70 when measured at a 60 degree meter.

##### 1.5 SUBMITTALS

- A. Submit under provisions of Section 01300.
- B. Manufacturer's data sheets on each product to be used, including:
  - 1. Material List: An inclusive list of required coating materials. Indicate each material and cross-reference specific coating, finish system, and application. Identify each material by manufacturer's catalog number and general classification.
  - 2. Preparation instructions and recommendations.
  - 3. Manufacturer's Information: Manufacturer's technical information, including label analysis and instructions for handling, storing, and applying each coating material.

- C. Selection Samples: For each finish product specified, two complete sets of color chips representing manufacturer's full range of available colors and patterns.
- D. Verification Samples: For each finish product specified, two samples, minimum size 6 inches (150 mm) square, representing actual product, color, and patterns.

#### 1.6 QUALITY ASSURANCE

- A. Installer Qualifications: A firm or individual experienced in applying paints and coatings similar in material, design, and extent to those indicated for this Project, whose work has resulted in applications with a record of successful in-service performance.
- B. Obtain block fillers and primers for each coating system from the same manufacturer as the finish coats.
- C. Paint exposed surfaces. If an item or a surface is not specifically mentioned, paint the item or surface the same as similar adjacent materials or surfaces. If a color of finish is not indicated, Architect will select from standard colors and finishes available.
- D. Do not paint prefinished items, concealed surfaces, finished metal surfaces, operating parts, and labels.
- E. Mock-Up: Provide a mock-up for evaluation of surface preparation techniques and application workmanship.
  - 1. Finish areas designated by Architect.
  - 2. Do not proceed with remaining work until workmanship, color, and sheen are approved by Architect.
  - 3. Refinish mock-up area as required to produce acceptable work.

#### 1.7 DELIVERY, STORAGE, AND HANDLING

- A. Deliver materials to Project site in manufacturer's original, unopened packages and containers bearing manufacturer's name and label:
- B. Store materials not in use in tightly covered containers in a well-ventilated area at a minimum ambient temperature of 45 deg F (7 deg C). Maintain storage containers in a clean condition, free of foreign materials and residue.
- C. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's absolute limits. Apply waterborne paints only when temperatures of surfaces to be painted and surrounding air are between 50 and 90 deg F (10 and 32 deg C), unless manufacturer's instructions specifically state's.
- D. Apply solvent-thinned paints only when temperatures of surfaces to be painted and surrounding air are between 45 and 95 deg F (7 and 35 deg C).
- E. Do not apply paint in snow, rain, fog, or mist; or when relative humidity exceeds 85 percent; or at temperatures less than 5 deg F (3 deg C) above the dew point; or to damp or wet surfaces.
  - 1. Painting may continue during inclement weather if surfaces and areas to be painted are enclosed and heated within temperature limits specified by manufacturer during application and drying periods.

## 1.8 EXTRA MATERIALS

- A. Furnish extra paint materials from the same production run as the materials applied and in the quantities described below. Package with protective covering for storage and identify with labels describing contents. Deliver extra materials to Owner.
- B. Quantity: Furnish Owner with an additional three percent, but not less than 1 gal (3.8 l) or 1 case, as appropriate, of each material and color applied.

## PART 2 PRODUCTS

### 2.1 MANUFACTURERS

- A. Acceptable Manufacturer:
  - 1. Kelly-Moore Paints (basis of specification)
  - 2. Dunn Edwards Paints
  - 3. Benjamin Moore Paints
- B. Requests for substitutions will be considered in accordance with provisions of Section 01600.

### 2.2 PAINT Material's - GENERAL

- A. Material Compatibility: Provide block fillers, primers, and finish-coat materials that are compatible with one another and with the substrates indicated under conditions of service and application, as demonstrated by manufacturer based on testing and field experience.
- B. VOC Classification: Provide materials, including primers, undercoats, and finish-coat materials, that meet local air quality management district regulations.
- C. Application Rate: Coating thickness for primer, intermediate, barrier and finish coats shall be measured as Dry Film Thickness (DFT) and comply with manufacturer's published recommendations.
- D. Galvanized Metal, Aluminum and Copper:
  - 1. Primer:
    - a. 1 coat - 1440 Devcryn Acrylic Primer/Finish.
  - 2. Finish:
    - a. 2 coats - 1245 ACRY-SHIELD 100 percent Acrylic Exterior Low Sheen Finish.

### 2.3 EXTERIOR MASONRY, CONCRETE AND STUCCO

- A. Concrete, Stucco, and Brick (Painted Finish):
  - 1. Primer:
    - a. 1 coat - 247 ACRY-SHIELD 100 percent Acrylic Exterior Masonry Primer.
  - 2. Finish:
    - a. 2 coats - 1245 ACRY-SHIELD 100 percent Acrylic Exterior Low Sheen Finish.

### 2.4 INTERIOR GYPSUM WALLBOARD

- A. Textured Finish:
  - 1. Primer:
    - a. 1 coat - 971 ACRY-PLEX Interior PVA Primer/Sealer Zero VOC.
  - 2. Finish:
    - a. 2 coats - 1010 KM PROFESSIONAL Zero VOC Interior Acrylic Eggshell Enamel.

- B. Smooth Wall Finishes:
  - 1. Base Coat:
    - a. 1 coat - 95-25 KM PROFESSIONAL Wallboard Pre-Coat/Primer/Sealer (recommended for level 5 finish).
  - 2. Primer:
    - a. 1 coat - 971 ACRY-PLEX Interior PVA Primer/Sealer Zero VOC.
  - 3. Finish:
    - a. 2 coats - 1010 KM PROFESSIONAL Zero VOC Interior Acrylic Eggshell Enamel.

## 2.5 INTERIOR METAL

- A. Ferrous Metal:
  - 1. Primer:
    - a. 1 coat - 5725 DTM Acrylic Primer/Finish.
  - 2. Finish:
    - a. 2 coats - 1448 Devcryn Semi-Gloss Finish
- B. Galvanized Metal and Aluminum:
  - 1. Primer:
    - a. 1 coat - 5725 DTM Acrylic Primer/Finish.
  - 2. Finish:
    - a. 2 coats - 1010 KM PROFESSIONAL Zero VOC Interior Acrylic Eggshell Enamel.

## EXECUTION

### 2.6 EXAMINATION

- A. Do not begin installation until substrates have been properly prepared.
- B. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.
- C. Coordination of Work: Review other Sections in which primers are provided to ensure compatibility of the total system for various substrates. On request, furnish information on characteristics of finish materials to ensure use of compatible primers.
  - 1. Notify Architect about anticipated problems when using the materials specified over substrates primed by others.
  - 2. If a potential incompatibility of primers applied by others exists, obtain the following from the primer Applicator before proceeding:
    - a. Confirmation of primer's suitability for expected service conditions.
    - b. Confirmation of primer's ability to be top coated with materials specified.

### 2.7 PREPARATION

- A. General: Remove hardware and hardware accessories, plates, machined surfaces, lighting fixtures, and similar items already installed that are not to be painted. If removal is impractical or impossible because of size or weight of the item, provide surface-applied protection before surface preparation and painting.
  - 1. After completing painting operations in each space or area, reinstall items removed using workers skilled in the trades involved.
- B. Cleaning: Before applying paint or other surface treatments, clean substrates of substances that could impair bond of the various coatings. Remove oil and grease before cleaning.
  - 1. Schedule cleaning and painting so dust and other contaminants from the cleaning process will not fall on wet, newly painted surfaces.

- C. Surface Preparation: Clean and prepare surfaces to be painted according to manufacturer's written instructions for each particular substrate condition and as specified.
1. Provide barrier coats over incompatible primers or remove and reprime.
  2. Provide barrier coats over incompatible primers or remove primers and reprime substrate.
  3. Cementitious Substrates: Prepare concrete, brick, concrete masonry block, and cement plaster surfaces to be coated. Remove efflorescence, chalk, dust, dirt, grease, oils, and release agents. Roughen as required to remove glaze. If hardeners or sealers have been used to improve curing, use mechanical methods to prepare surfaces.
    - a. Use abrasive blast-cleaning methods if recommended by coating manufacturer.
    - b. Determine alkalinity and moisture content of surfaces by performing appropriate tests. If surfaces are sufficiently alkaline to cause the finish paint to blister and burn, correct this condition before application. Do not coat surfaces if moisture content exceeds that permitted in manufacturer's written instructions.

4. Wood Substrates: Clean surfaces of dirt, oil, and other foreign substances with scrapers, mineral spirits, and sandpaper, as required. Smoothly sand surfaces exposed to view and dust off.
    - a. Scrape and clean small, dry, seasoned knots, and apply a thin coat of white shellac or other recommended knot sealer, before applying primer.
    - b. Immediately on delivery, prime edges, ends, faces, undersides, and backsides of wood to be coated.
    - c. After priming, fill holes and imperfections in the finish surfaces with putty or plastic wood filler. Sand smooth when dried.
    - d. Determine moisture content of surfaces by performing a moisture test. Do not coat if moisture content exceeds 15 percent.
  5. Ferrous-Metal Substrates: Clean ungalvanized ferrous-metal surfaces that have not been shop coated; remove oil, grease, dirt, loose mill scale, and other foreign substances. Use solvent or mechanical cleaning methods that comply with SSPC recommendations.
    - a. Blast-clean steel surfaces as recommended by coating manufacturer and according to SSPC-SP 10.
    - b. Treat bare and sandblasted or pickled clean metal with a metal treatment wash coat before priming.
    - c. Touch up bare areas and shop-applied prime coats that have been damaged. Wire brush, solvent clean, and touch up with same primer as the shop coat.
  6. Nonferrous-Metal Substrates: Clean nonferrous and galvanized surfaces according to manufacturer's written instructions for the type of service, metal substrate, and application required.
    - a. Remove pretreatment from galvanized sheet metal fabricated from coil stock by mechanical methods.
- D. Material Preparation: Carefully mix and prepare coating materials according to manufacturer's written instructions.
1. Maintain containers used in mixing and applying coatings in a clean condition, free of foreign materials and residue.
  2. Stir materials before applying to produce a mixture of uniform density. Stir as required during application. Do not stir surface film into the material. Remove film and, if necessary, strain coating material before using.
  3. Use only the type of thinners approved by manufacturer and only within recommended limits.
  4. Tinting: Tint each undercoat a lighter shade to simplify identification of each coat when multiple coats of same material are applied. Tint undercoats to match the color of the finish coat, but provide sufficient differences in shade of undercoats to distinguish each separate coat.

## 2.8 APPLICATION

- A. General: Apply paint according to manufacturer's written instructions. Use applicators and techniques best suited for substrate and type of material being applied.
- B. General: Apply high-performance coatings according to manufacturer's written instructions.
  1. Use applicators and techniques best suited for the material being applied.
  2. Do not apply high-performance coatings over dirt, rust, scale, grease, moisture, scuffed surfaces, or conditions detrimental to forming a durable coating film.
  3. Coating surface treatments, and finishes are indicated in the coating system descriptions.