

City of Lindsay
Tulare Road & Foothill Avenue Intersection and Pavement Rehabilitation
Improvements Project



City of Lindsay
Department of City Services
150 North Mirage Avenue
Lindsay, California 93247
559.562.7102 Ext 4 Phone 559.562.5748 Fax

**City of Lindsay,
Tulare Road & Foothill Avenue Intersection and Pavement Rehabilitation Improvements
Project**

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ATTACHEMENTS:

**TULARE ROAD & FOOTHILL AVENUE INTERSECTION & PAVEMENT
REHABILITATION CONSTRUCTION PLANS**

**CITY OF LINDSAY
STATE OF CALIFORNIA
NOTICE INVITING BIDS**

SEALED PROPOSALS will be received by the Office of the City Clerk at City Hall, 251 Honolulu Street, City of Lindsay, California, until **2:00 p.m. on August 14, 2024** and promptly thereafter all proposals that have been duly received will be publicly opened and read aloud for furnishing to said City all labor, materials, equipment, transportation, and services for the

**City of Lindsay, Tulare Road & Foothill Avenue Intersection and Pavement Rehabilitation
Improvements Project**

Instructions to Bidder, plans, project specifications and proposal forms may be inspected at City of Lindsay Department of City Services, 150 North Mirage, Lindsay, California and copies of said documents may be obtained from the City Services Department upon payment of a \$250.00 non-refundable fee for each set. Bidders must request to be placed on the official plan holder's list by sending an email request to neyba.amezcua@gkinc.com and an electronic copy of the project manual and plans will be provided at no fee. All addenda and correspondence during the bid process will be handled electronically. No bid will be received unless it is made on the proposal forms furnished with the project specifications.

A Certified Check, Cashier's Check, or Bidder's Bond in the amount of ten percent (10%) of the bid made payable to the City of Lindsay will be required to accompany each proposal.

Any contract entered into pursuant to this notice will incorporate the provisions of the State Labor Code. Compliance with the apprenticeship employment standards established by the State Director of Industrial Relations will be required.

Pursuant to Section 1773 of the Labor Code, the general prevailing wage rates in the county, or counties, 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 City of Lindsay address and available from the California Department of Industrial Relations' Internet website at <http://www.dir.ca.gov/DLSR/PWD>. The Federal minimum wage rates for this project as predetermined by the United States Secretary of Labor are set forth in this project manual issued for bidding. Purposes and in copies of this book that may be examined at the offices described *above* where project plans, special provisions, and bid forms may be seen. Addenda to modify the Federal minimum wage rates, if necessary, will be issued to holders of this project manual. Future effective general prevailing wage rates, which have been predetermined and are on file with the California Department of Industrial Relations, are referenced but not printed in the general prevailing wage rates.

Attention is directed to the Federal minimum wage rate requirements. If there is a difference between the minimum wage rates predetermined by the Secretary of Labor and the general prevailing wage rates determined by the Director of the California Department of Industrial Relations for similar classifications of labor, the Contractor and subcontractors shall pay not less than the higher wage rate. The Department will not accept lower State wage rates not specifically included in the Federal minimum wage determinations. This includes "helper" (or other classifications based on hours of experience) or any other classification not appearing in the Federal wage determinations. Where Federal wage determinations do not contain the State wage rate determination otherwise available for use by the Contractor and subcontractors, the Contractor and subcontractors shall pay not less than the Federal minimum wage rate, which most closely approximates the duties of the employees in question.

As per SB854, passed by California State Senate on June 20, 2014, contractors and subcontractors will now be required to register with the California Department of Industrial Relations (DIR). A contractor or subcontractor shall not be qualified to bid on, be listed in a bid proposal, subject to the requirements of Section 4104 of the Public Contract Code, or engage in the performance of any contract for public work, as defined in this chapter, unless currently registered and qualified to perform public work pursuant to Section 1725.5. It is not a violation of this section for an unregistered contractor to submit a bid that is authorized by Section 7029.1 of the Business and Professions Code or by Section 10164 or 20103.5 of the Public Contract Code, provided the contractor is registered to perform public work pursuant to Section 1725.5 at the time the contract is awarded.

Affirmative action to ensure against discrimination in employment practices on the basis of race, color, national origin, ancestry, sex, or religion will also be required.

The City hereby affirmatively ensures that qualified contractors so duly licensed will be afforded full opportunity to submit bids in response to this notice and there will be no discriminated against on the basis of race, color, national origin, ancestry, sex, or religion in any consideration leading to the award of contract.

No qualified handicapped person shall, on the basis of handicap, be excluded from participating in, be denied the benefits of, or otherwise be subject to discrimination.

No bid will be accepted from a contractor who is not duly licensed in accordance with the provisions of Chapter 9, Division III, of the Business and Professions Code, and as a minimum, possesses a current California State License Class "A", General Engineering Contractor.

The right is reserved by the City of Lindsay to reject any or all bids, to evaluate the bids submitted and to award the contract according to the proposal which best serves the interests of said City.

The successful bidder will be required to furnish the City of Lindsay with a "Performance Bond" in the amount of one hundred percent (100%) of the contract and a "Labor and Material Bond" in the amount of one hundred percent (100%) of the contract amount.

Upon receiving the "**NOTICE OF AWARD**", the successful bidder has **TEN (10) DAYS** to submit all required bonds, insurance and licenses and meet with City representatives in a **PRE CONSTRUCTION MEETING** to discuss any questions pertaining to this project. It is the contractor's responsibility to contact the City's Project Manager immediately, to arrange for the **PRE CONSTRUCTION MEETING** during **the TEN (10) DAY PERIOD**.

Upon receiving the "**NOTICE TO PROCEED**", the successful bidder has **TEN (10) DAYS to COMMENCE CONSTRUCTION**. The contractor shall pay to the City, as liquidated damages, the amount of \$800.00 for each calendar day that the commencement of construction is delayed beyond the **TEN (10) DAY PERIOD**.

The Contractor shall pay the City as liquidated damages, the amount of \$800.00 a day for each calendar day the project is delayed beyond the "**TIME OF COMPLETION DATE**".

The City will withhold five percent (5%) retention from payments due the Contractor until thirty-five (35) days after date of recording of the Notice of Completion. The Contractor may elect to receive one hundred percent (100%) of payments due under the contract by depositing securities of equivalent value with the City in accordance with the provisions of the California Government Code Section 4590.

All terms and conditions contained in the contract documents, including the information to bidders, shall become part of the contract. No bidder may withdraw his bid for a period of sixty (60) days after the time set for the opening thereof. A time limit of **Sixty (60)** Working Days has been set for the completion of the work from the date of the Notice to Proceed.

Dated this 10th day of July 2024.



Maegan Peton, City Clerk of the City of Lindsay

Publish Notice: Porterville Recorder, July 12, 2024

SECTION ONE
B - INSTRUCTIONS TO BIDDERS

1B-01. Securing Documents. Plans, Specifications and other contract documents will be available for examination without charge and copies may be secured in accordance with the foregoing “Notice Inviting Bidders”.

1B-02. Examination of Specifications and Sites of Work. The Bidder is required to examine the site of work, the proposal, the Plans and Specifications very carefully. He shall satisfy himself as to the character and quantities of the work to be performed, the materials to be furnished and the requirements of the Contract Documents. It is not to be inferred that all conditions as shown on the Plans are actually existent, nor shall the City or any of its officers be liable for any loss sustained by the Contractor as a result of any variance between conditions shown on the Plans and actual conditions revealed during examination or progress of the work. The submission of a proposal shall be prima facie evidence that the Bidder has made such an examination.

1B-03. Interpretation of Plans and Documents. If any Bidder should find discrepancies in, or omissions from the Plans, Specifications, or other proposed contract documents, or if he should be in doubt as to the true meaning of any part thereof, he shall at once make a request to the City for correction, clarification, or interpretation of the points in question. The person submitting such a request shall be responsible for its prompt delivery.

In the event that the City received such a request and it should be found that certain essential information is not clearly and fully set forth, or if the City discovers errors, omissions, or points requiring clarification in the documents, a written addendum will be mailed to each person to whom a set of contract documents has been delivered. The City will not be responsible for any instructions, explanations, or interpretations of the documents presented to Bidders in any manner other than written addendum.

1B-04. Addenda or Bulletins. The effect of all addenda to the contract documents shall be considered in the bid and said addenda shall be made a part of the contract documents and shall be returned with them. Before submitting his bid, each Bidder shall acquaint himself as to whether or not any such addenda have been issued and failure to cover in his bid any such addenda issued, may render his bid informal and result in its rejection.

1B-05. Disqualification of Bidders. No person, firm or corporation shall be allowed to make, file, or be interested in more than one bid for the same work unless alternate bids are called for. (A person, firm or corporation who has submitted a sub-proposal to a Bidder, or who has quoted prices or materials to a Bidder, is hereby disqualified from submitting a bid in his own behalf).

1B-06. Proposals. Bids to receive consideration shall be in accordance with the following instructions:

- a. Bids shall be made only on the Bid Proposal included with the Specifications; all bid items shall be properly filled out; numbers shall be stated in figures and the signatures of all persons signing shall be in longhand.
- b. All prices and notations must be in ink or typewritten. No erasures will be permitted. Mistakes may be crossed out and corrections typed or written in ink adjacent thereto and must be initialed in ink by the person or persons signing the bid.

c. Bids shall not contain any recapitulation of the work to be done. Alternate proposals will not be considered except as required hereinabove. No oral, telegraphic, or telephonic proposals or modifications will be considered.

d. The Owner may make such investigations as he deems necessary to determine the ability of any Bidder to perform the Work and the Bidder shall furnish to the Owner such information and data for this purpose as the owner may request.

e. Each Bidder shall list his proposed subcontractors on the form accompanying the proposal in accordance with the provisions of the Specifications.

f. Each Bidder must accompany his bid with either a cashier's check upon some responsible bank, or a check upon such bank properly certified, or an approved corporate surety bond payable to the City of Lindsay, for a sum not less than ten percent (10%) of the aggregate sum of the bid, which check or bond and the monies represented thereby shall be held by the said City as a guarantee that the Bidder, if awarded a contract, will in good faith enter into such contract and furnish the required bonds and insurance policies. Such bid bond shall be in a form acceptable by the City.

The Bidder agrees that, in case of his refusal or failure to execute said contract and provide said bonds and insurance policies within the time required by these documents, such check or bond and the money represented thereby, shall remain the property of the City party hereto and, said surety will pay to the City, as liquidated, for all damages which the City may suffer by reason of such failure, the sum of ten percent (10%) of the amount of the bid. A Bid received and not accompanied by such cashier's check, certified check, or approved bond, shall be rejected.

g. Bids shall be delivered to the City of Lindsay, at the location stipulated, on or before the day and hour set for the opening of bids, as herein before specified in the "Notice Inviting Bids". Bids shall be enclosed in a sealed envelope bearing the title of the work and the name of the Bidder.

1B-07. Licensing of Contractors. All persons, firms, partnerships, or corporations shall be licensed in accordance with the Business and Professions Code of the State of California and the applicable ordinances of the City of Lindsay before proceeding with the work under this contract. This project requires a current and valid Class "A", General Engineering Contractor License.

1B-08. Withdrawal of Bid. Any Bidder may withdraw his bid in person or by written request at any time prior to the scheduled closing time for receipt of bids.

1B-09. Opening of Bid Proposals. A City representative will, in open session, publicly open, examine and declare the bids at the earliest convenient time following the time set forth in the "Notice Inviting Bids". Bidders or their authorized representatives are invited to be present.

1B-10. Award of Contract or Rejection of Bids. No Bidder may withdraw his bid for a period of sixty (60) days after the date set for the opening of bids. The contract for the work will either be awarded, or the bids rejected within sixty (60) days from the date set for the opening of bids.

The contract for the work will be awarded to the lowest responsive and responsible Bidder complying with these instructions, the four (4) criteria set forth below and the "Notice Inviting Bids". The City, however, reserves the right to reject any or all bids and to waive any informality in the bids received. The City, in making its determination of the lowest responsible Bidder, will give consideration to the following criteria:

1. Quality of the contractor's technical approach to the project;
2. Qualifications of the Contractor's personnel, equipment and their availability to complete the work on time.
3. Experience of the Contractor in this type of work and the capability for performing the project; and
4. The Contractor's total bid price per the Base Bid Schedule.

A Bidder to whom an award is made shall execute a written Contract with the awarding City and furnish the stipulated bonds and insurance within ten (10) days after the Notice of Award of the contract is issued. The Contract shall be made on the form provided by the City.

If the bidder to whom the award is made fails to enter into the contract as herein provided, the award may be annulled and an award may be made to the next lowest responsible Bidder; and such Bidder shall fulfill every stipulation embraced herein, as if he were the party to whom the first award was made. A corporation to which an award is made shall furnish evidence of its corporate existence and that the officers signing the contract and bond for the corporation are duly authorized to do so by certified copy of Resolution authorizing same by Board of Directors.

1B-11 Bonds. A successful Bidder, simultaneously with the execution of an Agreement, will be required to furnish a bond to secure the payment of labor and materials in a sum not less than 100 percent (100%) of the total amount payable by the terms of the contract and a faithful performance bond in a sum not less than 100 percent (100%) of the amount of the contract; said bonds shall be secured from a surety company satisfactory to the City. Surety companies, to be acceptable to the City must be authorized to do business in the State of California and be on the accredited list of the United States Treasury. The bonds given by the contractor shall be extended as proposed in the same manner as the district.

1B-12. Time of Completion and Liquidated Damages. The work shall be commenced within ten (10) calendar days from the date of the Notice to Proceed and shall be diligently prosecuted until completion. A time limit of sixty (60) Working days from date of the Notice to Proceed has been set for completion of all of the work. The Bidder agrees to pay, as Liquidated Damages, Eight Hundred Dollars (\$800.00) for each consecutive calendar day delay in finishing the work in excess of the number of calendar days as prescribed above. The Bidder's attention is directed to the General and Special Conditions as to provisions for extension of time of completion and/or assessment of Liquidated Damages.

1B-13. Assignment of Contract. No assignment by the Contractor of any contract to be entered into hereunder or of any part thereof, or of funds to be received thereunder by the Contractor, will be recognized by the Agency unless such assignment has had prior approval of the Agency and the surety has been given notice of such assignment in writing and has consented thereto in writing.

1B-14. Workers and Wages. Attention is specifically directed to all provisions of the Labor Code of the State of California with regard to workers and wages. Contractors must comply with provisions of the Work Hours and Safety Standards Act (40 U.S.C. 327 ET SEQ) and the regulations issued thereunder.

Pursuant to Section 1773 of the Labor Code, the general prevailing wage rates in the county, or counties, 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 City of Lindsay address and available from the California Department of Industrial Relations' Internet website at <http://www.dir.ca.gov/DLSR/PWD>. The Federal minimum wage rates for this project as predetermined by the United States Secretary of Labor are set forth in this project manual issued for bidding. Purposes and in copies of this book that may be examined at the offices described above where project plans, special provisions, and bid forms may be seen. Addenda to modify the Federal minimum

wage rates, if necessary, will be issued to holders of this project manual. Future effective general prevailing wage rates, which have been predetermined and are on file with the California Department of Industrial Relations, are referenced but not printed in the general prevailing wage rates.

1B-15. Job Tour. Assistance, if necessary, in the inspection of the project location can be obtained by prior arrangement with the City of Lindsay Department of City Services.

1B-16. Identification of Subcontractors. In accordance with Section 4100 et seq of the Public Contract Code, each Bidder, in the Bid, shall set forth: **(1)** The name and location of the place of business of each subcontractor who will perform work or labor, or render services to the Contractor in or about the construction of the work, or improvement, in an amount in excess of one-half of one percent of the Contractor's total bid; and **(2)** The position of the work which will be done by each such subcontractor. No Contractor, whose bid is accepted shall, without consent of the City, either: **(3)** Permit any such contract to be assigned or transferred, or allow it to be performed by anyone other than the original subcontractor listed in the bid; or **(4)** Sublet or subcontract any portion of the work in excess of one-half percent of one percent of the Contractor's total bid as to which his original bid did not designate a subcontractor. Penalties for failure to comply with the foregoing are as set forth in the Public Contract Code.

1B-17. (blank)

1B-18. (blank)

1B-19. (blank)

1B-20. Statutory Penalty for Unauthorized Overtime Work. In accordance with Section 1815 of the California Labor Code, the Contractor shall, as a penalty to the State or political subdivision on whose behalf the contract is made or awarded, forfeit twenty-five dollars (\$25.00) for each worker employed in the execution of the contract by the Contractor or by any subcontractor for each calendar day during which said worker is required or permitted to work more than eight hours in any one calendar day and forty hours in any one calendar week in violation of Sections 1810-1815 of the California Labor Code.

1B-21. Workers Compensation Notice. As required by Section 1860 of the California Labor Code and in accordance with provisions of Section 3700 of the Labor Code, every Contractor will be required to secure the payment of "workers compensation" to its employees.

1B-22. Workers Compensation Certification by Contractor. In accordance with Section 1861 of the California Labor Code, the Contractor shall furnish the City a notarized statement prior to commencing construction as follows: "I am aware of the provisions of Section 3700 of the Labor Code which requires every employer to be insured against liability for workers compensation or to undertake self-insurance in accordance with the provisions of that code and I will comply with such provisions before commencing the performance of the work of this contract."

1B-23. Apprenticeship Requirements. The Contractor agrees to comply with Sections 1777.5, 1777.6 and 1777.7 of the California Labor Code relating to the employment of apprentices. The responsibility for compliance with these provisions is fixed with the prime Contractor for all apprentice able occupations. Under these sections of the law, contractors and subcontractors must employ apprentices in apprentice able occupations, where journeymen in the craft are employed on the public work, in a ratio of not less than one apprentice for each five journeyman (unless an exemption is granted in accordance with Section 1777.5) and contractors and subcontractors shall not discriminate among

otherwise qualified employees as indentured apprentices on any public work solely on the grounds of race, religious creed, color, national origin, ancestry, sex, or age, except as provided in Section 3077 of the Labor Code. Only apprentices, as defined in Section 3077, who are in training under apprenticeship standards and who have signed written agreements will be employed on City Services in apprentice able occupations.

**SECTION ONE
C - BID PROPOSAL
CITY OF LINDSAY
TULARE ROAD & FOOTHILL AVENUE INTERSECTION AND PAVEMENT
REHABILITATION IMPROVEMENTS PROJECT
Lindsay, California**

Ladies & Gentlemen:

The undersigned hereby declares, as Bidder, that the only persons or parties interested in this proposal as principals, are those named herein, that no public officer or employee of the City is in any manner interested directly or indirectly in this proposal or in the profits to be derived from the contract proposed to be taken; that this bid is made without any connection with any other person or persons making a bid for the same purpose; that the bid is in all respects fair and without collusion or fraud; that he has read the Notice Inviting Bids and the Specifications and agrees to all the stipulations contained herein; that he has examined the site of the work, the form of Agreement and the Specifications and drawings referred to therein.

The undersigned hereby proposes and agrees to furnish all of the material, labor, equipment, transportation and services for the construction and completion of the work listed below, all in strict conformity with the Plans, Specifications and other contract documents on file at the City, at the unit prices listed below.

If awarded the contract, the undersigned agrees to sign said contract and furnish the necessary bonds and insurance policies within ten (10) days after the Notice of Award of contract.

The undersigned has checked carefully all of the prices quoted and understands that the City of Lindsay will not be responsible for any errors or omissions on the part of the undersigned in making up this Revised Bid Proposal.

Attached please find Bidder's Bond or certified check, for \$ _____, which amount is not less than ten percent (10%) of the total amount of this bid.

BIDDING SHEET

The work under this Specification is for the construction of the City of Lindsay, Tulare Rd and Foothill Ave Intersection and Pavement Rehabilitation Improvements Project, for the City of Lindsay all as described in this Specification and as shown on Plans.

The City reserves the right to:

1. Accept or reject any or all bids.
2. Award the contract to the lowest qualified Bidder for the Base Bid, if selected.
3. Waive any defects.
4. Accept all or any portion of the BID SCHEDULE.

The undersigned hereby certifies that he has a valid license as contractor Class "A", General Engineering Contractor License, in the State of California, the number of which is _____ and expiration of which is _____. I hereby declare that this information is valid and submitted under penalty of perjury in compliance with Business and Professions Code Section 7028.15.

Signed

Title

BID BOND

KNOW ALL MEN BY THESE PRESENTS, that we, the undersigned, _____ as Principal, and _____ as surety, are hereby held and firmly bound unto THE CITY OF LINDSAY as Owner, in the penal sum of _____ for the payment of which, well and truly to be made, we hereby jointly and severally bind ourselves, our heirs, executors, administrators, successors and assigns.

The condition of the above obligation is such that whereas the Principal has submitted to the CITY OF LINDSAY a certain Bid, attached hereto and hereby made a part hereof to enter into a contract in writing, for the

City of Lindsay, Tulare Road & Foothill Avenue Intersection and Pavement Rehabilitation Improvements

NOW THEREFORE,

- a. If said Bid shall be rejected, or in the alternate,
- b. If said Bid shall be accepted and the Principal shall execute and deliver a contract in the Form of Contract attached hereto (properly completed in accordance with said Bid) and shall furnish a bond for his faithful performance of said contract, and for the payment of all persons performing labor or furnishing materials in connection therewith, and shall in all other respects perform the agreement created by the acceptance of said Bid, then this obligation shall be void, otherwise the same shall remain in force and effect; it being expressly understood and agreed that the liability of the Surety for any and all claims hereunder shall, in no event, exceed the penal amount of this obligation as herein stated.

The Surety, for value received, hereby stipulates and agrees that the obligation of said Surety and its bond shall be in no way impaired or affected by any extension of the time within which the Owner may accept such Bid; and Surety does hereby waive notice of any extension.

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

Contractor, Individual, Partnership, or Corporation

Surety

By: _____

By: _____

IMPORTANT: Surety companies executing bonds must appear on the Treasury Department's most current list (Circular 570, as amended) and be authorized to transact business in the State of California.

**DECLARATION OF NON COLLUSION TO BE EXECUTED BY
BIDDER AND SUBMITTED WITH BID**

State of California)
)
County of _____)

I, _____, declare as follows:

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

I certify (or declare) under penalty of perjury that the foregoing is true and correct and that this declaration is executed in _____, California, on _____, 20__.

Signature

INFORMATION REQUIRED OF BIDDER

The Bidder is required to supply the following information. Additional sheets may be attached if necessary.

(1) Address :

Phone No. _____ Fax No. _____ E mail/Web page _____

(2) Type of Firm: Individual, Partnership or Corporation: _____

(3) Corporation organized under the laws of the State of _____

(4) List the names of all members of the firm or names and titles of all officers of the corporation:

_____	_____
_____	_____
_____	_____

(5) Number of years' experience as a licensed contractor in this type of construction work: _____

(6) Subcontractors Listing. Please complete the section below with all subcontractors that will be performing work in or about the work or improvement in excess of one-half (1/2) of one percent (1%) of the total bid price. Attach additional pages as necessary.

	Type		Subcontractor	Dollar Amt.	Total
No.	Work	DIR #	Name, Address, Phone, FAX	of Contract	Percentage
1					
2					
3					
4					
5					

(7) List the name of the person who inspected the site of the proposed work for your firm:

_____. Date of Inspection: _____

(8) List 3 projects minimum and the owners and project manager or contact of similar size and type of construction; include the total base dollar figure and the final constructed dollar figure. (Attach additional page if necessary):

1.

2.

3.

(9) The General Contractor and all listed subcontractors shall submit with this proposal an organizational chart listing current employee names and titles. The General Contractor and all listed subcontractors shall identify the proposed project manager and foremen, and include the length of employment with the company and years of experience with this type of construction. The General Contractor and all listed subcontractors shall also list the equipment owned that will be utilized on this project and list equipment not owned that is anticipated to be rented/purchased to complete this project.

(10) If requested by the City, the Bidder shall furnish a notarized financial statement, financial data, or other information and references sufficiently comprehensive to permit an appraisal of his current financial condition.

The undersigned acknowledges that the quantities of work specified are approximate only, are the quantities which will be required to the best knowledge of the City at this time, and are set forth herein for the purpose of comparing bids.

The City reserves the right to reject all bids or waive any informality and to award the bid to the best qualified bidder on any Schedule.

The undersigned agrees, if awarded the Contract, to begin work within ten (10) calendar days after the date of the Notice to Proceed and to fully complete all work within the number of calendar days stipulated in the Instruction to Bidders after the date of the Notice to Proceed.

Receipt is hereby acknowledged of Addenda Number(s)

_____.

The undersigned is licensed in accordance with the laws of the State of California, Class "A", General Engineering Contractor License, in the State of California.

Individual Contractor

Name: _____

Address: _____

Partnership

Name: _____

Business Address: _____

By: _____

Partner.

Other Partners: _____

Corporation

Name: _____

Business Address: _____

By: _____, President.

_____,Secretary

Organized under the laws of the State of

(Corporate Seal)

Authorized Signatures for Corporate Contractors

The undersigned certifies that they are authorized to execute documents on behalf of the corporation:

President

Date

Secretary

Date

Treasurer

Date

(Corporate Seal)

BID SCHEDULE**City of Lindsay****Tulare Road & Foothill Avenue Intersection and Pavement Rehabilitation Improvements Project**

The Bid Schedule(s) list the various divisions of construction contemplated in the Plans and Specifications, together with an estimate of the units each. With these units as the basis, the Bidder will extend each item, using the cost he inserts in the unit column. Any total cost found inconsistent with the unit cost shall be considered incorrect. Unit cost figures shall be considered correct and adjustments made accordingly.

The Bid prices shall be in ink or typewritten and the sum entered in figures. The following quantities of work to be done and materials to be furnished are given as a basis for the comparison of bids. The City reserves the right to increase or decrease the quantities of any items as necessary or expedient.

CITY OF LINDSAY					
TULARE ROAD & FOOTHILL AVENUE INTERSECTION AND PAVEMENT REHABILITATION IMPROVEMENTS PROJECT					
Item No.	Item Description	Estimated Quantity	Unit	Unit Price	Amount
General					
1	Mobilization, Demobilization, Bonds and Insurance	1	LS	\$	\$
2	Construction Notification Sign	3	EA	\$	\$
3	Traffic Control System	1	LS	\$	\$
4	Dust Control Plan	1	LS	\$	\$
5	Storm Water Pollution Prevention Plan	1	LS	\$	\$
6	Miscellaneous Facilities and Operations	1	LS	\$	\$
				SUBTOTAL	\$
Street					
7	Clearing and Grubbing	1	LS	\$	\$
8	Agricultural Tree Removal and Hauling	1	AC	\$	\$
9	Sawcut and Remove Curb and Gutter	23	LF	\$	\$
10	Sawcut and Remove Curb Returns	7	EA	\$	\$
11	Sawcut and Remove Cross Gutter	2	EA	\$	\$
12	Sawcut and Remove Drive Approach	2	EA	\$	\$

13	Remove Block Fence	32	LF	\$	\$
14	Remove Chain Link Fence	25	LF	\$	\$
15	Curb Ramps and Landings	8	EA	\$	\$
16	Concrete Drive Approach	3	EA	\$	\$
17	Concrete Curb Island	1	EA	\$	\$
18	Asphalt Drive Approach	3	EA	\$	\$
19	Concrete Cross Gutter	2	EA	\$	\$
20	New Decorative Block Fence	29	LF	\$	\$
21	New Chain Link Fence	21	LF	\$	\$
22	Full Depth Reclamation with Cement (F)	208,310	SF	\$	\$
23	Increase or Decrease in Cement for FDR-C method	1	LB	\$	\$
24	Hot Mix Asphalt Concrete	3,776	TN	\$	\$
25	AC Dike	1,295	LF	\$	\$
26	Reset Survey Marker	4	EA	\$	\$
27	RRFB Assembly with Street Light and APB, Advanced Crossing Assembly	1	LS	\$	\$
28	Signage, Pavement Striping, Markers and Markings	1	LS	\$	\$
				SUBTOTAL	\$
Utilities					
29	12-Inch SDR-26 PVC Green Storm Drain Pipe	38	LF	\$	\$
30	Storm Drain Inlet	1	EA	\$	\$
31	Adjust Sanitary Sewer and Storm Drain Manhole to Finish Grade	13	EA	\$	\$
32	Adjust Water Valve to Finish Grade	17	EA	\$	\$
				SUBTOTAL	\$
Separate Bid Items- Road Expansion on Tulare Rd Near the School					
33	Clearing and Grubbing in School Area	1	LS	\$	\$

34	Remove Existing Concrete Sidewalk in School Area	4,524	SF	\$	\$
35	Tree Removal and Hauling in School Area	21	EA	\$	\$
36	Sawcut and Remove Curb and Gutter in School Area	455	LF	\$	\$
37	Concrete Sidewalk (4-inch) in School Area	4,362	SF	\$	\$
38	Concrete Curb and Gutter in School Area	485	LF	\$	\$
39	Remove & Relocate Street Lights in School Area	5	EA	\$	\$
40	Plant New Trees in School Area	18	EA	\$	\$
41	Irrigation Appurtenances in School Area	1	LS	\$	\$
				SUBTOTAL	\$
				TOTAL	\$

ABBREVIATIONS

CF	-	Cubic Foot (Feet)	SACK(S)	-	Sack(s)
CY	-	Cubic Yard(s)	STAYD	-	Station Yard(s)
EA	-	Each	SF	-	Square Foot (Feet)
LB(s)	-	Pound(s)	SY	-	Square Yard(s)
LF	-	Linear Foot (Feet)	TN	-	Ton(s)
LS	-	Lump Sum	MGAL	-	Million Gallon(s)
(F)	-	Final Pay Quantity*	(S)	-	Specialty Item
(S-F)	-	Specialty Item and Final Pay Quantity*	(F&I)	-	Furnish and Install
AC	-	Acres			

***Final Pay Quantities**

- A. When an item of work is designated as a Final Pay Quantity on the Bid Schedule and/or in the Explanation of Bid Items, the estimated quantity for that item of work shall be the final pay quantity, unless the dimensions of any portion of that item are revised by the Engineer, or the item or any portion of the item is eliminated.

If the dimensions of any portion of the item are revised, and the revisions result in an increase or decrease in the estimated quantity of that item of work, the final pay quantity for the item will be revised in the amount represented by the changes in the dimensions.

If a final pay item is eliminated, the estimated quantity for the item will be eliminated.

If a portion of a final pay item is eliminated, the final pay quantity will be revised in proportion to the bid quantity represented by the eliminated portion of the item of work.

- B. The estimated quantity for each item of work designated as a Final Pay Quantity on the Bid Schedule and/or in the Explanation of Bid Items shall be considered as approximate only, and no guarantee is made that the quantity which can be determined by computations, based on the details and dimensions shown on the plans, will equal the estimated quantity. No allowance will be made in the event that the quantity based on computations does not equal the estimated quantity.
- C. In case of discrepancy between the quantity shown on the Bid Schedule for a final pay item and the quantity or summation of quantities for the same item shown on the plans, payment will be based on the quantity shown on the Bid Schedule.

The undersigned hereby proposes and agrees to furnish all of the material, labor, equipment, transportation, and services necessary for the construction of the City of Lindsay, Hermosa Street Improvements Project, including paving, concrete, underground and other work necessary to properly complete the proposed improvements, all in strict conformity with the Plans and Specifications on file with the City of Lindsay. Completion time is defined as the number of working days necessary to complete the defined work items from the date of the Notice to Proceed.

In accordance with Section 4552 of the Government Code, the bidder shall conform to the following requirements. In submitting a bid to the City, the bidder offers and agrees that if the bid is accepted, it will assign to the City all rights, title, and interest in and to all causes of action it may have under Section 4 of the Clayton Act (15 U.S.C.) or under the Cartwright Act (Chapter 2, commencing with Section 16700, of Part 2 of Division 7 of the Business and Professions Code), arising from purchase of goods, materials, or services by the bidder.

All items shall be complete in place and bids shall include sales tax and all other applicable taxes and fees.

Witness our hands this _____ day of _____, 20____.

Signature of bidder, with business addresses and phone number.

Individual Contractor

Name: _____

Address: _____

Partnership

Name: _____

Business

Address: _____

By: _____

Partner.

Other

Partners: _____

Corporation

Name: _____

Business

Address: _____

By: _____,

President.

_____,
Secretary

(Corporate Seal)

Organized under the laws of the State of

**SECTION ONE
D - CONTRACT**

THIS CONTRACT is made and entered _____, 2024, by and between the **City of Lindsay**, hereinafter referred to as the "City" and _____, hereinafter referred to as the "Contractor".

IT IS HEREBY AGREED BETWEEN THE PARTIES AS FOLLOWS:

First. Contract Documents. The complete Contract includes all of the contract documents, to-wit: (a) Notice Inviting Sealed Bids; (b) Instructions to Bidders; (c) Bid Proposal; (d) Contract; (e) General Conditions; (f) Special Conditions; (g) Technical Provisions including the complete set of Plans for construction of City of Lindsay, **Tulare Road and Foothill Avenue Intersection and Pavement Rehabilitation Improvements Project**; (h) Performance Bond; (i) Payment Bond; (j) duly issued Addenda and all modifications incorporated in the foregoing documents before execution of the Contract Agreement.

The foregoing contract documents are hereby incorporated by reference and shall be deemed and considered as forming a part of this Contract Agreement as fully and to the same extent as if it were copied at length herein.

Second. The Work. The Contractor agrees to furnish all tools, labor, materials, equipment, transportation, services and supplies necessary to perform and complete in a good and workmanlike manner the construction of the work designated as City of Lindsay, **Tulare Road and Foothill Avenue Intersection and Pavement Rehabilitation Improvements Project** in strict conformity with and in exact accordance with, the Plans and Specifications and all other Contract Documents referred to above, which plans are on file at the offices of the Participants.

Third. Payment. The City agrees to pay and the Contractor agrees to _____ (\$ _____), according to the Bid Proposal at the time and manner set forth in these Specifications.

The foregoing shall be accepted by the Contractor as full and final compensation for work done under this contract.

Fourth. Commencement and Completion of the Work. The Contractor agrees to begin and complete the work within the time specified in the Notice Inviting Bids. Time is of the essence in completing the project.

Fifth LIQUIDATED DAMAGES. THE PARTIES AGREE THAT IT WOULD BE IMPRACTICAL AND EXTREMELY DIFFICULT TO FIX THE ACTUAL DAMAGE AND LOSS SUSTAINED BY THE CITY SHOULD THE CONTRACTOR FAIL TO COMPLETE THE WORK IN THE SPECIFIED TIME, THEREFORE, HE SHALL PAY TO THE CITY, AS LIQUIDATED DAMAGES, AND NOT IN THE NATURE OF A PENALTY, EIGHT HUNDRED DOLLARS (\$800.00) A DAY FOR EACH DAY DELAYED, WHICH SHALL BE DEDUCTED FROM ANY AMOUNT TO BE PAID UNDER THIS CONTRACT. THE AMOUNT OF LIQUIDATED DAMAGES HEREIN PROVIDED FOR REPRESENTS AN ENDEAVOR BY THE CITY AND THE CONTRACTOR TO MUTUALLY DETERMINE, FIX AND STATE AN AMOUNT THAT NEARS A REASONABLE RELATIONSHIP TO THE ACTUAL DAMAGE SUFFERED BY THE CITY SHOULD THE CONTRACTOR FAIL TO COMPLETE THE WORK WITHIN THE TIME SPECIFIED; PROVIDED THAT EXTENSIONS OF TIME WITH WAIVER OF FORFEITURE DUE TO DELAY MAY BE GRANTED AS PROVIDED IN SECTION 2-06 OF THE GENERAL CONDITIONS.

Sixth. Performance and Payment Bond. The Contractor agrees to furnish bonds guaranteeing the performance of this Contract and guaranteeing payment for all labor and material used under this Contract as required by the laws of the State of California, in forms approved by the Participants. The Performance Bond shall be for an amount not less than one hundred percent (100%) of the amount of this Contract and shall be conditioned on full and complete performance of the Contract, guaranteeing the work against faulty workmanship and materials for a period of one year after completion and acceptance. The Payment Bond shall be in an amount not less than one hundred percent (100%) of the amount of this Contract and shall be conditioned upon full payment of all labor and material entering into or incident to the work covered by this Contract. The Contractor agrees to furnish the bonds on the forms bound within these Specifications.

Seventh. Insurance. The Contractor agrees to carry Public Liability Insurance, Property Damage Insurance, Fire and Extended Coverage, Builder's All Risk and Worker Compensation Insurance in amounts and any other requirements as stated as required by the General Conditions.

Eighth. General Prevailing Rate of Per Diem Wages. Any contract entered into pursuant to this notice will incorporate the provisions of the U.S. Department of Labor Code and the State of CA Department of Industrial Relations with the prevailing rates of wages and apprenticeship employment standards established by both agencies.

Ninth. Compliance with Other Provisions of Law Relative to Public Contract. The City is a public agency in the State of California and is subject to the provisions of the Government Code, The Public Contract Code and the Labor Code of that State. It is stipulated and agreed that all provisions of law applicable to public contracts are a part of this Contract to the same extent as though set forth herein and will be complied with by the Contractor. These include, but are not limited to, the stipulation that eight hours' labor constitutes a legal day's work and the Contractor will, as a penalty to the City, forfeit twenty-five (\$25.00) for each workman employed in the execution of the Contract by the Contractor or any subcontractor for each calendar day during which such workman is required or permitted to work more than eight hours in violation of the provisions of Article Three, Chapter One, Part Seven, Division 2 of the California Labor Code, except as permitted by law.

Contractors are required by law to be licensed and regulated by the Contractors' State License Board. Any questions concerning a contractor may be referred to the Registrar, Contractors' State License Board, 1020 N Street, Sacramento, California 95814.

Tenth. Protecting of Public Utilities. The Contractor shall be compensated for the cost of locating, repairing damage not due to the failure of the Contractor to exercise reasonable care, in removing or relocating such utility facilities not indicated in the Plans and Specifications with reasonable accuracy and for equipment on the project necessarily idle during such work. The Contractor shall not be assessed liquidated damages for delay in completion of the project, which such delay was caused by the failure of the City or the owner of the utility to provide for removal or relocation of such utility facilities.

Nothing herein shall be deemed to require the City to indicate the presence of existing service laterals or appurtenances whenever the presence of such utilities on the site of the construction project can be inferred from the presence of other facilities, such as buildings, meter junction boxes, on or adjacent to the site of the construction; provided, however, nothing herein shall relieve the City from identifying main or trunk lines in the Plans and Specifications.

If the Contractor, while performing a contract, discovers utility facilities not identified by the City on the Plans or in the Specifications, he shall immediately notify the City and the utility in writing. The City,

where it is the owner, shall have the sole discretion to perform the repairs or relocation work or permit the Contractor to do such repairs or relocation work at a reasonable price. If the Contractor discovers hazardous waste or unusual physical conditions, he shall comply with the notice provisions of Public Contract Code Section 7104.

Eleventh. Submission of Bids: Agreement to Assign. In accordance with Section 4552 of the Government Code, the bidder shall conform to the following requirements. In submitting a bid to the City, the bidder offers and agrees that if the bid is accepted, it will assign to the City all rights, title, and interest in and to all causes of action it may have under Section 4 of the Clayton Act (15 U.S.C.) or under the Cartwright Act (Chapter 2, commencing with Section 16700, of Part 2 of Division 7 of the Business and Professions Code), arising from purchase of goods, materials, or services by the bidder.

Twelfth. Termination or Modification of Contract. Environmental Reasons. City may terminate, amend or modify the contract for environmental considerations. In the event of such termination, modification or amendment, the notification to the Contractor thereof will include a statement of the compensation payable, if any, by reason of such termination, modification or amendment. Any claims filed by the Contractor shall be in sufficient detail to enable the City to ascertain the basis and amount of said claims. The City will consider and determine the Contractor's claim and it will be the responsibility of the Contractor to furnish, within a reasonable time, such further information and details as may be required by the City to determine the facts or contentions involved in his claims. Failure to submit such information and details will be sufficient cause for denying the claims.

Upon final determination of any claim, the City shall then make and issue his final estimate in writing and within forty (40) days thereafter the City will pay the entire sum found due thereon, if any.

Thirteenth. Integration Clause. This Contract constitutes the entire agreement of the parties. No other agreements, oral or written, pertaining to the work to be performed under this Contract, exist between the parties. This Contract can be modified only by an agreement in writing signed by both parties.

IN WITNESS WHEREOF, this Contract is executed by the duly authorized agent(s) of the City and by the Contractor on the date set before the name of each.

CITY OF LINDSAY

By: _____
Mayor

(City Seal)
Attest:

City Clerk
City of Lindsay

Contractor

(Corporate Seal)

By: _____

Title

Approved as to Form:

City Attorney for City of Lindsay

Authorized Signatures for Corporate Contractors

The undersigned certifies that they are authorized to execute documents on behalf of the corporation:

_____	_____
President	Date

_____	_____
Secretary	Date

_____	_____
Treasurer	Date

(Corporate Seal)

**CONTRACTOR'S/SUBCONTRACTOR'S CERTIFICATION
CONCERNING STATE LABOR STANDARDS**

All contractors and subcontractors shall give the following certifications to the grantee and forward this certification to the grantee within ten days after the execution of any contract or subcontract.

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

B. "It is further agreed that, except as may be provided in Section 1815 of the California Labor Code, the maximum hours a worker is to be employed is limited to eight hours a day and 40 hours a week and the subcontractor shall forfeit, as a penalty, twenty-five dollars (\$25.00) for each worker employed in the execution of the subcontract for each calendar day during which a worker is required or permitted to labor more than 8 hours in any calendar day or more than 40 hours in any calendar week."

Contractor/Subcontractor

By: _____

Typed Name and Title

CERTIFICATION OF NONSEGREGATED FACILITIES

The construction contractor certifies that he does not maintain or provide for his employees any segregated facilities at any of his establishments and that he does not permit his employees to perform their services at any location, under his control, where segregated facilities are maintained. The construction contractor certifies further that he will not maintain or provide for his employees any segregated facilities at any of his establishments and that he will not permit his employees to perform their services at any location, under his control, where segregated facilities are maintained. The construction contractor agrees that a breach of his certification is a violation of the Equal Opportunity clause in this contract. As used in this certification, the term “segregated facilities” means any waiting rooms, work areas, restrooms and washrooms, restaurants and other eating areas, parking lots, drinking fountains, recreation or entertainment areas, transportation and housing facilities provided for employees which are segregated by explicit directive or are in fact segregated on the basis of race, creed, color, or national origin, because of habit, local custom, or otherwise. The construction contractor agrees that (except where he has obtained identical certification from proposed subcontractors for specific time periods) he will obtain identical certifications from proposed subcontractors prior to the award of subcontracts exceeding \$10,000 which are not exempt from the provisions of the Equal Opportunity clause, and that he will retain such certification in his files.

Signature

By: _____

Title

BOND FOR FAITHFUL PERFORMANCE

KNOW ALL MEN BY THESE PRESENTS:

That we, _____, hereinafter referred to as "Contractor", as Principal, and _____ as Surety, are held firmly bound unto the City of Lindsay in the sum of _____ dollars (\$ _____), lawful money of the United States of America, for the payment of which sum well and truly to be made, we bind ourselves, jointly and severally, firmly by these presents.

The condition of the foregoing obligation is such that:

WHEREAS, said Contractor has been awarded and is about to enter a Contract with the City of Lindsay for furnishing all materials, equipment and labor and in the constructing of City of Lindsay, **Tulare Road and Foothill Avenue Intersection and Pavement Rehabilitation Improvements Project** for said City, and is required by said City to give this bond in connection with the execution of said Contract:

NOW, THEREFORE, if the said Contractor shall well and truly do and perform all the covenants and obligations of said Contract on his part to be done and performed at the times and in the manner specified therein, then this obligation shall be null and void, otherwise it shall be and remain in full force and effect:

PROVIDED, that any alternations in the work to be done, or the materials to be furnished, which may be made pursuant to the terms of said Contract, shall not in any way release either the Contractor or the Surety thereunder, nor shall the extension of time granted under the provisions of said contract release either the Contractor or the Surety, and notice of such alternations or extensions of the Contract is hereby waived by the Surety.

WITNESS our hands this _____ day of _____, 20____.

(Corporate Seal)

Contractor/Principal

By: _____

Title

(Corporate Seal)

Surety

By: _____

Title

Approved as to Form:

City Attorney for City of Lindsay

BOND FOR MATERIALS AND LABOR

KNOW ALL MEN BY THESE PRESENTS:

That we, _____, hereinafter referred to as "Contractor", as Principal, and _____ as Surety, are held firmly bound unto the City of Lindsay in the sum of _____ dollars (\$ _____), lawful money of the United States of America, for the payment of which sum well and truly to be made, we bind ourselves, jointly and severally, firmly by these presents.

The condition of the above obligation is such that:

WHEREAS, said Contractor has been awarded and is about to enter a Contract with the City of Lindsay for furnishing all materials, equipment and labor and in the constructing of City of Lindsay, **Tulare Road and Foothill Avenue Intersection and Pavement Rehabilitation Improvements Project** for said City, and is required by said City to give this bond in connection with the execution of said Contract:

NOW, THEREFORE, if the said Principal as Contractor in said contract, or its, his or their subcontractors fails to pay for any materials, provisions, provider or other supplies, or teams, used in, upon, or for amounts due under the Unemployment Insurance Act with respect to such work or labor, said Surety will pay for the same, in an amount not exceeding the sum specified above, and also, in case suit is brought upon this bond, a reasonable attorney's fee to be fixed by the Court. This bond shall inure to the benefit of any and all persons entitled to file claims as under Section 1192.1 of the Code of Civil Procedure of the State of California.

PROVIDED, that any alternations in the work to be done, or the materials to be furnished, which may be made pursuant to the terms of said Contract, shall not in any way release either the Contractor or the Surety thereunder, nor shall the extension of time granted under the provisions of said contract release either the Contractor or the Surety, and notice of such alterations or extensions of the Contract is hereby waived by the Surety.

WITNESS our hands this _____ day of _____, 20_____.

(Corporate Seal)

Contractor/Principal

By: _____

Title

(Corporate Seal)

Surety

By: _____

Title

Approved as to Form:

City Attorney for City of Lindsay

CERTIFICATE OF OWNER'S ATTORNEY

I, the undersigned, _____ the duly authorized and acting
(Please Type)

legal representative of **City of Lindsay**, do hereby certify as follows:

I have examined the attached CONTRACT(s), Performance and Payment BONDS and insurance certificates and the manner of execution thereof, and I am of the opinion that each of the aforesaid agreements has been duly executed by the proper parties thereto acting through their duly authorized representatives; that said representatives have full power and authority to execute said agreements on behalf of the respective parties named thereon; and that the foregoing agreements constitute valid and legally binding obligations upon the parties executing the same in accordance with terms, conditions, and provisions thereof. I also am of the opinion that the CONTRACTOR's insurance coverage complies with the requirements of the CONTRACT.

(Attorney's Signature)

DATE: _____

SECTION TWO
GENERAL CONDITIONS
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SECTION TWO

GENERAL CONDITIONS

2-01. Definition of Terms:

Terms used herein are defined as follows and as in the “Glossary, Water and Wastewater Control Engineering” proposed by the Joint Committee representing the American Public Health Association, American Society of Civil Engineers, American Water Works Association, and Water Pollution Control Federation.

- a. Addendum: A supplement of any of the Contract Documents issued, in writing, after advertisement of, but prior to the opening of bids for a Contract.
- b. Advertisement: The public announcement, as required by law, inviting bids for work to be performed or materials to be furnished.
- c. Agency: City of Lindsay, California, Party of the First Part of this Contract, or duly authorized agent of the Agency.
- d. Award: The formal action of the governing body in accepting a proposal.
- e. Bid Security: Refers to the certified check, cashier’s check, or surety bond, which is required to be submitted with the Proposal to insure execution of the Contract and the furnishing of the required bonds.
- f. Bidder: Any individual, firm, co-partnership or corporation, submitting a proposal for the work contemplated, acting directly or through a duly authorized representative.
- g. Change Order: A written order issued by the Agency ordering the Contractor to make changes in the work or to perform extra work, and setting forth conditions for payment and adjustment in time of completion.
- h. Contract: The written instrument executed by the Contractor and the Agency by which the Contractor is bound to furnish all labor, equipment and materials and to perform the work specified, and by which the Agency is obligated to compensate the contractor therefore at the prices set forth therein. The Contract Documents are herewith by reference made a part of the Contract as if fully set forth therein.
- i. Contract Documents: The works “Contract Documents” include the Notice Inviting Bids, Information for Bidders, General Conditions, Special Conditions, Specifications, Measurement and Payment, Proposal, Contract Payment Bond, Performance Bond, Plans and Addenda thereto.
- j. Contractor: The party of the second part, or his duly authorized agent, entering into contract with the Agency for performance of the work required by the Specifications. The Contractor is referred to throughout the contract documents as if of a singular number and masculine gender.
- k. Days: Unless otherwise designated, days will be understood to mean calendar days.
- l. District: The City of Lindsay or duly authorized agent of the District.
- m. Engineer: Whenever the Engineer is referred to, it is meant to mean City of Lindsay Engineer, limited in each case to the particular duties entrusted to him, or them.

n. Inspector: Whenever the Inspector is referred to, it is meant to mean the City of Lindsay.

o. Labor and Material Bond: A bond furnished by the Contractor and an approved surety, conditioned upon the Contractor promptly paying all monies due persons supplying labor or material to be used in protection of the Contract.

p. Materials: The word “materials” includes, in addition to material incorporated into the project, equipment and other material consumed in the performance of the work.

q. Notice of Award: A directive issued by the Agency notifying the Bidder that his proposal for the work contemplated has been accepted.

r. Notice to Proceed: A directive issued by the Agency authorizing the Contractor to start the work or improvements required in the Contract.

s. Faithful Performance Bond: A bond furnished by the Contractor and an approved surety, conditioned on the faithful performance and completion of the work covered by the Contractor.

t. Plans: The approved detail drawings, or exact reproduction thereof, listed in the detail Specifications, which shows location, character, dimensions and details of the work to be done and which is to be constructed as a part of this Contract.

u. Specifications: All written directions, provisions and requirements governing the procedure to be followed in connection with the performance and execution of the work, the quantities and qualities of materials to be used and the method of measurement of the quantities of work.

v. Subcontractor: A person, firm, or corporation supplying labor and materials or labor for work at the site of the project as an agent of the Contractor.

w. Surety: The word “surety” refers to the person, firm or corporation with whom the Contractor joins in assuring the liability for their performance of the contract in accordance with the Plans and Specifications by issuing the bonds required by law.

x. Work: The word “work” or “improvement” includes any or all of the improvements mentioned and authorized to be made, and the construction, reconstruction and repair of all, or any portion of such improvements, and all labor, services, incidental expenses, and material necessary or incidental thereto.

y. The terms approved, directed, satisfactory, acceptable, proper, required, necessary, and or equal, shall be defined as meaning as approved, directed, satisfactory, accepted, acceptable, proper, required, necessary, or equal in the opinion of the Engineer.

2-02. Abbreviation.

The abbreviations used in the Plans and Specifications are abbreviations, the meaning of which are established by general usage, throughout the industry, those shown on the standard symbols of the Plans, and those defined hereinafter.

2-03. Supplementary Specifications.

Wherever reference is made within these documents to certain standard specifications, the reference shall be construed to mean the standards, with all subsequent amendments, changes, or additions as thereafter adopted and published that are in effect at the date of approval of the Plans and Specifications.

AASHTO	American Association of State Highway and Transportation Officials (formerly AASHO)
ACI	American Concrete Institute
AISC	American Institute of Steel Construction
AISI	American Iron and Steel Institute
ANSI	American National Standards Institute
ASME	American Society of Mechanical Engineers
ASTM	American Society for Testing and Materials
AWG	American Wire Gauge
AWS	American Welding Society
AWWA	American Water Works Association
CRSI	Concrete Reinforcing Steel Institute
FS	Federal Specification
SSPC	Steel Structures Painting Council

2-04. Subcontractors and Contracts.

No subcontractor will be recognized as such, and all persons engaged by the Contractor for the furnishing of labor, materials, equipment or any one or more of them, will be considered as employees of the Contractor, except regarding insurance as provided in paragraph 2-14. hereinafter.

Subcontractors may be permitted, to such extent as shall be shown to be necessary of definitely advantageous to the principal Contractor in the prosecution of the work, and in the opinion of the Engineer without injury to the interests of the Agency. The subcontract shall contain a reference to the agreement and all parts thereof shall be made a part of such subcontract insofar as applicable to the work covered thereby. All work and materials furnished by the subcontractor shall be guaranteed by the Contractor and the Agency will hold the Contractor responsible therefore.

2-05. Testing and Rejection.

a. Operational and Field Testing. After all construction is complete and before acceptance, the Contractor shall perform field tests as called for in the Technical Provisions. The Contractor shall demonstrate to the Agency the operation of the facilities for proper sequence of operation and satisfactory performance of the individual components. Any improper operation of the system or improper, neglected or faulty construction shall be repaired or corrected to the satisfaction of the Engineer. The Contractor shall make changes, adjustments or replacement of equipment as may be required to make some comply with the Specifications, or replace any defective parts or material.

b. Tests. Materials requiring tests are so specified in the Technical Provisions.

c. Defective Work or Materials. The inspection of the work shall not relieve the Contractor of any of his obligations to fulfill his contract, and defective work shall be made good, and unsuitable materials may be rejected, notwithstanding that such work and materials have been previously overlooked by the Engineer and accepted. If the work, or any part thereof, shall be found defective at any time prior to the final acceptance of the whole work, the Contractor shall forthwith make good such defect, without additional compensation, in a manner satisfactory to the Engineer.

Should it be considered necessary or advisable for the Agency, at any time before final acceptance of the work, to make an examination of work already completed by removing or exposing the work, the Contractor shall, on request, promptly furnish all necessary facilities, labor and materials. If such work is found to be defective in any respect due to fault of the Contractor or any of his subcontractors, he shall defray all the expenses of such examinations and of satisfactory reconstruction. If, however, such work is found to meet the requirements of this Contract, the additional cost of labor and materials necessarily involved in the examination and replacement, plus fifteen percent (15%) shall be allowed the Contractor.

All costs for retesting and re-inspection which are necessitated by defective materials and/or workmanship shall be at the sole expenses of the Contractor.

2-06. Performance of Work.

The work shall be commenced within ten (10) calendar days from the date of the Notice to Proceed and shall be completed by the Contractor within the number of calendar days stipulated in the Contract from the commencement of work. If the work is not completed in accordance with the foregoing, the Agency shall have the right to extend the time for completion if it determines such extension to be in the best interests of the Agency. In case the Agency decides to extend the time limit for the completion of the work, it shall have the further right to charge the Contractor, his executors, administrators, heirs, assigns or sureties, all or any part as the Agency may deem proper, of the actual costs of engineering inspection, supervisors, incidental and other overhead expenses, that are directly chargeable to the Contract and that accrue during the period of such extension, and to deduct the amount thereof from the final payment for the work. However, the cost of the final survey and the preparation of the final estimate will not be included in such charges.

If the work is not completed by the Contractor in the time specified, or within any period of extension as above-authorized, it is understood that the Agency, will suffer damage and it being impractical and extremely difficult to determine the amount of actual damage, it is agreed that the Contractor shall pay to the Agency as fixed and liquidated damages and not as a penalty, the sum specified in the Contract Agreement for each calendar day of delay until the work is completed and accepted and the Contractor and his surety shall be liable for the amount thereof, provided that the Contractor shall not be charged liquidated damages because of any delays in the completion of the work due to unforeseeable causes beyond the control and without the fault or negligence of the Contractor (including, but not restricted to, acts of God, or of the public enemy, acts of the Government, acts of the Agency, fires, floods, epidemics, quarantine restrictions, strikes, freight embargoes, and unusually severe weather (such as rain where the contractor's normal operational level is impeded)). The Contractor shall, within ten (10) days from the beginning of any such delay, notify the Engineer in writing the cause of the delay; whereupon the Agency shall ascertain the facts and the extent of the delay and extend the time for completing the work when in its judgment the findings of fact justify such an extension; and its findings of fact thereby shall be final and conclusive on the parties thereto.

In the event of a dispute between the parties as to performance of the work, the interpretation of this contract, or payment or nonpayment for work performed, the parties shall attempt to resolve the dispute. If the dispute is not resolved, Contractor agrees to continue the work diligently to completion and will neither rescind this

contract nor seek to stop the Contract by order of a court of competent jurisdiction until after the project has been completed, or to arbitration as provided in Paragraph 3-15 of the Special Conditions.

The Contractor must ascertain to his own satisfaction the scope of the project and the nature of any other contracts that have been or may be awarded by the Agency in the project to the end that the Contractor may perform the contract in the light of such other contract, if any. Nothing herein contained shall be interpreted as granting to the Contractor exclusive occupancy of the site of the project. The Contractor shall not cause any unnecessary hindrance or delay to any other contractor working on the project. If the performance of any contract for the project is likely to be interfered with by the simultaneous execution of some other contract or contracts, the Agency shall decide which Contractor may proceed. The Agency shall not be responsible for any damages suffered or extra costs incurred by the Contractor resulting directly, or indirectly from the award or performance of any other contract or contracts on the project, or caused by any decision or omission of the Agency respecting the order of precedence in the performance of the contracts awarded for completion of the project.

2-07. Federal Hindrance.

In entering into this contract, it is clearly understood by all parties hereto that conditions may subsequently arise resulting from, connected with, or growing out of any war, in which the United States may be engaged, or any national emergency or condition created directly or indirectly by or for national defense and which are entirely beyond the control of either party, that may hinder, delay or render impossible the performance of this contract in accordance with its terms and conditions.

It is therefore mutually understood and agreed, anything herein contained to the contrary notwithstanding, that in the event the Contractor shall be prevented from performing the contract or any part thereof by reasons of the conditions above stated, the following procedure shall govern.

The Contractor shall, in writing, notify the Agency of his inability to perform, stating in full the reason therefore and the probable durations of such inability. If required, he shall also submit proof or evidence in support of this claim or inability to perform.

If it shall appear to the satisfaction of the Agency that the cause of inability to perform arose after the contract was entered into and is beyond the control of the Contractor, the Agency may:

- a. If lawfully within its power, remove the cause which prevents performance; or
- b. Suspend this contract until the cause of inability to perform is removed; or
- c. With the consent of the Contractor, renegotiate or amend this contract by extending the time of performance or by making changes in the character of the work, or in the materials or equipment required in order to enable performance of the contract; or
- d. Waive performance of that part of the Contract which is impossible, or supply substitute materials for those unavailable. Where this remedy is resorted to, the payment due the Contractor shall be diminished to the extent of the work not required to be supplied, based on a written agreement.

If none of the foregoing procedures are adopted by the Agency within thirty (30) days after the Agency is satisfied and so finds that the Contractor is unable to perform for the reason above stated, then either party hereto may, without incurring any liability, elect to declare this contract terminated upon the going of impossibility of performance. Upon such termination, the Contractor shall be entitled to proportionate compensation at the contract price for such portion of the contract as may have been performed.

2-08. Suspension of Contract.

If the work to be done under the Contract shall be abandoned by the Contractor, or if the Contractor shall make a general assignment for the benefit of his creditors or be adjudicated as bankrupt, or a receiver of his property or business be appointed by a court of competent jurisdiction, or if this Contract shall be assigned by him otherwise than as hereinafter specified, or if at any time the Engineer shall be of the opinion that the performance of the Contract is unnecessarily delayed, or that the Contractor is willfully violating any of the conditions or covenants of the Contract or of the Specifications, or is executing same in bad faith or not in accordance with the terms thereof, or if the work is not fully completed within the time named in the Contract for its completions, or approved extension of such time, the Agency may, by written notice, instruct the Contractor to discontinue all work, or any part thereof, under the Contract.

When such written notice is served upon the Contractor, he shall immediately discontinue the work or such part thereof as is covered by the notice and shall not resume the same except by written instruction from the Agency.

In any case, the Agency may take charge of the work and complete it by whatever method it deems expedient. In doing so, the Agency may take possession of any materials, plant, tools, equipment, supplies, and property of every kind provided by the Contractor for the purpose of his work. The Contractor shall not be entitled to receive any payments after the date of said notice. If upon completion of the work, the total cost of the Agency in connection therewith from the date of said notice to the date of completion exceeds the amount which would have been due the Contractor if the Contract had been completed by him, he shall pay the amount of such excess to the Agency; and in case such total cost shall be less than the amount which would have been payable under the Contract if the same had been completed by the Contractor, then the difference shall be paid to the Contractor in the same manner as the final payment under the Contract.

The Agency also reserves the right of suspending the whole or any part of the work if the Engineer shall deem it for the interest of the Agency to do so and, unless otherwise provided in the Technical Provisions, the Contractor shall have not claim for damages or additional compensation on account of such suspension, but will be entitled to so much additional time wherein to complete the Contract as determined in accordance with paragraph 2-06. herein before.

2-09. Protests.

If the Contractor considers any work demanded of him to be outside the requirements of the Contract, or if he considers any instructions, ruling or decision of the Agency or Engineer, or of any inspection, to be unfair, he shall, within ten days after any such demand is made, or instruction, ruling, or decision is given, file a written protest with the Engineer, stating clearly and in detail his objections and the reasons therefore. Except for such protests and objections as are made of record in the manner and within the time stated herein, the Contractor shall be deemed to have waived and does hereby waive all grounds for protests or objections to such demands, instruction, ruling, or decision of the Engineer.

2-10. Right-of-Way.

The proposed improvements will be installed on public right-of-way and on easements secured for project purposes. The Contractor will be responsible for any encroachments in connection with the required construction pursuant to Section 3-13.

2-11. Loss or Damage.

The Agency shall not be answerable or accountable in any manner for any loss or damage that may happen to the work or any part thereof, or to any of the materials or other things used in performing the work, or for injury to any person or persons, either workmen or to the public, or for damage to any property for any cause which might have been prevented by the Contractor. Against all these injuries or damages to persons and property, the Contractor shall properly guard. The Contractor shall be responsible for any liability imposed by law for any damage to any person or property resulting from defects or obstructions, or from any cause whatsoever during the process of the work, or at any time before final acceptance, and shall indemnify, defend and save harmless the Agency from all suits or actions of every description brought for, or on account of, any injuries or damages received or sustained by any person or persons by reason of the construction of work, or any negligence in guarding the same, of improper materials used in its construction, or of any act of omission of the Contractor.

2-12. Protection of Property and Utilities.

- a. Protection of Property. The Contractor shall conduct his operation in such a manner as to avoid injury or damage to adjacent property, improvements, or facilities.

Buildings, trees, ground cover and shrubbery that are not designated for removal, pole lines, fences, guard rails, guide posts, culvert and project markers, signs, pavement, structures, conduits, pipelines and other improvements within or adjacent to the proposed improvements shall be protected from injury or damage. The Contractor shall provide and install suitable safeguards to protect such objects from injury or damage, which objects, if injured or damaged, by reason of the Contractor's operations, shall be replaced or restored to a condition as good as when entered upon the work, or as required by the Specifications.

The Contractor shall be responsible for all damage to streets, roads, highways, canals, ditches, embankments, bridges, culverts or other public or private property, which may be caused by transporting equipment, materials, or men to or from the work. The Contractor shall make satisfactory and acceptable arrangements with the property owner over the damaged property concerning its repair or replacement.

- b. Protection of Utilities and Substructures. A diligent search of known utility records has been made in the endeavor to indicate on the plans the nature and location of all utilities which exist within the limits of the work. However, the accuracy or completeness of the utilities on the Plans is not guaranteed. Utility structures and/or service connections to adjacent property may or may not be shown on the Plans.

It shall be the responsibility of the Contractor, before commencing any excavation, to contact all possible owners of utilities within the work area and to ascertain from records or otherwise, the existence, position and ownerships of all utilities, utility structures and service connections. No error or omission regarding said utilities shall be construed to relieve the Contractor from his responsibility in protecting all such facilities.

Utilities with facilities in the area of the work covered by these Specifications include:

- | | |
|--|---|
| 1. GAS LINES:
Southern California Gas Company
5000 W. Cypress
Visalia, CA 93292
Phone 559-739-2234 | 2. UNDERGROUND SERVICE
ALERT:
800-227-2600 or 411 |
| 3. TELEPHONE SERVICE: | 4. ELECTRIC POWER: |

Verizon
710 S. Kaweah
Exeter, CA 93221
Phone 800-483-4000

Southern California Edison Co.
2425 S. Blackstone
Tulare, CA 93274
Phone 559-685-3268

5. IRRIGATION LINES:

Lindsay-Strathmore Irrigation District
23260 Round Valley Road
Lindsay, CA 93247
Phone 559-562-2581

Lindmore Irrigation District
240 West Lindmore Street
Lindsay, CA 93247
Phone 559-562-2534

5. WATER, SEWER & STORM DRAIN LINES:

City of Lindsay
251 East Honolulu
Lindsay, CA 93247
Phone 559-562-5945

6. CABLE T.V.:

Charter Communications
151 North Main Street
Porterville, CA 93257
559-560-5312

Unless otherwise indicated on the Plans or in these Specifications or unless otherwise cared for by the Agency thereof, all water, gas, oil, or irrigation lines; lighting power, or telephone conduits; sewer lines, house connection lines; sprinkling systems, and other subsurface structure of any nature along the work shall be maintained by the Contractor at his own expense and shall not be disturbed, disconnected, or damaged by him during the progress of the work. Should the Contractor in the performance of the work disturb, disconnect, or damage any of the above, all expenses of whatever nature arising from such disturbance, or the replacement or repair thereof shall be borne by the Contractor.

The Contractor shall be compensated for the cost of locating, repairing damage not due to the failure of the Contractor or exercise of reasonable care, in removing or relocating such utility facilities not indicated on the Plans and in the Specifications with reasonable accuracy and for equipment on the project necessarily idle during such work. The Contractor shall not be assessed liquidated damages for delay in completion of the project when such delay was caused by the failure of the Agency or the owner of the utility to provide for removal or relocation of such utility facilities.

Nothing herein shall be deemed to require the Agency to indicate the presence of existing service laterals or appurtenances whenever the presence of such utilities on the site of the construction project can be inferred from the presence of other visible facilities, such as building, meter junction boxes, on or adjacent to the site of the construction; provided, however, nothing herein shall relieve the Agency from identifying main or trunk lines on the Plans and in the Specifications.

If the Contractor, while performing a contract, discovers utility facilities not identified by the Agency in the contract Plans or Specifications, he shall immediately notify the Agency and the utility in writing. The public utility, where they are the owner, shall have the sole discretion to perform the repairs or relocation work or permit the Contractor to do such repairs or relocation work at a reasonable price.

In any case, should it be necessary to move or temporarily maintain the property of any public utility or other property, the cost of which because of the terms of any franchise or for any other reason must be borne by the Agency thereof, such Agency will, upon proper application by the Contractor, be notified by the Engineer to move or temporarily maintain such property within a specified reasonable time, and the Contractor shall not interfere with said property until after the expiration of the time specified.

If the Contractor discovers any of the following three conditions during excavation or trenching, the conditions shall be reported to the Engineer before the condition is disturbed:

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

(2) Subsurface or latent physical conditions differing from those indicated.

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

The Engineer shall promptly investigate any such report to determine if it justifies an increase or decrease in the Contractor's cost, or a change in the time required for performance of the work. Any dispute with the decision of the Engineer shall not excuse Contractor from proceeding on the basis of established completion dates, but Contractor shall be entitled to contest the Engineer's decision in the normal course of claims resolution as provided for in this Contract.

The right is reserved to the Agency, to governmental agencies, and to owners of public utilities and franchises to enter upon any street, alley, right-of-way, or easement for the purpose of maintaining or of making necessary repairs or changes in property made necessary by the work. The Agency reserves the right during the progress of the work, upon determination of the actual position of the existing utilities and structures, to make changes in the grade or alignment of the pipelines wherever by so doing, the necessity for relocation of such utility structure will be avoided. Such changes will be ordered by the Engineer.

c. Removal, Relocation or Protection of Existing Utilities. In accordance with the provisions of Section 4215 of the California Government Code, the contractor shall not be assessed liquidated damages for delay in completion of the project, when such delay was caused by the failure of the public agency or owner of the utility to provide for the removal or relocation of such utility facilities.

2-13. Observance of Laws and Regulations.

The address given in the Contractor's proposal on which the contract is founded, is hereby designated as the place to which all notices, letters, and other communications to the Contractor shall be mailed or delivered, except that said address may be changed by the Contractor by so notifying the Engineer and Agency in writing. This shall not be construed to preclude the service of any notice, letter, or other communication upon the Contractor personally.

a. Patents or Copyrights. The Contractor shall hold and save the Agency harmless from liability of any nature and kind including costs and expenses, for or on account of any copyrighted or un-copyrighted composition, secret process, patented or unpatented invention, article, or applicant, manufactured, furnished, or used by him in the performance of this contract, including their use by the Agency unless otherwise specifically stipulated in the contract.

b. Labor Standard. Subject to the provisions of Section 1810 to 1817, both inclusive, of the California Labor Code, the time of service of any laborer, workman, or mechanic employed on the work shall be limited and restricted to eight hours during any one calendar day, except as otherwise provided in said sections, and the Contractor shall forfeit, as a penalty to the Agency, \$25.00 for each laborer, workman, mechanic employed in the execution of this Contract by him or any subcontractor under him, for each calendar day during which such laborer, workman, or mechanic is required or permitted to labor more than eight hours in violation of the provisions of the California Labor Code.

c. Bonds. Upon the execution of this Contract, the Contractor shall furnish to the Agency the bonds required in these Specifications. Said bonds to be in substantially the forms hereto attached and with sureties approved by the Agency. The premium upon all such bonds shall be paid by the Contractor. The Agency will approve any surety company which, at the time of execution of this Contract, is listed in the latest published U.S. Treasury Department list of "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds as Acceptable Reinsuring Companies."

The Contractor shall, and the Contractor does, hereby assume all risks of damage to this Work and material from fire, earthquake, storm, and/or other causes prior to the completion and acceptance of the Contractor's Work, and shall at the Contractor's own cost and expense, repair and/or replace any work or materials damaged or destroyed.

d. Compliance with Laws and Regulations. The Contractor shall keep himself informed of all laws, ordinances and regulations in any manner affecting those employed on the work, or the materials used in the work, or in any way affecting the conduct of the work and of all orders and decree of bodies or tribunals having any jurisdiction or authority over the same. He shall, at all times, observe and comply with all such applicable laws, ordinances, regulations, orders and decrees in effect or which may become effective before completion of this contract; and shall protect and indemnify the Agency against any claim of liability arising from or based upon the violation of any such law ordinance, regulation, order or decree, whether by himself, his employees, or his subcontractors.

Unless otherwise explicitly provided in these Specifications, all permits and licenses necessary to the prosecution of the work shall be secured by the Contractor at his own expenses, and he shall pay all taxes properly assessed against his equipment or property used in connection with the work.

2-14. Insurance Requirements for Contractors.

The Contractor shall procure and maintain for the duration of the contract 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 the Contractor, his agents, representatives, employees, or subcontractors.

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 11 88)
2. Insurance Services Office form number CA 00 01 06 92 covering Automobile Liability, code 1 (any auto).
3. Workers' Compensation insurance as required by the State of California and Employer's Liability Insurance.
4. Course of Construction insurance covering for all risk of loss.

B. Minimum Limits of Insurance. Contractor shall maintain limits no less than:

1. General Liability: \$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 accident for bodily injury and property damage.
3. Employer's Liability: \$1,000,000 per accident for bodily injury or disease.
4. Course of Construction: Completed value of the project.

C. Deductibles and Self-Insured Retentions. Any deductibles or self-insured retentions must be declared to and approved by the City. At the option of the City, either: the insurer shall reduce or eliminate such deductibles or self-insured retentions as respects the City, its officers, officials, employees and volunteers;

or the Contractor shall provide a financial guarantee satisfactory to the City guaranteeing payment of losses and related investigations, claim administration and defense expenses.

D. Other Insurance Provisions. The general liability and automobile liability policies are to contain, or be endorsed to contain, the following provisions:

1. The City, its officers, officials, employees, and volunteers are to be covered as insured with respect to liability arising out of automobiles owned, leased, hired or borrowed by or on behalf of the contractor; and with respect to liability arising out to work or operations performed by or on behalf of the Contractor including materials, parts or equipment furnished in connection with such work or operations. General liability coverage can be provided in the form of an endorsement to the Contractor's insurance, or as a separate owner's policy.
2. For any claims related to this project, the Contractor's insurance coverage shall be primary insurance as respects the City, its officers, officials, employees, or volunteers. Any insurance or self-insurance maintained by the City, its officers, officials, employees, or volunteers shall be excess of the Contractor's insurance and shall not contribute with it.
3. Each insurance policy required by this clause shall be endorsed to state that coverage shall not be canceled by either party, except after thirty (30) days' prior written notice by certified mail, return receipt requested, has been given to the City.

Course of construction policies shall contain the following provisions:

1. The City shall be named as loss payee.
2. The insurer shall waive all rights of subrogation against the City.

E. Acceptability of Insurers. Insurance is to be placed with insurers with a current A.M. Best's rating of no less than A: VII.

F. Verification of Coverage. Contractor shall furnish the Entity with original certificates and amendatory endorsements effecting coverage required by this clause. The endorsements should be on forms provided by the City or on other than the City's forms, provided those endorsements or policies conform to the requirements. All certificates and endorsements are to be received and approved by the City before work commences. The City reserves the right to require complete, certified copies of all required insurance policies, including endorsements affecting the coverage required by these specifications at any time.

G. Subcontractors. Contractors shall include all subcontractors as insured under its policies or shall furnish separate certificates and endorsements for each subcontractor. All coverage for subcontractors shall be subject to all of the requirements stated herein.

2-15. Construction Facilities.

a. Power. The Contractor will make arrangement for power and shall pay for all power and installation thereof, required for the execution of the work required to complete this contract.

b. Sanitary Facilities. The Contractor shall provide temporary chemical toilet facilities for the use of all workmen. The toilet building shall be maintained in a sanitary condition at all times and at the completion of construction shall be removed from the site. Pit-type privies shall not be used.

c. Telephone. Any telephone facilities which the Contractor may install in connection with the work shall be made available for use of the Engineer or his representatives without charge; except that any toll charges incurred by the Engineer shall be paid by the Engineer.

d. Storage. The Contractor shall be responsible for the storage of all materials, equipment and so on, which are used in the work. All materials, equipment and articles at the site shall be adequately housed

by the Contractor or otherwise protected by him against deterioration and damage. All costs incurred through the failure to provide protection shall be borne by the Contractor during the course of the work.

e. Transportation Facilities. The Contractor shall investigate the ability of transportation facilities and shall make all arrangements necessary for the delivery of materials to be used on the work. The Contractor shall make his own investigation on the condition of available public roads, access right-of-way, and of restrictions, bridge load limits and other limitations affecting transportation and ingress and egress at the site of the work.

f. Dust Control. The Contractor shall refer to Section Three, Dust Control, of the Technical Provisions of these specifications.

g. Drinking Water. The Contractor shall supply pure, cool, drinking water with individual drinking cups or a sanitary bubbler fountain.

h. Safety Measures and Public Conveniences. The Contractor shall provide for the protection of all persons and property at all times. The Contractor shall comply with the recommendations for safe construction methods from the "Manual of Accident Prevention in Construction", published by the Associated General Contractors of America, Inc., to the intent that such provisions do not conflict with the applicable laws. Machinery and equipment shall be guarded in accordance with the requirements of the "Manual of Accident Prevention in Construction", published by the Associated General Contractor of America, Inc., to the extent that such provisions do not conflict with the applicable laws.

The Contractor shall take all necessary measures to protect the work and prevent accidents during the construction. He shall provide and maintain sufficient night lights, barricades, guards, temporary sidewalks, temporary bridges, danger signals, watchmen and necessary appliances and safeguards to properly safeguard life and property. He shall also protect all excavations, equipment and materials with barricades and danger signals so that the public will not be endangered.

The Contractor shall so conduct his operations as to offer the least possible obstruction and inconvenience to traffic, and shall have under construction no greater amount of work than he can handle properly with due regard to the rights of the public. Where existing streets are not available for detours, all traffic shall be permitted to pass through the work with as little and inconvenience as possible, unless otherwise authorized by the Engineer.

The Contractor shall be responsible for all damage or injury which may be caused on any property by trespass by the Contractor or his employees in the course of their employment, whether the said trespass was committed with or without the consent or knowledge of the Contractor.

i. Representative for Emergencies. The Contractor shall file with the Engineer, the names, addresses, and telephone numbers of representatives who can be contacted, at any time, in case of emergency. The representatives must fully be authorized and equipped to correct unsafe or excessively inconvenient conditions on short notice.

2-16. Superintendence and Labor Competency.

Whenever the Contractor is not present on any part of the work where it may be desired to give direction, orders given by the engineer shall be received and obeyed by the superintendent or foreman as authorized representative who may be in charge of the work. Any order given by the Engineer, not otherwise required be in writing by the Specifications, will, on request of the Contractor, be giving or confirming in writing. An authorized representative of the Contractor shall be at the site of the work during working hours.

All superintendents and foremen shall be English-speaking. Any superintendent, foreman, laborer, or other person employed on the work by the Contractor who fails or refuses to perform the work in the manner specified herein, shall be discharged immediately and such person shall not again be employed on the work. When required in writing by the Engineer, the Contractor or any subcontractor shall discharge any person who is, in the opinion of the Engineer, incompetent, unfaithful, disorderly, or otherwise unsatisfactory. Such discharge shall not be the basis of any claim for compensation or damage against the Agency.

2-17. Work Site Maintenance.

- a. Access to Property Adjacent to Work. The convenience of abutting property owners shall be provided for as far as practicable. Convenient access to driveways, houses and buildings adjoining the work shall be maintained and temporary approaches to intersecting streets and alleys shall be provided and kept in good condition. When a section of surfacing, pavement, or a structure has been completed, it shall be opened for use by traffic at the request of the Engineer. In order that unnecessary delay to the traveling public may be avoided, the Contractor, when so ordered by the Engineer or City, shall provide competent flagman whose sole duty shall consist of directing traffic either through or around the work.
- b. Water Hydrant and Utility Valves. The Contractor shall not prevent the free access to water, valves, water hydrants, or gas valves.
- c. Rights to Access. The Contractor shall, at all times, provide proper facilities for access and inspection of the work by the Engineer, his assistants, inspectors, agents, and representatives of public agencies having jurisdiction.

2-18. Use of Explosives.

Explosives shall not be used on this project.

2-19. Drawing and Data to be Furnished by the Contractor.

Shop drawings shall be submitted by the Contractor to the Engineer as called for in the Specifications. A minimum of five (5) copies of all shop fabrication drawings that are required shall be submitted to the Engineer for approval prior to the fabrication or placement of any of all items, three (3) of which will be retained by the Engineer. The remaining drawings, with comments of the Engineer, will be returned to the Contractor.

Approval of shop and working drawings shall indicate only that such drawings generally express the intent of the contract documents and shall not be construed as a complete check. Approval of drawings shall not relieve the Contractor of the responsibility of furnishing all materials and work required by and conforming to the Plans and Specifications. Approval of shop drawings shall, in addition, not relieve the Contractor of the responsibility of accuracy of dimensions; provision of adequate connections and the proper fitting of the work in the completed construction. An effort will be made to discover any errors in sizes of materials, general dimensions and detailed dimensions, but the responsibility for these items shall remain that of the Contractor.

Prior to submittal, the Contractor shall check the shop drawings prepared by subcontractor for accuracy and completeness, especially that the relation to adjoining work is accurately shown. Approval of shop drawings does not authorize any substitution of material or other departure from the requirements of the Contract Documents. Request for such changes shall be made the subject of separate correspondence. Shop drawings shall be submitted at such a time as will permit the Engineer not less than fifteen (15) days for checking. Any fabrication or other work done prior to the receipt of the approved shop and fabrication drawings shall be done entirely at the Contractor's risk.

The Contractor shall, in addition, file one (1) set of Contract Drawings, herein referred to as “Record Drawings”, on which shall be recorded all variations between the work “as-built” and the Contract Drawings or other information specified. The Record Drawings shall be supplemented by any detailed sketches as necessary or directed to indicate fully the work “as-built”. The Record Drawings shall be delivered to the Engineer upon completion of the work.

The Contractor shall supply to the Engineer, three (3) copies of the manufacturer’s literature for all materials to be used in the project.

2-20. Final Conditions of Work.

Before application is made for the Agency to accept the work, all items of work shall be complete, ready to operate and in a clean condition. All trash, debris, unused building material and temporary structures shall have been removed from the site of the work. Tools and construction machinery not needed for repair and adjustment consequent to operational tests shall not be on the site. The walkways, parking areas and roadway shall be completely swept and broomed.

2-21. General Supervising.

The Engineer shall have the general supervision and direction of the work. He has authority to stop the work whenever such stoppage may be necessary to insure the proper execution of the contract. He shall have authority to reject any work or materials which do not conform to the Contract Documents, to direct the application of forces to such portions of the work as in his judgment is required, to order the force increased or diminished, to direct the sequence of the work and to decide questions which arise in the execution of the work.

2-22. Lines and Grades, Setting Stakes.

The Contractor shall give two working days’ notice in writing when he will require the services of the Engineer for laying out any portion of the work. Elevations shown for the various parts of the work refer to the Datum Bench Mark, which will be established by the Engineer near the site. The Engineer shall establish the necessary base lines at the surface of the ground for the construction of the work. From the established base lines, the Contractor shall extend the necessary lines and grades for construction of the work and shall be responsible for the correctness of the same. The Contractor shall preserve all stakes set for lines, grades, or measurements of the work in their proper places until authorized to move them by the Engineer. Any expense incurred in replacing said stakes shall be borne by the Contractor.

Three consecutive points set on the same slope shall be used together in order that any variation from a straight grade can be detected. If any such variation is found, it shall be reported to the Engineer. In the absence of such report, the Contractor shall be responsible for any error in the grade of the finished work.

Prior to any request for construction stakes, the Contractor shall have all utility lines located and marked in the field.

2-23. Inspection.

The Agency shall provide inspection for all work to be performed under the Contract. Inspectors employed by the Agency shall be authorized to inspect all work done and materials furnished. Such inspection may extend to all or any part of the work, and to the preparation, fabrication, or manufacture of the materials to be used. The inspector will have authority to reject defective material and to suspend any work that is being improperly performed, subject to the final decision of the Engineer.

The inspector will exercise such additional authority only as may, from time to time, be delegated to him by the Engineer.

The Contractor shall notify the Agency or the Engineer two working days in advance of any work to be done in order that inspection services may be provided.

2-24. Materials and Workmanship.

Unless otherwise specified, all material incorporated in the permanent work shall be new. Materials so designated shall be as detailed and shall be of the best commercial quality and suitable for the purpose intended.

All workmanship shall be in conformance with the best trade practices. Particular attention shall be given to the appearance of exposed work. Any work or workmanship not conforming to the best practices shall be subject to rejection.

Preference for Materials. In accordance with the provision of Section 3400 of the California Public Contract Code, a contractor shall be provided a period of not less than 35 days after award of the contract for submission of data substantiating a request for a substitution of "an equal" item.

2-25. Guarantees.

The Contractor shall guarantee all parts of the work against defective materials or workmanship furnished by the Contractor for a period of one (1) year from the date of filing of the "Notice of Completion" of the contract, unless otherwise stipulated.

2-26. Attorney Fees.

If an action is commenced in a court of competent jurisdiction, or if the parties agree to settle a controversy of claim by arbitration, as provided in Section 3-15 of the Special Conditions attached hereto and made a part hereof, and if as a result of such action or settlement, the Agency is afforded any relief, it shall be entitled to its reasonable attorneys', paralegals' appraisers', engineers', and other professionals' fees and costs.

2-27. Subsurface Conditions.

The Contractor shall promptly, and before such conditions are disturbed except in the event of an emergency, notify the Agency of written notice of:

** Subsurface or latent physical conditions at the site differing materially from those indicated on the Contract Documents; or

** Unknown physical conditions at the site, of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract Documents.

The Agency shall promptly investigate the conditions, and if it is found that such conditions do so materially differ and cause an increase or decrease in the cost of, or in the time required for, performance of the work, an equitable adjustment hereunder shall be made and the contract documents shall be modified by a change order. Any claim of the Contractor for adjustment hereunder shall not be allowed unless the required written notice has been given; provided that the Agency may, if the Agency determines the facts so justify, consider and adjust any such claims consented to before the date of final payment.

2-28. Assignments.

- a. Public Works Contracts: Assignment to Awarding Body. In accordance with Section 4551 of the Government Code, the Contractor and subcontractor shall conform to the following requirements. In entering into a public works contract or a subcontract to supply goods, services, or materials pursuant to a public works contract, the Contractor or subcontractor offers and agrees to assign to the awarding body all rights, title, and interest in and to all causes of action it may have under Section 4 of the Clayton Act (15 U.S.C. Sec. 15) or under the Cartwright Act (Chapter 2, commencing with Section 16700, of Part 2 of Division 7 of the Business and Professions Code), arising from purchases of goods, services or materials pursuant to the public works contract of the subcontractor. This assignment shall be made and become effective at the time the awarding body tenders final payment to the Contractor, without further acknowledgement by the parties.
- b. Submission of Bids: Agreement to Assign. In accordance with Section 4552 of the Government Code, the bidder shall conform to the following requirements; In submitting a bid to a public purchasing body, the bidder offers and agrees that if the bid is accepted, it will assign to the purchasing body all rights, title, and interest in and to all causes of action it may have under Section 4 of the Clayton Act (15 U.S.C. Sec. 15) or under the Cartwright Act (Chapter 2 commencing with Section 16700, of Part 2 of Division 7 of the Business and Professions Code), arising from purchase of goods, materials, or services by the bidder for sale to the purchasing body pursuant to the bid. Such assignments shall be made and become effective at the time the purchasing body tender final payment to the bidder.

c. Submission of a Bid to a Public Agency Without a License: Misdemeanor; Exceptions: Previous Conviction; Fine: Application.

(1) It is a misdemeanor for any person to submit a bid to a public agency in order to engage in the business or act in the capacity of a contractor within this state without having a license therefore, except in any of the following cases:

- (a) The person is particularly exempted from the provisions of this chapter.
- (b) The bid is submitted on a state project governed by Section 10164 of the Public Contract Code.

(2) If a person has been previously convicted of the offense described in this section, the court shall impose a fine of 20 percent of the price of the contract under which the unlicensed person performed contracting work, or four thousand five hundred dollars (\$4,500) whichever is greater, or performed imprisonment in the county jail for not less than 10 days nor more than six months, or both.

In the event the person performing the contracting work has agreed to furnish materials and labor on an hourly basis, "the price of the contract" for the purpose of this subdivision means the aggregate sum of the cost of materials and labor furnished and the cost of completing the work to be performed.

(3) This section shall not apply to a joint venture license, as required by Section 7029.1. However, at the time of making a bid as a joint venture, each person submitting the bid shall be subject to this section with respect to his or her individual licenser.

(4) This section shall not affect the right or ability of a licensed architect or registered professional engineer to form joint ventures with licensed contractors to render services within the scope of their respective practices.

(5) A licensed contractor shall not submit a bid to a public agency unless his or her contractor's license number appears clearly on the bid, the license expiration date is stated, and the bid contains a statement that the representations made therein are made under penalty of perjury. Any bid not containing this information, or a bid containing information which is subsequently proven false, shall be considered non responsive and shall be rejected by the public agency.

2-29. Access to Contractor Records.

Access to all Contractor and Subcontractor records related to work performed under this contract shall be subject to examination and audit by the State Auditor General for a period of three (3) years after final payment under this contract. Such records shall be maintained for a minimum period of three (3) years after final payment is received and shall be available to the State, its representatives, or during the term of this project and for a minimum period of three (3) years after the final payment.

2-30 Payments to the Contractor and Completion.

a. Payment. The Agency shall make payments as follows:

Request for payments submitted by the Contractor on or before the tenth day of the calendar month, the Agency agrees to pay the Contractor, on the last day of the month, an amount to be determined by taking 90 percent of the approved completed work, proportionate to the amount of the Contract, of labor and materials incorporated in the Work to be performed, and by deducting the aggregate of all previous payments. The balance of the total Contract Price shall be paid 35 calendar days after the date of filing by the Agency of such Notice of Completion of all the Work to be done under this Contract.

The Agency reserves the right to withhold payments on accounts of:

- (1) Defective work not remedied.
- (2) Failure of the Contractor to make payments properly to subcontractors or for materials or labor.
- (3) A reasonable doubt that the Contract can be completed for the balance then unpaid.
- (4) Default of the Contractor in the performance of the terms and/or conditions of the Contract, or in their performance of any such terms and/or conditions.

b. Substitution of Securities in Lieu of Retainage. Pursuant to Section 22300 of the California Public Contract Code, the Contractor may substitute securities for any money held by the Agency to insure performance of the contract. At the request and expense of the contractor, securities equivalent to the amount withheld shall be deposited with the Agency or with the State or Federally-chartered bank as the escrow agent, who shall return such securities to the contractor upon satisfactory completion of the contract.

Deposit of the securities with an escrow agent shall be subject to a written agreement in the form outlined in Section 22300 of the Public Contract Code. The Agency shall not certify that the contract has been completed until at least 45 days after the filing by the Agency of a Notice of Completion. Securities eligible for investment under said Section shall be those listed in Section 16430 of the California Government Code, bank or savings and loan certificates of deposit, interest-bearing demand deposit accounts, standby letters of credit, or any other security mutually agreed upon by the Contractor and the public agency.

c. Working Hours. The Contractor shall comply with all applicable provisions of Section 1810 to 1815, inclusive, of the California Labor Code relating to working hours. The Contractor shall, as a penalty of the Owner, forfeit \$25.00 for each worker employed in the execution of the Contract by the Contractor or

by any subcontractor for each calendar day during which such worker is required or permitted to work more than 8 hours in any one calendar day and 40 hours in any one calendar week, unless such worker receives compensation for all hours in excess of 8 hours at not less than 1-1/2 times the basic rate of pay.

d. Workers Compensation.

(1) In accordance with the provisions of Section 1860 of the California Labor Code, the Contractor's attention is directed to the requirement that in accordance with the provisions of Section 3700 of the California Labor Code, every Contractor will be required to secure the payment of compensation of his or her employees.

(2) In accordance with the provisions of Section 1861 of the California Labor Code, each Contractor to whom a public works contract is awarded shall sign and file with the awarding body the following certificate prior to performing the work of the contract: "I am aware of the provisions of Section 3700 of the Labor Code which requires every employer to be insured against liability for worker's compensation or to undertake self-insurance in accordance with the provisions before commencing the performance of the work of this contract."

e. Protection of Workers in Trench Excavations. As required by Section 6705 of the California Labor Code and in addition thereto, whenever work under the Contract involves the excavation of any trench or trenches 5 feet or more in depth, the Contractor shall submit for acceptance by the Owner or by a registered civil or structural engineer, employed by the Owner, to Whom authority to accept has been delegated, in advance of excavation, a detailed plan showing the design of shoring, bracing, sloping, or other provisions to be made for worker protection from the hazard of caving ground during the excavation, of such trench or trenches. If such plan varies from the shoring system standards established by the Construction Safety Orders of the Division of Industrial Safety, the plan shall be prepared by a registered civil or structural engineer employed by the Contractor, and all costs therefore shall be included in the price named in the Contract Documents. Nothing in this Section shall be deemed to allow the use of a shoring, sloping, or other protective system less effective than that required by the Construction Safety Orders. Nothing in this Section shall be construed to impose tort liability on the Owner, the Engineer, nor any of their officers, agents, representatives, or employees.

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SPECIAL CONDITIONS
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SECTION THREE SPECIAL CONDITIONS

3-01. Scope of Work.

The work to be done consists of furnishing all labor, materials, tools and equipment necessary for or incidental to the construction and completion of the Tulare Road and Foothill Avenue Intersection and Pavement Rehabilitation Improvements Projects in accordance with the Plans and Specifications.

The Contractor shall complete the proposed work in every detail specified. Should any details be omitted from these Specifications, it shall be the responsibility of the Contractor to inform the Engineer.

The Contractor acknowledges that the work called for consists of **Tulare Road and Foothill Avenue Intersection and Pavement Rehabilitation Improvements Project** as shown on the construction plans and called for in the Bid Schedule.

3-02. Time of Performance.

The work shall be completed within the number of calendar days stipulated in the Contract Agreements and the Notice Inviting Bids.

The liquidated damages levy shall apply to the time frame allotted there.

3-03. Payments.

For request for payments submitted by the Contractor on or before the tenth day of the calendar month, the Agency agrees to pay the Contractor, on the last day of the month, an amount to be determined by taking 95 percent of the approved completed work, proportionate to the amount of the Contract, of labor and materials incorporated in the Work to be performed, and by deducting the aggregate of all previous payments. The monthly payments shall be made on the basis of monthly estimates which shall be prepared by the Contractor on a form approved by the Agency. The estimate shall reflect work completed up to and including the last working day of each month. Work completed as estimated shall be an estimate only and no inaccuracy or error in said estimate shall operate to or release the Contractor or any bondsman from damages arising from such work or from enforcing each and every provision of the Contract; and the City shall have the right subsequently to correct any error made in any estimate for payment. The Contractor shall not be entitled to have any payment estimates processed or be entitled to have any payment made for work performed so long as any lawful or proper direction concerning the work or any portion thereof by the Agency shall remain uncompiled with.

Retained amounts shall be limited, except where greater retention is necessary under specific circumstances specifically provided for in this Specification, to the following:

Retention of 5% of payments claimed until construction is complete. Retention shall be paid after 35 calendar days following Notice of Completion filed by City Clerk.

The foregoing condition will not apply to the extent that it may be prohibited by any specific requirement of State or local laws or ordinances.

Contractor may elect to substitute securities for money withheld pursuant to Public Contract Code Section 22300 subject to escrow instructions approved by City.

In addition to the amount which the City may retain as provided above, the City may withhold a sufficient amount or amounts of any payments otherwise due to the Contractor as in its judgment may be necessary to cover (a) payments which may be past due and payable for just claims against the Contractor or any subcontractor for labor or materials furnished in or about the performance of the work on the Project under the contract; (b) for defective work not corrected; and (c) for failure of the Contractor to make proper payments to any of his subcontractors; and (d) for delays which expose the City to claims from other contractors or suppliers.

The City may apply such withheld amount or amounts to the payment of such claims, in its direction. In so doing, the City shall be deemed the agent of the Contractor and any payments so made by the City shall be considered as a payment made under the contract by the City to the Contractor and the City shall not be liable to the Contractor for such payment in good faith. Such payment may be made without prior judicial determination of the claim or claims. The City will render to the Contractor a proper accounting of such funds disbursed on behalf of the Contractor.

Immediately after execution and delivery of the contract, and before the first partial payment is made, the Contractor shall deliver to the Engineer, (a) a construction commencement and completion program schedule of each of the various subdivisions of work required under the Contract and the anticipated amount of each monthly payment that will become due the contract price, and (b) periodical itemized estimates of work done for the purpose of making partial payments thereon.

At the expiration of thirty-five (35) days after the final acceptance and filing of a Notice of Completion, the Contractor will be paid the remainder of the total contract price after deducting any sums which may be legally retained under this contract.

3-04. Measurement and Payment.

General. Work performed by the Contractor pursuant to the requirements of the Contract Documents will be paid at the unit prices set forth in the Bid Proposal. The quantities of work performed will be measured by the Engineer in accordance with United States Standard Measures.

All miscellaneous work required to complete the contract in accordance with the technical provisions and plans prepared by the Engineer shall be included in and paid for in the items contained in the Bid Schedule and no claim shall be made for extra work on this account.

Payments made to the Contractor as specified herein shall constitute full compensation for all labor, materials, tools, equipment, taxes, fees, royalties, freight and incidentals necessary to the completed work and for performing all work contemplated and embraced under the Contract Documents; also for loss or damage arising from the nature of the work, or from the action of the elements, or from any unforeseen difficulties which may be encountered during the prosecution of the work until the acceptance by the Agency and for all risks of every description connected with the prosecution of the work, also for all expenses incurred in consequence of the suspension or discontinuance of the work as provided in the Contract documents; and for completing the work according to the Specifications. Neither the payment of any estimate nor of any retained percentage shall relieve the Contractor of any obligation to make good any defective work or material. No compensation will be made in any case for loss of anticipated profits.

- a) **Mobilization and Demobilization.** Transportation of necessary equipment to and from the site of the work and erection and removal of offices and other necessary temporary structures will be paid at the Contract lump sum price for Mobilization and Demobilization.
- b) **Traffic Control.** This lump sum bid item includes all materials, labor and appurtenances required to maintain traffic control measures for the project limits in accordance the State of California

Department of Transportation (CalTrans) Manual of Traffic Controls for Construction and Maintenance Work Zones, latest revision, as required to control and direct traffic in an orderly and safe manner.

- c) **Striping.** The quantity for striping will be by lump sum price. The unit prices shall include all traffic control, traffic paint (water based and thermoplastic) and all other labor, materials, equipment and transportation necessary to meet these specifications and all requirements of the City of Lindsay. Stop bars, text, centerlines, pavement markings and required signs, etc. shall be included to match existing conditions.
- d) **Asphalt Remove and Replace Area.** The quantity for asphalt remove & replace shall be measured by the square foot. The unit price shall include the removal & replacement of the existing asphalt thickness plus a 6" subgrade. The price shall also include the work necessary to achieve a minimum 95% Relative Compaction on both subgrade and asphalt. The price shall also include all other labor, materials, equipment and transportation necessary to meet these specifications and all requirements of the City of Lindsay.

3.05- Contract Modifications, Contract Price, Contract Time.

1. **Contract Modifications.** The Agency, without invalidating the Contract and without notice to any Surety, may, at any time, require changes in, additions to, or deductions from the work to be performed or materials to be furnished pursuant to the provisions of the Contract. These will be authorized by a Written Amendment, a Contract Change Order (CCO), or a Work Directive Change. Upon approval of any such document, the Contractor shall promptly proceed with the Work involved, which will be performed under the applicable conditions of the Contract Documents (except as otherwise specifically provided).

A 10% contingency may be allowed to increase the project amount via CCO's depending on the scope of the CCO and the overall project budget. This 10% contingency is an aggregate total of all CCO's, not CCO's presented on an individual basis.

The City Council, through the City Manager, shall authorize the City Services Director to execute CCO increases so long as they fall within the 10% contingency and there is a nexus to the original scope of work.

For CCO (individual or aggregate) increases that exceed the 10% aggregate contingency and are below 25% increase of the project bid and there is a nexus to the original scope of work, the City Council shall approve and authorize the City Manager to execute the CCO.

For CCO's (individual or aggregate) that exceed 25% of the original bid proposal, and there is a nexus to the original scope of work, City Council shall approve and authorize the City Manager to execute a Supplemental Agreement with the Contractor.

Contractor shall not be entitled to an increase in the Contract Price or an extension of the Contract time with respect to any work performed that is not required by the Contract Documents as amended, modified and/or supplemented. The Contractor shall, when required by the Agency, furnish an itemized breakdown of the quantities and prices used in computing the value of any change that might be ordered.

Notice of any change affecting the general scope of the work or provisions of the Contract Documents (including but not limited to, Contract Price or Contract Time) is required, by the provisions of any bond, to be given to a

surety, the giving of any such notice will be the Contractors responsibility, and the amount of each applicable bond will be adjusted accordingly.

If The Agency and Contractor shall execute appropriate Change Orders or Written Amendments covering:

- (a). Changes in the Work which are ordered by the Agency or are agreed to by the Parties;
- (b.) Changes in the Contract price or Contract time which are agreed to by the Parties;
- (c.) Changes in the Contract price or Contract time which embody the substance of any written decision rendered by the Agency; provided that, in lieu of executing any such Change Order, an appeal may be taken from any such decision in accordance with the provisions of the Contract Documents and applicable laws and regulations, but during any such appeal, Contractor shall carry on the work and adhere to the progress schedule.

2. Contract Price. The Contract Price constitutes the total compensation (subject to authorized adjustments) payable to the Contractor for performing the work. All duties, responsibilities, and obligations assigned to or undertaken by the Contractor shall be at his expense without change in the Contract Price.

The Contract Price may only be changed by a Change Order or by a Written Amendment. Any claim for an increase or decrease in the Contract Price shall be based on written notice delivered by the party making the claim to the other party and promptly (but in no event later than thirty days) after the occurrence of the event giving rise to the claim and stating the general nature of the claim. Notice of the amount of the claim with supporting data shall be delivered within sixty days of such occurrence (unless Agency allows an additional period of time to ascertain more accurate data in support of the claim) and shall be accompanied by claimant's written statement that the amount claimed covers all known amounts (direct, indirect, and consequential) to which the claimant is entitled as a result of the occurrence of said event. No claim for an adjustment in the Contract Price will be valid if not submitted in accordance with this Section.

The value of any Work covered by a Change Order or of any claim for an increase or decrease in the Contract Price shall be determined in one of the following methods:

A. Unit Price. Where the Work involved is covered by unit prices contained in the Contract Documents, by application of unit prices to the quantities of the items involved;

- 1. Where the Contract documents provide that all or part of the work is to be unit price work, initially the contract price will be deemed to include for all unit price work an amount equal to the sum of the established unit prices for each separately identified item of unit price work times the estimated quantity of each item as indicated in the Agreement. The estimated quantities of items of unit price work are not guaranteed and are solely for the purpose of comparison of the Bids and determining an initial contract price. Determinations of the actual quantities and classifications of unit price work performed by the Contractor will be made by the Agency.
- 2. Each unit price will be deemed to include an amount considered by the Contractor to be adequate to cover the Contractors overhead and profit for each separately identified item.
- 3. Where the quantity of any item of unit price work performed by the Contractor differs materially and significantly from the estimated quantity of such item indicated in the Agreement and there is no corresponding adjustment with respect to any other item of work and if the Contractor believes that the Contractor has incurred additional expenses as a result thereof, the Contractor may make a claim for an increase in the Contract Price in accordance with this Section if the parties are unable to agree as to the amount of any such increase.

4. In the case of such an increase or decrease in a major unit item, the use of this basis for the adjustment of payment will be limited to that portion of the change, which together with all previous changes to that item, is not in excess of twenty-five percent (25%) of the total cost of such item based on the original quantity and Contract Unit Price.

5. Should any Contract unit item be deleted in its entirety, payment will be made only for actual costs incurred prior to notification of such deletion.

B. Lump Sum. By mutual acceptance of a lump sum proposal from the Contractor (which may include an allowance for overhead and profit); or

C. Force Account. On the basis of the Cost of the Work (as determined below) plus a Contractor's fee for overhead and profit (as determined below).

Daily force account reports shall be submitted to the Engineer no later than seven (7) days following the performance of said work. The reports shall itemize the materials used, hours and rate of pay of each workman, and the hours and rental rates of each piece of equipment utilized in extra work.

The term "Cost of the Work" means the sum of all costs necessarily incurred and paid by the Contractor in the proper performance of the work. Except as otherwise may be agreed to in writing by the Agency, such costs shall be in amounts no higher than those prevailing in the locality of the Project, shall include only the following items, and shall not include any of the costs itemized in Section 3-05.:

1. Payroll costs for employees in the direct employ of the Contractor in the performance of the Work under schedules of job classifications agreed upon by the Agency and the Contractor. Payroll costs for employees not employed full time on the work shall be apportioned on the basis of their time spent on the work. Payroll costs shall include, but not be limited to, salaries and wages plus the cost of fringe benefits which shall include social security contributions, unemployment, excise, and payroll taxes, workers or workmen's compensation, health and retirement benefits, bonuses, sick leave, vacation, and holiday pay applicable thereto. Such employees shall include foremen at the site, only in the proportion that the claimed extra work applies to all work of the foreman. The costs of supervisory workers shall be considered part of the overhead as allowed per Section 3-05.2.F., Contractor's Fee. The expenses of performing work after regular working hours, on Sunday, or legal holidays, shall be included in the above to the extent authorized by the Agency.

2. Cost of all materials and equipment furnished and incorporated in the work, including cost of transportation and storage thereof, and Suppliers field services required in connection therewith. All cash discounts shall accrue to the Contractor unless the Agency deposits funds with the Contractor with which to make payments, in which case the cash discounts shall accrue to the Agency.

All trade discounts, rebates, and refunds, and all returns from sale of surplus materials and the Contractor shall accrue to the Agency, and the Contractor shall make provisions so that they may be obtained.

3. Payments made by the Contractor to the subcontractors for work performed by subcontractors. If required by the Agency, the Contractor shall obtain competitive bids from subcontractors acceptable to the Contractor and shall deliver such bids to the Agency who will then determine which bids will be accepted. If a subcontract provides that the subcontractor is to be paid on the basis of cost of the work plus a fee, the subcontractor's cost of the work shall be determined in the same manner as the Contractor's cost of the work. All subcontracts shall be subject to the other provisions of the Contract Documents insofar as applicable.

4. Cost of special consultants (including, but not limited to engineers, architects, testing laboratories, surveyors, attorneys, and accountants) employed for service specifically related to the work except that the cost for special consultants employed for purposes of the prosecution or defense of any claims arising out of the work shall not be included in "Cost of the Work".

D. Supplemental costs including the following:

1. The proportion of necessary transportation, travel, and subsistence expenses of the Contractor's employees incurred in discharge of duties connected with the work.
2. Cost, including transportation and maintenance, of all materials, supplies, equipment, machinery, appliances, office and temporary facilities at the site, and hand tools not owned by the workers which are consumed in the performance of the work, and cost less market value of such items used but not consumed which remain the property of the Contractor.
3. Rentals of all construction equipment and machinery and the parts thereof whether rented from the Contractor or others in accordance with rental agreements approved by the Agency, and all costs of transportation, loading, unloading, installation, dismantling, and removal thereof ; all in accordance with terms of said rental agreements. The rental of any such equipment, machinery, or parts shall cease when the use thereof is no longer necessary for the work.
4. Sales, consumer, use, or similar taxes related to the work and for which the Contractor is liable, imposed by laws and regulations.
5. Deposits lost for causes other than negligence of the Contractor, any subcontractor or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, and royalty payments and fees for permits and licenses.
6. Losses and damages (and related expenses), not compensated by insurance or otherwise, to the work or otherwise sustained by the Contractor in connection with the performance and furnishing of the work (except losses and damages within the deductible amounts of property insurance established by the Agency for this work.), provided they have resulted from causes other than the negligence of the Contractor, any subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable. Such losses shall include settlements made with the written consent and approval of the Agency.
7. No such losses, damages, and expenses shall be included in the cost of the work for the purpose of determining the Contractor's fee. If, however, any such loss or damage requires reconstruction and the Contractor is placed in charge thereof, the Contractor shall be paid for services a fee proportionate to that.
8. The cost of utilities, fuel, and sanitary facilities at the site.
9. Cost of premiums for additional bonds and insurance required because of changes in the work and premiums for property insurance within the deductible amounts established by the Agency.

E. The term "Cost of the Work" shall not include any of the following:

1. Payroll costs and other compensation of the Contractor's officers, executives, principals (of partnership and sole proprietorships), general managers, engineers, architects, estimators, attorneys, auditors,

accountants, purchasing and contracting agents, expeditors, timekeepers, clerks, and other personnel employed by the Contractor whether at the site or in the Contractor's principal or a branch office for general administration of the work and not specifically included in the agreed upon schedule of job classifications referred to in Section 3-05.2.C.1. or specifically covered by Section 3-05.2.C.4. - all of which are to be considered administrative costs covered by the Contractor's Fee.

2. Expenses of the Contractor's principal and branch offices other than the Contractor's office at the site.
3. Any part of the Contractor's capital expenses, including interest on the Contractor's capital employed for the work and charges against the Contractor for delinquent payments.
4. Cost of premiums for all bonds and for all insurance whether or not the Contractor is required by the Contract Documents to purchase and maintain the same (except for the cost of premiums covered by Section 3-05.2.D.9. above).
5. Costs due to the negligence of the Contractor, any subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable including, but not limited to, the correction of defective work, disposal of materials or equipment wrongly supplied, and making good any damage to property.
6. Minor expenses such as telegrams, long distance telephone calls, telephone service at the site, expressage, and similar petty cash items in connection with the work.
7. Other overhead or general expense costs of any kind and the costs of any items not specifically and expressly included in Sections 3-05.C. and 3-05.D.

F. Contractor's Fee. The Contractor's Fee allowed to the Contractor for overhead and profit shall be determined as follows:

1. A mutually acceptable fixed fee; or if none can be agreed upon.
2. To the total of the direct costs computed, an allowable markup of 10% for overhead and 5% for profit may be added. The markup shall constitute full compensation for all overhead costs and shall be deemed to include all items of expense and profit. The allowable markup for overhead and profit will be determined according to the work involved and the Contractor's operation. The percentage of markup shall be approved by the Agency.

In case work is performed by a subcontractor, the markup will be added only once to the actual cost of the work, however, the Contractor may add five percent (5%) to the subcontractor price to cover his own overhead and profit.

The amount of credit to be allowed by the Contractor to the Agency for any such change which results in a net decrease in cost shall be the amount of the actual net decrease plus a deduction in the Contractor's fee by an amount equal to ten percent of the net decrease ; and

When both additions and credits are involved in any one change, the adjustment in the Contractor's fee shall be computed on the basis of the net change in accordance with Section 3-05.2.F.

3. Whenever the cost of any work is to be determined pursuant to Section 3-05.2.E., the Contractor shall submit in form acceptable to the Agency, an itemized cost breakdown together with supporting data.

G. Cash Allowances. It is understood that the Contractor has included in the Contract Price all allowances so named in the Contract Documents and shall cause the work so covered to be done by such subcontractors or suppliers and for such sums within the limit of the allowances as may be acceptable to the Agency. The Contractor agrees that;

1. The allowances include the cost to the Contractor (less any applicable trade discounts) of materials and equipment required by the allowances to be delivered at the site, and all applicable taxes; and
2. The Contractor's cost for unloading and handling on the site, labor, installation, costs, overhead, profit, and other expenses contemplated for the allowances have been included in the Contract Price and not in the allowances. No demand for additional payment on account of any thereof will be valid.

Prior to final payment, an appropriate Change Order will be issued as recommended by the Agency to reflect actual amounts due the Contractor on account of work covered by allowances, and Contract Price shall be correspondingly adjusted.

3. Contract Time. The Contract Time may only be changed by a Change Order or a Written Amendment. Any claim for an extension or shortening of the Contract Time shall be based on written notice delivered by the party making the claim to the other party promptly (but in no case later than thirty days) after the occurrence of the event giving rise to the claim and stating the general nature of the claim. Notice of the extent of the claim with supporting data shall be delivered within sixty days of such occurrence (unless Agency allows an additional period of time to ascertain more accurate data in support of the claim) and shall be accompanied by the claimant's written statement that the adjustment claimed is the entire adjustment to which claimant has reason to believe it is entitled as a result of the occurrence of said event. No claim for adjustment in Contract Time will be valid if not submitted in accordance with the requirements of this Section, 3-05.3.

The Contract Time will be extended in an amount equal to time lost due to delays beyond the control of the Contractor if a claim is made therefore as provided in Section 3-05.3. Such delays shall include, but not be limited to, acts or neglect by the Agency or others performing additional work, or to fires, floods, labor disputes, epidemics, abnormal weather conditions, or acts of God.

All time limits stated in the Contract Documents are of the essence of the Agreement. The provisions of this Section 3-05.3. shall not permit recovery for damages (including but not limited to fees and charges of engineers, architects, attorneys, and other professionals and court and arbitration costs) for delay by either party otherwise excluded by Section 3-05.2.C.4..

3-06. Authority of Engineer.

In these Specifications or in other contract documents where these Specifications govern, the term Engineer shall mean authorized personnel from the City of Lindsay.

The work shall be done under the direction of the Engineer, and the materials used shall comply with these Specifications and to be to the satisfaction of the Engineer. The Engineer shall have authority to stop the work, authority to reject any work or materials which do not conform to the contract documents, to direct the application of forces to such portion of the work as in his judgment is required, to order the force increased or diminished, to direct the sequence of the work and to decide questions which arise in the execution of the work. All work under this contract shall be done under the direction and to the satisfaction of the Engineer.

3-07. Materials Furnished by Agency.

Materials and equipment to be furnished by the Agency will be supplied in accordance with the applicable portions of the Technical Provisions.

3-08. Access to Work.

The City, its inspectors, agents and other employees, shall at all times and for any purpose have access to the work and the premises used by the Contractor, and the Contractor shall provide safe and proper facilities therefore. Furthermore, the City, its inspectors and agents shall, at all times, have immediate access to all places of manufacture where machinery or materials are being manufactured, produced or fabricated for use under these Specifications, and shall have full facilities for determining that all such machinery or materials are being made strictly in accordance with the Specifications. The Contractor shall, whenever so requested, give the Engineer access to the proper invoices, bills of lading, etc., and shall provide scales and assistance for weighing, or assistance for measuring any of the materials.

3-09. Shutdown.

Shutdown periods for existing facilities shall not be necessary for this project.

3-10. Land Survey Monuments.

Land Survey monuments and property marks shall not be moved or otherwise disturbed by the Contractor until an authorized agent of the agency having jurisdiction over the land monuments or property, marks the setting, witnesses or otherwise references their location, and only then as directed by the Engineer.

3-11. Disposal Area.

The Contractor shall use the nearest approved solid waste disposal facility for the disposal of surplus construction material from the work. It is required that any asphalt or concrete excavated from this project shall be taken to an approved recycling center.

3-12. Compaction Tests.

All compaction tests required in accordance with these Specifications will be paid by the City. The cost of repeated compaction tests due to failure of the original test will be charged to the Contractor, at the rate of \$50.00 per retest.

3-13. Permits, City Licenses.

The Contractor shall be required to obtain an encroachment permit as follows:

- a. Encroachment Permit, General. The Contractor shall obtain an encroachment permit from the City of Lindsay Department of City Services, 150 North Mirage, Lindsay, California, before performing any work in public right-of-way areas. Permit fees shall be the responsibility of the Contractor.
- b. Application. Requirements for application of an encroachment permit include:
 1. A certificate of comprehensive general liability insurance furnishing coverage in an amount not less than two million dollars (\$2,000,000) combined single limit and naming the City of Lindsay as an additional insured in the policy.

2. A surety bond in a form acceptable to City of Lindsay for an amount not less than that specified by the City.

3. A completed application for encroachment permit signed by the Contractor.

4. Two (2) sets of Plans and Specifications (provided by the City).

c. Processing. The Contractor shall provide for the requirements listed in 1. and 2. and shall furnish to the City necessary forms filled with the information pertaining to the Contractor for the requirements listed in 3. The Contractor will furnish the Plans and Specifications to the City of Lindsay Permit Office and will fill in the information pertaining to the City and the project on the forms furnished by the Contractor. Such forms, when filled in by the Agency, will be returned to the Contractor for further processing by the Contractor.

d. Requirements. The encroachment permit issued by City of Lindsay will contain conditions and requirements. The Contractor shall observe such conditions and requirements. These include:

1. Traffic control, signs, and safety procedures shall follow the provisions of the Traffic Control Manual of the State of California, Business and Transportation Agency, Department of Transportation;

2. Trenches shall be backfilled after the end of work each day;

3. During the performance of work there shall be at least one lane open to traffic and after the end of work each day there shall be at least two lanes open to traffic ; and

4. City Inspector shall be allowed access to the work and shall be allowed to perform such tests as the City Inspectors deem necessary to assure that the work is being performed in conformance with city requirements.

e. City Business License, General. The Contractor shall obtain a City of Lindsay business license from the City of Lindsay Finance Department, 251 East Honolulu, Lindsay, California, before performing any work. License fees shall be the responsibility of the Contractor. This shall pertain to all subcontractors on this project also.

3-14. Contracts with Subcontractors.

Contracts with subcontractors must contain excerpts from "Labor Standards - Instructions".

The Contractor may utilize the services of special subcontractors on those parts of the work which, under normal contracting practices, are performed by specialty subcontractors. The Contractor shall not award work to subcontractor(s), which, in the aggregate, exceeds fifty percent (50%) of the contract price, unless specifically specified in the bid documents.

The Contractor shall be fully responsible to the City for the acts and omissions of its subcontractors, and of persons either directly or indirectly employed by them, as the Contractor is for the acts and omissions of persons directly employed by it.

The Contractor shall cause appropriate provisions to be inserted in all subcontracts relative to the work to bind subcontractors to the Contractor by the terms of the contract documents insofar as applicable to the work of subcontractors and give the Contractor the same power as regards terminating any subcontract that the City may exercise over the Contractor under any provision of the Contract Documents.

Nothing contained in this contract shall create contractual relations between any subcontractor and the City.

3-15. Claims and Disputes Resolution.

a. Time Limits on Claims. Claims by Contractor must be made within 7 days after occurrence of the event giving rise to such claim, except that claims made due to delay or hindrances which Contractor claims was caused by the City shall be made within 10 days after occurrence of the event giving rise to such claim. Claims must be made by written notice. Failure to make such claim in writing in the time set forth herein shall bar Contractor from recourse for such claim. All claims must be filed on or before the payment date of Final Payment.

b. Claims for Additional Costs.

1. If Contractor wishes to make a claim for an increase in the Contract Price, he shall give the Agency written notice thereof within the time set forth in Paragraph a. above. This notice shall be given by the Contractor before proceeding to execute the work, except in an emergency endangering life or property in which case the Contractor shall, as soon as soon as possible, advise Agency of his intent to do the Work.

2. Increases in Contract Price due to claims shall be calculated based on the force account method detailed in paragraph 3-05.

3. Under no circumstances shall Contractor recover any administrative overhead costs or recover on the basis of any "Home Office" damages formula, "Total Cost" recovery formula, or any other such formula.

c. Claims for Additional Time.

1. If the Contractor wishes to make claim for an increase in the Contract Time, written notice as provided herein shall be given. The Contractor's claim shall include an estimate probable effect of delay on progress of the Work. In the case of a continuing delay only one claim is necessary.

2. If adverse weather conditions are the basis for a claim for additional time, such claim shall be documented by data substantiating that weather conditions were abnormal for the period of time and could not have been reasonably anticipated, and that weather conditions had an adverse effect on the scheduled construction.

3. The Agency shall not be liable for any damages on account of any reasonable delay or hindrance of others.

However, Contractor shall be entitled to an extension of time for any delay or hindrance caused by the Agency. Any delay or hindrance by the Agency which is unreasonable and not within the contemplation of the parties may subject the Agency to a claim for damages. Contractor shall make any claims in writing within the time set forth in Paragraph a., above, for any unreasonable delay or hindrance caused by the Agency, and specifying the cause thereof as required in paragraph d., below.

d. Submittal of Claims. Any disputes relating to this contract, or its breach, which is not imposed on by agreement shall be promptly submitted as a claim to and decided by the Agency's representative who shall issue a written decision on the dispute. Claims shall be submitted by the Contractor to the Agency's Representative with adequate supporting data and include a demand for the Agency's Representative's decision. Adequate supporting data shall include, but is not limited to: a statement of the reasons for the asserted entitlement, the certified payroll, invoice for material and equipment rental, and an itemized breakdown of any adjustment sought.

e. Submission Under Penalty of Perjury. The Contractor shall certify, at the time of submission of a claims, as follows: "I certify under penalty of perjury under the laws of the State of California, that the claim is made in good faith, that the supporting data are accurate reflects the adjustments for which the City is liable."

By: _____
(Contractor's signature)

f. Continue Work During Dispute. In the event of any dispute between the Agency and the Contractor, the Contractor will not stop work, but will prosecute the work diligently to completion in his manner directed by the Agency, and the dispute shall be resolved by a court of law after completion of work. However, all disputes must be submitted by Contractor in accordance with the provisions of Section 3-15.

g. Agency's Review of Claim. The Agency's Representative shall review the facts pertinent to the claim, secure assistance from legal and other advisors, coordinate with the contract administrators, and within the time stipulated in paragraph h. below, render a written decision on the claim. A copy of the decision shall be furnished to the Contractor by certified mail, return receipt requested, or any other method that provides evidence of receipt. The decision of the Agency's Representative shall be final and conclusive except as is otherwise provided herein.

h. Requirement for Filing a Claim. For any claim subject to this Article, the following requirement applies: the claim shall be in writing and include the documents necessary to substantiate the claim. Claims must be filed on or before the date of final payment. Nothing in this subdivision is intended to extend the time limit or supersede notice requirements otherwise provided by contract for a filing of claims.

1. For claims of less than fifty thousand dollars (\$50,000), the Agency shall respond in writing to any written claim within 45 days of receipt of the claim, or may request, in writing, within 30 days of receipt of the claim, any additional documentation supporting the claims or relating to defenses or claims the Agency may have against the claimant. If additional information is hereafter required, it shall be requested and provided pursuant to this subdivision, upon mutual agreement of the Agency and claimant. The Agency's written response to the claim, as further documented, shall be submitted to the claimant within 15 days after receipt of the further documentation or within a period of time no greater than that taken by the claimant in producing the additional information, whichever is greater.

2. For claims of over fifty thousand dollars (\$50,000) and less than or equal to three hundred seventy-five thousand dollars (\$375,000), the Agency shall respond in writing to all written claims within 60 days of receipt of the claim, or may request, in writing, within 30 days of receipt of the claim, any additional documentation supporting the claim or relating to defenses or claims the Agency may have against the claimant. If additional information is thereafter required, it shall be requested and provided pursuant to this subdivision, upon mutual agreement of the Agency and the claimant. The Agency's written response to the claim, as further documented, shall be submitted to the claimant within 30 days after receipt of the further document, or a period of time no greater than that taken by the claimant in producing the additional information or requested documentation, whichever is greater.

3. If the claimant disputes the Agency's written response, or the Agency fails to respond within the time prescribed, the claimant may so notify the Agency, in writing, either within 15 days of receipt of the Agency's failure to respond within the time prescribed, respectively, and demand an informal conference to meet and confer for settlement of the issues in dispute. Upon demand, the Agency shall schedule a meet and confer conference within 30 days for settlement of the dispute.

4. If following the meet and confer conference the claim or any portion remains in dispute, the claimant may file a claim pursuant to Part 3, Chapter 1, Article 1.5, commencing with Section 20104 et seq. of the Government Code. For purposes of those provisions, the running of the period of time within which a claim must be filed shall be tolled from the time the claimant submits his or her written claim pursuant to

subdivision (a) until the time the claim is denied, including any period of time utilized by the meet and confer conference.

i. Claims Exempt from Review. The procedures and remedies provided in Section 3-15 do not apply to:

1. Any claims by the Agency;
2. Any claim for or respecting personal injury or death or reimbursement or other compensation arising of or resulting from liability for personal injury or death;
3. Any claim or dispute relating to stop payment requests or stop notices;
4. Any claim related to the approval, refusal to approval, refusal to approve, or substitution of subcontractors, regardless to tier, and suppliers.

j. Procedure to Resolve Civil Claims. The Agency and claimant shall follow procedures established for all civil actions filed to resolve claims pursuant to Section 20104.4 of the Public Contract Code.

k. Payment of Undisputed Portion of Claim; Interest on Arbitration Award or Judgment:

1. Agency shall pay claimant such portion of a claim which is undisputed except as otherwise provided in the contract.

2. In any suit filed under Section 20104.4, of the Public Contract Code, the Agency, if applicable, shall be liable for interest at 7% per annum. The interest shall begin to accrue on the date the judgment is filed in a court of law.

l. Suit in Tulare County Only. Any litigation arising out to this Contract shall be brought in Tulare County and Contractor hereby waives the removal provisions of California Code of Civil Procedure Section 394.

3-16. Protection of Existing Facilities.

The Contractor shall be responsible for any loss or damage that may occur to any of the existing facilities or to any new materials or equipment stored at the site of the work, during the life of the contract.

3-17. Protection of Persons and Property.

The Contractor shall adopt every practical means and comply with all laws, ordinances, and regulations in order to minimize interferences to traffic, and inconveniences, discomfort and damage to the public, including the provision of adequate dust control measures. All obstructions to traffic shall be guarded.

The Contractor shall not trespass upon private property and shall be responsible for all injury or damage to persons or property, directly or indirectly, resulting from his operations in completing this work. He shall comply with the laws and regulations of the Agency, County and State, relating to the safety of persons and property, and will be held responsible and required to make good any injury or damage to persons or property caused by carelessness or neglect on the part of the Contractor or subcontractors, or any agent or employee of either during the progress of the work and until its final acceptance.

The Contractor shall protect against injury to any pipes conduits, electrical conduits, lawns, gardens, shrubbery, trees, fences, or other structures or property, public and/or private, encountered in this work except as stipulated elsewhere herein. The Contractor shall be responsible and liable for any injury to such pipe, structures, and property.

3-18. Cultural Resources.

In accordance with the Nation Historic Preservation Act of 1966, (16 U.S.C.470) and PRM 75-27, the following procedures are implemented to insure historic preservation and fair compensation to the Contractor for delays attendant to cultural resources investigations.

In the event potential Historical, Architectural, Archaeological, or Cultural Resources (hereinafter cultural resources) are discovered during subsurface excavations at the site of construction, the following procedures shall be instituted:

1. The Engineer shall issue a "Stop Work Order" directing the Contractor to cease all construction operations at the location of such potential cultural resources find.
2. Such "Stop Work Order" shall be effective until such time as a qualified archaeologist can be called to assess the value of these potential cultural resources and make recommendations to the Engineer. Any "Stop Work Order" shall contain the following:
 - a. A clear description of the work to be suspended;
 - b. Any instructions regarding issuance of further orders by the Contractor for material services;
 - c. Guidance as to action to be taken on subcontractors;
 - d. Any suggestions to the Contractor as to minimization of his costs;
 - e. Estimated duration of the temporary suspension.

If the archaeologist determines that the potential find is a bonafide cultural resource, the Engineer shall extend the duration of the "Stop Work Order" in writing, and the Contractor shall suspend work at the location of the find.

Equitable adjustment of the construction contract shall be made in the following manner:

1. Time Extension. If the work temporarily suspended is on the "critical path", the total number of days for which the suspension is in effect shall be added to the number of allowable contract days.

3-19. Taxes.

All bid prices shall include an allowance for all applicable taxes.

3-20. Examination of Specifications and Site of Work. The Bidder is required to examine the site of work, the proposal, the Plans and Specifications very carefully. He shall satisfy himself as to the character and quantities of the work to be performed, the materials to be furnished and the requirements of the contract documents. It is not to be inferred that all of the conditions as shown on the Plans are actually existent, nor shall the Agency or any of its officers be liable for any loss sustained by the Contractor as a result of any variance between conditions shown on the Plans and actual conditions revealed during examination or progress of the work. The submission of a proposal shall be prima facie evidence that the Bidder has made such an examination.

3-21. State Nondiscrimination Clause.

- a. During the performance of this contract, Contractor and its subcontractors shall not lawfully discriminate against any employee or applicant for employment because of race, religion, color, national origin, ancestry, physical handicap, medical condition, marital status, age (over 40), or sex. Contractors and subcontractors

shall ensure that the evaluation and treatment of their employees and applicants for employment are free of such discrimination. Contractors and subcontractors shall comply with the provisions of the Fair Employment and Housing Act (Government Code Section 12900 et seq.) and the applicable regulations promulgated thereunder (California Administrative Code, Title 2, Section 728.5.0 et seq).

The applicable regulations of the Fair Employment and Housing Commission implementing Government Code Section 12990, set forth in Chapter 5 of Division 4 of Title 2 of the California Administrative Code, are incorporated into this contract by reference and made a part hereof as if set forth in full. Contractor and its subcontractors shall give written notice of their obligations under this clause to labor organizations with which they have a collective bargaining or other agreement.

b. This Contract shall include the nondiscrimination and compliance provisions of this clause in all subcontracts to perform work under the contract.

3-22. Critical Path and Traffic Control.

The selected Contractor shall develop a critical path schedule and traffic control plan for this project. Said schedules and plans shall be submitted to the Engineer for approval prior to beginning any work. The critical path schedule shall detail the individual phases and shall be date specific (start and finish dates). The traffic control plan shall be developed in accordance with "State of California Manual of Traffic Controls", latest approved edition. Said plan shall be prepared in plan view showing location and type of traffic control signs used. Local traffic shall be permitted within all work zones during the course of this project. The required critical path and traffic control plan shall provide minimum disruption of local residents. The work plan shall provide access to properties by an acceptable means at the end of each work day.

SECTION FOUR BID ITEM DESCRIPTIONS

GENERAL

The Contract payment for the specified items of work as set forth in the Bid Schedule shall be full compensation for furnishing all labor, materials, methods or processes, implements, tools, equipment and incidentals and for doing all work involved as required by the provisions of the Contract Documents for a complete in place and operational system.

- A. Unless otherwise specified in the Specifications, quantities of work shall be determined per each, or from measurements or dimensions in a horizontal plane. All materials shall be measured on the basis of "in place" quantities and paid for using the units listed in the bid schedule.
- B. Except as noted, the Engineer will make field measurements of unit price items in order to determine the quantities of the various items as a basis for payment. On all unit price items, the contractor will be paid for the actual amount of the work performed in accordance with the contract documents, as computed from field measurements.
- C. Work or quantities not listed in the description of bid items are considered incidental to other construction and will not be separately measured or paid for. Compensation for such work and/or material shall be included in the prices paid for other items of work.
- D. Costs related to furnishing and installing import soil and exporting soil and other materials as needed shall be included in the bid item to which that work relates. No additional compensation will be provided. Bidder shall be responsible to review the provided Geotechnical Report, which includes bore logs that shall be used to represent anticipated soil conditions.

Bid Items:

Bid Item 1 – **Mobilization, Demobilization, Bonds and Insurance:** Payment for this item shall include full compensation for all labor, materials, tools, equipment and incidentals required for the cost of mobilization, move-in, move-out, all necessary bonds, insurance, permits, licenses, and fees required during the performance of the work as specified. This item also includes demobilization, including the removal of all equipment, supplies, personnel and incidentals from the project at the end of construction. Payment shall not exceed \$50,000. Payment for mobilization shall be made with the first progress payment and shall not exceed 80 percent of the bid item amount. Payment for demobilization shall be made with the last progress payment and shall not be less than 20 percent of the bid item amount. This item shall conform to the applicable portions of the Specifications, the Special Conditions, and the Technical Provisions. This bid item will be paid for by Lump Sum.

Bid Item 2 – **Construction Notification Sign:** Payment for this item shall include full compensation for all labor, materials, tools, equipment, and incidentals required to furnish and install construction notification signs determined as specified on Sheet X3 of the Construction Plans, on field conditions, and coordination from the City. The sign shall also be removed within 5 days of project completion as part of this bid item. The location of the signs are shown on the signing and striping plans with the "CS" Construction Call out. This bid item will be paid for Per Each.

Bid Item 3 – **Traffic Control System:** Payment under this item shall be considered full compensation for all labor, materials, (including signs), tools, equipment and incidentals required to place, remove, store, maintain, move to new locations, replace, and remove of the components of the traffic control system, including stationary mounted construction area signs, as well as flagging and temporary traffic delineators/stripping for the project in accordance with the Plans, the Special Conditions, the City of Lindsay Standards, and Technical Provisions. This bid item will be paid for by Lump Sum, prorated, based on percentage of contract work completed.

Bid Item 4 – **Dust Control Plan:** Payment under this item shall be considered full compensation for all labor, materials, tools, equipment and incidentals required to perform dust control measures for the project limits in accordance with the Specifications and these Special Provisions. The Contractor shall complete a Construction Notification and submit to the San Joaquin Valley Air Pollution Control District prior to construction. The Contractor shall provide a water truck and approved street sweeper on project site for dust control compliance. This bid item will be paid for by Lump Sum, prorated, based on percentage of contract work completed.

Bid Item 5 – **Storm Water Pollution Prevention Plan:** Payment under this item shall be considered full compensation for all labor, materials, tools, equipment, and incidentals required for doing all the work involved in “Storm Water Pollution Prevention,” complete in place. This bid item includes implementation of the Storm Water Pollution Prevention Plan (SWPPP) requirements and dust control compliance as required by the SJVAPCD, as directed by the Engineer, and in accordance with the SWPPP subsection in the Technical Provisions. The Contractor shall provide a water truck and approved street sweeper on project site for dust control compliance. The Contractor is responsible for uploading and obtaining the WDID number through the State Water Resources Control Board before the start of construction. This bid item will be paid as a Lump Sum, based on percentage of contract work completed.

Bid Item 6 – **Miscellaneous Facilities and Operations:** Payment under this item shall be considered full compensation for all labor, materials, tools, equipment, and incidentals required to complete all miscellaneous facilities or work shown or specified on the Plans and Specifications, and not specifically included in any other bid item. Included in this bid item shall be, but not necessarily limited to, such items as dewatering existing facilities and maintaining drainage; supporting of poles and protection of other utilities near excavations; verifying the locations of existing utilities, minor grading to provide or maintain drainage; providing temporary fencing for security; fees; fees and application required to obtain an encroachment permit with Tulare County; removing and replacing other existing improvements as required; replacement and reconfiguration of existing landscaping and irrigation not including irrigation scope specified in a separate bid item; tree trimming; final clean-up; and any other work necessary for completion of the work, and/or other operations as set forth and required but not specifically included in another bid item, all in conformance with existing codes and as directed by the Engineer. This bid item will be paid for by Lump Sum, prorated, based on percentage of work completed.

Bid Item 7 – **Clearing and Grubbing:** Payment for this item shall include full compensation for all labor, materials, tools, equipment, and incidentals making up the cost of all work involved in clearing and grubbing, within project site, in accordance with the plans and

specifications. This bid item will be paid as a Lump Sum, prorated based on the percentage of this item completed.

Bid Item 8 – **Agricultural Tree Removal and Hauling:** Payment for this item shall include full compensation for all labor, materials, tools, equipment, and incidentals making up the cost of all work involved in the removal and disposal of agricultural tree(s), stump(s), and roots as identified on the plans by the “RT” construction callout within the Plans, and as necessary to construct the improvements. All debris generated as a result of this item must be removed from the site daily. The contractor will backfill and compact all voids left by the tree/stump/roots removal daily with clean topsoil and take appropriate safety measures to ensure that the site is not left in a state which would pose danger to residents/pedestrians. Stumps are to be ground to a depth of at least twenty-four (24) inches below the existing grade and within a radial distance which would permit removal of all roots larger than one (1) inch. All surface roots protruding above the surrounding grade are to be ground level to the existing grade. The contractor will be required to remove and re-install any fencing, which needs to be removed to gain access to the tree/stump/roots. This bid item will be paid for Per Acre.

Bid Item 9 – **Sawcut & Remove Curb and Gutter:** Payment for this item shall include full compensation for all labor, materials, tools, equipment, and incidentals required to sawcut, remove, and dispose of existing concrete curb and gutter in accordance with the Plans, Specifications, these Special Provisions, Section F - Demolition of the Technical Provisions, and the City of Lindsay Standards. Curb and gutter outside of the Curb Ramp, Alley Approach, or Drive Approach details are included in this bid item only where specifically noted on the plans. This bid item shall not be used for curb and gutter removal and replacement needed for utility installation; those costs shall be included in the bid items related to the utility work. This item shall not be used for curb and gutter in front of drive approach removal and replacements, this work will be included in the Drive Approach with Ramps or Drive Approach bid item. This bid item will be paid for Per Linear Foot.

Bid Item 10 – **Sawcut and Remove Curb Returns:** Payment for this item shall include full compensation for all labor, materials, tools, equipment, and incidentals required to sawcut, remove, and dispose of existing concrete curb ramps, adjacent curb and gutter, and adjacent sidewalk in accordance with the Plans, Specifications, these Special Provisions, Section F - Demolition of the Technical Provisions, and the City of Lindsay Standards. This item includes the removal of sidewalk and curb and gutter adjacent to curb ramps required for construction of the curb ramps per the curb ramp details. This bid item will be paid for Per Each.

Bid Item 11 – **Sawcut and Remove Cross Gutter:** Payment for this item shall include full compensation for all labor, materials, tools, equipment, and incidentals required to sawcut, remove, and dispose of existing cross gutters in accordance with the Plans and Details, Specifications, these Special Provisions, Section F - Demolition of the Technical Provisions, and the City of Lindsay Standards. The curb returns adjacent to the cross gutter shall be paid under the Saw Cut & Remove Curb Returns bid item. This bid item will be paid for Per Each.

Bid Item 12 – **Sawcut and Remove Drive Approach:** Payment for this item shall include full compensation for all labor, material, tools, equipment, and incidents required to sawcut,

remove, and dispose of existing drive approach, adjacent curb and gutter, and adjacent sidewalk in accordance with the Plans and corresponding drive approach details, Specifications, these Special Provisions, Section F - Demolition of the Technical Provisions, and the City of Lindsay Standards. This bid item will be paid for Per Each

Bid Item 13 – Remove Block Fence: Payment under this item shall be considered full compensation for all labor, materials, tools, equipment, and incidentals making up the cost of all work involved in the removal and disposal of existing block fence, concrete foundation, gates, and posts as identified on the plans and as necessary to construct the improvements. All debris generated as a result of this item must be removed from the site daily. The contractor will backfill and compact all voids left by the fence removal daily with clean topsoil and take appropriate safety measures to ensure that the site is not left in a state which would pose danger to residents/pedestrians. Block fence removal shall conform to the Standard Specifications, applicable portions of the Plans, Specifications, and the City of Lindsay Standards. This bid item will be paid for per Linear Foot.

Bid Item 14 – Remove Chain Link Fence: Payment under this item shall be considered full compensation for all labor, materials, tools, equipment, and incidentals making up the cost of all work involved in the removal and disposal of existing chain link fence, and any concrete mow strips, gates, and post as identified on the plans and as necessary to construct the improvements. All debris generated as a result of this item must be removed from the site daily. The contractor will backfill and compact all voids left by the fence removal daily with clean topsoil and take appropriate safety measures to ensure that the site is not left in a state which would pose danger to residents/pedestrians. Chain Link fence removal shall conform to the Standard Specifications, applicable portions of the Plans, Specifications, and the City of Lindsay Standards. This bid item will be paid for per Linear Foot.

Bid Item 15 – Curb Ramp and Landings: Payment under this item shall be considered full compensation for all labor, materials, tools, equipment and incidentals required to construct ADA-Compliant curb ramps, including concrete curb, curb returns, gutters, ramps, landings, detectable warning devices, transition sidewalk, stamped concrete, and all other work shown on the curb return details excepting the Asphalt Concrete pavement improvements and storm drain inlets/wings, to the lines and grades shown in accordance with the Plans and Specifications. Each concrete curb ramp includes all pedestrian ramps constructed at that return location in its entirety. This bid item includes excavation, preparation and compaction of subgrade, forming, doweling into existing concrete, furnishing the Portland cement concrete, placement, finishing, furnishing and installation of detectable warning surface material, replacement and reconfiguration of existing landscaping and irrigation, regrading, and all other work required to result in a complete project. This item shall conform to the applicable portions of the Plans, Specifications, these Special Provisions, Section G - Concrete of the Technical Provisions. Concrete curb ramps shall be minimum 2,500 psi concrete. This bid item will be paid for Per Each.

Bid Item 16 – Concrete Drive Approach: Payment under this item shall be considered full compensation for all labor, materials, tools, equipment, and incidentals required to construct City Standard concrete drive approaches as shown on the plans and identified by the “DA” construction callout within the Plans. Included in this bid item shall be all excavation, preparation and compaction of subgrade, Class 2 Aggregate Base (where

required), forming, doweling into existing concrete, furnishing and placement of the Portland cement concrete, finishing, and all other work shown on the plans required to result in a complete concrete drive approach. This item shall conform to the applicable portions of the plans, these Special Provisions, Section G - Concrete of the Technical Provisions. Each drive approach will be considered 1 Per Each item under this bid item. This bid item will be paid for Per Each.

Bid Item 17 – Concrete Curb Island: Payment under this item shall be considered full compensation for all labor, materials, tools, equipment, and incidentals required to construct a concrete curb as shown on the plans and identified by the “IL” construction callout within the Plans. Included in this bid item shall be all excavation, preparation and compaction of subgrade, Class 2 Aggregate Base (where required), forming, doweling into existing concrete, furnishing and placement of the Portland cement concrete, finishing, and all other work shown on the plans required to result in a complete concrete curb island. The island shall have a 4” thick concrete to fill in the island while protecting existing light pole base in place. This item shall conform to the applicable portions of the plans, these Special Provisions, Section G - Concrete of the Technical Provisions. This bid item will be paid for Per Each.

Bid Item 18 – Asphalt Drive Approach: Payment under this item shall be considered full compensation for all labor, materials, tools, equipment, and incidentals required to replace the full or partial existing asphalt drive approaches as shown on the plans to the lines and grades shown in accordance with the Plans Specifications, and City of Lindsay Standards. Included in this bid item shall be all excavation, preparation and compaction of subgrade, Class 2 Aggregate Base (where 90% relative compaction cannot be achieved with native subgrade), ac dike forming, finishing, and all other work shown on the plans required to result in a complete asphalt drive approach. This item shall conform to the applicable portions of Special Provisions, and the City of Lindsay Standards. Each residential drive approach will be considered 1 Per Each item under this bid item. This bid item is only for asphalt drive approaches where a drive approach site detail is not provided with lines and grades. This item is paid for Per Each.

Bid Item 19 – Concrete Cross Gutter: Payment under this item shall be considered full compensation for all labor, materials, tools, equipment and incidentals required to construct concrete Cross Gutter to the lines and grades shown and specified in accordance with the plans and Specifications. This bid item includes excavation, preparation and compaction of subgrade, forming, furnishing and placing the Portland cement concrete, placement, finishing and all other work required to result in a street Cross Gutter. This item shall conform to the applicable portions of the plans, City of Lindsay Standard Drawing ST-16. This item shall conform to the Special Provisions, Section G - Concrete of the Technical Provisions. Concrete Cross Gutter shall be minimum 3,000 psi concrete. This bid item will be paid for Per Each.

Bid Item 20 – New Block Fence: Payment under this item shall be considered full compensation for all labor, materials, tools, equipment and incidentals required to furnish and install new Block Fence. The work to be performed includes sourcing, providing, and installing concrete free standing fence wall blocks to the lines specified on the project construction drawings. Contractor to match the existing block fence design to the property’s existing block fence design. This bid item will include leveling, compacting, foundations, new block, concrete, staining, and sealing required to complete the work

specified in the Plans. Fence material and appurtenances shall conform to the Standard Specifications, applicable portions of the Plans, Specifications, and the City of Lindsay Standards. This bid item will be paid for per Linear Foot.

Bid Item 21 – **New Chain Link Fence:** Payment under this item shall be considered full compensation for all labor, materials, tools, equipment, and incidentals related to furnish and install New Chain Link fence as shown on the Plans. All materials shall be new and galvanized, imperfectly galvanized material or material upon which serious abrasions of the galvanizing occur, shall not be used. This Bid item will include new posts, concrete mow strips, tension wires, and braces required to complete the work as specified in the Plans. Fence material and appurtenances shall conform to the Standard Specifications, applicable portions of the Plans, Specifications, and the City of Lindsay Standards. This bid item will be paid for per Linear Foot.

Bid Item 22 – **Full Depth Reclamation with Cement (F):** Payment under this item shall be considered full compensation for all labor, materials, tools, equipment and incidentals required to pulverize the exposed material, re-grade and compact the pulverized material to the design soil cement grade, mix the pulverized material with 3% cement and compact in accordance with the plans and specifications, including the removal and stockpile of any excess material, haul-off, disposal, all grading and compaction of the Subgrade necessary to achieve specified final pavement design grades, and all other work necessary to result in a complete soil cement base course ready for application of asphalt concrete pavement section. The Contractor shall provide for the appropriate curing, and micro-cracking of the cement treated base material, prior to the placement of the specified thickness of hot mix asphalt concrete. The following item conforms to Section E – Full Depth Reclamation – Cement of the Technical Provisions. Bid quantity shown is estimated from theoretical dimensions and shall be considered a Final Pay Quantity unless the project design is modified by a Contract Change Order. This bid item shall be paid for per Square Feet.

Bid Item 23 – **Increase or Decrease in Cement for FDR-C method:** Payment under this item shall be considered full compensation for all labor, materials, tools, equipment and incidentals related to the modification in quantity of cement for the full depth reclamation. Adjustment of the quantity of cement shall not be subject to a unit price adjustment. This bid item will be paid for Per Pound of increase or deducted Per Pound of decrease in the quantity of cement from the 3% cement base line quantity, as calculated. No change in the contract amount shall be allowed in the event the contractor applies more cement than the specified rate, unless it is ordered in writing by the Engineer. The Contractor shall provide certified weight tickets of all cement deliveries to the Engineer daily. The quantities of the amount of increased or decreased cement shall be determined by field measurement of the area of treatment, the application rate and the weight tickets.

Bid Item 24 – **Hot Mix Asphalt Concrete:** Payment under this item shall be considered full compensation for all labor, materials, tools, equipment, and incidentals required to furnish and place Type “A” asphalt concrete pavement to the lines and grades shown in accordance with the plans and specifications. This bid item will include furnishing the material, placement, compaction, tack coat, asphaltic emulsion coating on vertical surfaces to abut the new pavement, grading and compaction of subgrade, and all other work required to result in an asphalt pavement meeting the requirements of the Plans,

Specifications, these Special Provisions, Section H – Asphalt Concrete Pavement of the Technical Provisions. The asphalt concrete pavement for *temporary* ramps or surfacing of trenches shall be included in the contract prices paid for the various items of work which may require temporary paving, as dictated by the Plans, Specifications, these Special Provisions, and no separate payment will be made therefor. This bid item will be paid for Per Ton installed. Payment adjustments for price index fluctuations of the 2018 Caltrans Standard Specification Section 9.107 shall *not* apply.

Bid Item 25 – **AC Dike:** Payment under this item shall be considered full compensation for all labor, materials, tools, equipment, and incidentals necessary for furnishing and installing an asphalt concrete dike in accordance with the plans. Included in this bid item shall be all excavation, grading and compaction of subgrade, and all other work required to result in complete AC Dike meeting the requirements of the Plans, Specifications, City Standard of Lindsay, and applicable portions of the plans. This item is also required to conform to Section H - Asphalt Concrete Pavement of the Technical Provisions and the 2018 Caltrans Standard Plans and Specifications. This bid item will be paid for Per Linear Foot.

Bid Item 26 – **Reset Survey Marker:** Payment for this item shall be considered full compensation for all labor, materials, tools, equipment and incidentals required to remove and reset existing monuments or survey points in accordance with the Plans, City of Lindsay Standard Detail MI-1 (Type B Monument), and the City of Lindsay Technical Specifications. The City will arrange for a surveyor to stamp the brass disk. This bid item will be paid for Per Each. Additionally, refer to General Notes regarding disturbed monuments on the cover sheet of the Plans.

Bid Item 27 – **RRFB Assembly with Light and APB, Advanced Crossing Assembly:** Payment for this item shall include full compensation for The system consists of the materials for the installation of a Rectangular Rapid Flashing Beacon (RRFB) system meeting the requirements of this Specification; the Federal Highway Administration (FHWA) Interim Approval for Optional Use of Pedestrian Actuated RRFB at Uncontrolled Marked Crosswalks (IA-21) dated March 20, 2018 (with correction issued 3/21/2018); and the Plans. All work involved in installation of the RRFB Assembly and Advanced Crossing Assembly, as shown on the plans, is identified as “AS” and “RB” in the Plans. This item shall conform to the applicable portions of the Plans, Specifications, and Special Provisions. This item shall be fully functionable once installed. This item will be paid for Per Each.

Bid Item 28 – **Signage, Pavement Striping, Markers and Markings:** Payment under this item shall be considered full compensation for all labor, materials, tools, equipment and incidentals required to furnish and install street signs, sign poles, sign pole footings, placards, and hardware, pavement striping/markers/markings (paint and thermoplastic), including relocating, or removing and disposing of existing signs, striping and markers, as shown and specified, and doing all other work necessary to complete the signing and striping installations. This item shall conform to the applicable portions of the Plans, Specifications, these Special Provisions. All existing signs and posts affected by the installation of new curb ramps and sidewalks shall be relocated as shown on the plans. This bid item will be paid as a Lump Sum, prorated, based on percentage of work completed.

Bid Item 29 – **12-Inch SDR-26 PVC Green Storm Drain Pipe:** Payment under this item shall be considered full compensation for all labor, materials, tools, equipment and incidentals required for constructing 12-Inch SDR-26 PVC Storm Drain Pipe to the lines and grades shown in accordance with the Plans, Specifications and Special Provisions Section I – Sewer and Storm Drain Pipe Technical Provisions. Pipe color shall be *GREEN*. Included in this bid item shall be all excavation, trench preparation, bedding, pipe, fittings, work required to connect to existing drain inlets, backfill, compaction, temporary trench patching, worker protection, and other work required to result in a complete project. This bid item will be paid for Per Linear Foot installed, measured from the outside of the inlet.

Bid Item 30 – **Storm Drain Inlet:** Payment under this item shall be considered full compensation for all labor, materials, tools, equipment and incidentals required to furnish and install new storm drain inlets in the locations shown and in accordance with the Plans and Specifications. Included in this bid item shall be all excavation, bedding, backfilling, compaction, watering, furnishing and installing the cast-iron grate and lid, and constructing the concrete curb and gutter wings and any affected adjacent curb and gutter and sidewalk, minor grading around the inlet, connecting the new storm drain pipe to the inlet, and all other work necessary to result in a complete and operating inlet. This item shall conform to the applicable portions in accordance with the Plans, Specifications and Special Provisions Section I – Sewer and Storm Drain Pipe Technical Provisions. The construction of this item will be held to City of Lindsay Standards and Section G – Concrete of Technical Provisions. This bid item will be paid for Per Each.

Bid Item 31 – **Adjust Sanitary Sewer and Storm Drain Manhole to Finish Grade:** Payment under this item shall be considered full compensation for all labor, materials, tools, equipment, incidentals, and furnishing and installing the grade rings, concrete collar, and asphalt, and resetting the frame and cover and for doing all the work involved in Adjust Sanitary Sewer and Storm Drain Manholes to Finished Grade. This item shall conform to the applicable portions of the plans, as specified in accordance with the Plans, Specifications and Special Provisions Section I – Sewer and Storm Drain Pipe Technical Provisions, and as directed by the Engineer. This bid item will be paid for Per Each.

Bid Item 32 – **Adjust Water Valve to Finish Grade:** Payment under this item shall be considered full compensation for all labor, materials, tools, equipment and incidentals required for furnishing and installing riser, cover with lid, concrete collar, and asphalt, and resetting the frame and cover and for doing all work involved in Adjust Water Valve to Finished Grade as shown on the plans. This item shall include adjusting existing water valves, blow-offs, and fire hydrant valves to finished grade. This item shall conform to

the applicable portions of the Plans, Specifications, these Special Provisions Section H – Asphalt Concrete Pavement Technical Provisions. This bid item will be paid for Per Each.

Bid Item 33 – **Clearing and Grubbing in School Area:** Payment for this item shall include full compensation for all labor, materials, tools, equipment, and incidentals making up the cost of all work involved in clearing and grubbing, within Tulare Rd near the school expansion as shown in sheet “D4”, in accordance with the plans and specifications. This bid item will be paid as a Lump Sum, prorated based on the percentage of this item completed.

Bid Item 34 – **Remove Existing Concrete Sidewalk in School Area:** Payment for this item shall include full compensation for all labor, materials, tools, equipment, and incidentals required to sawcut, remove and dispose of existing concrete sidewalk in accordance with the Specifications, these Special Provisions, Section F - Demolition of the Technical Provisions, and the City of Lindsay Standards. Bid item is identified in sheet “D4” as sidewalk to be removed in the school area. This bid item shall not be used for sidewalk removal and replacement needed for utility installation, those costs shall be included in the bid items related to the utility work. This item shall not be used for sidewalk behind drive approach removal and replacements, this work will be included in the Concrete Drive Approach or Sawcut & Remove Drive Approach bid item. This item does not include removal of sidewalk adjacent to curb ramps or alley approaches required for construction of the curb ramps or alley approaches per the curb ramp and alley approach details. This bid item will be paid for Per Square Foot.

Bid Item 35 – **Tree Removal and Hauling in School Area:** Payment for this item shall include full compensation for all labor, materials, tools, equipment, and incidentals making up the cost of all work involved in the removal and disposal of tree(s), stump(s), and roots as identified on the plans as “RTS”, and as necessary to construct the improvements. All debris generated as a result of this item must be removed from the site daily. The contractor will backfill and compact all voids left by the tree/stump/roots removal daily with clean topsoil and take appropriate safety measures to ensure that the site is not left in a state which would pose danger to residents/pedestrians. Stumps are to be ground to a depth of at least twenty-four (24) inches below the existing grade and within a radial distance which would permit removal of all roots larger than one (1) inch. All surface roots protruding above the surrounding grade are to be ground level to the existing grade. The contractor will be required to remove and re-install any fencing, which needs to be removed to gain access to the tree/stump/roots. This bid item will be paid for Per Each.

Bid Item 36 – **Sawcut and Remove Curb & Gutter in School Area:** Payment for this item shall include full compensation for all labor, materials, tools, equipment, and incidentals required to sawcut, remove, and dispose of existing concrete curb and gutter in accordance with the Plans as shown in sheet “D4”, Specifications, these Special Provisions, Section F - Demolition of the Technical Provisions, and the City of Lindsay Standards. This bid item shall not be used for curb and gutter removal and replacement needed for utility installation; those costs shall be included in the bid items related to the utility work. This item shall not be used for curb and gutter in front of drive approach removal and replacements, this work will be included in the Drive Approach with Ramps or Drive Approach bid item. This bid item will be paid for per Linear Foot

Bid Item 37 – **Concrete Sidewalk (4-inch) in School Area:** Payment under this item shall be considered full compensation for all labor, materials, tools, equipment, and incidentals required to construct 4-inch-thick concrete sidewalk to the lines and grades shown and specified in accordance with the plans and Specifications. This bid item includes work performed in the school area as shown in sheet “L6 and “L7” and called out as “MC” in the Plans. This bid item includes excavation, preparation, and compaction of subgrade, forming, doweling into existing concrete, furnishing the Portland cement concrete, placement, finishing and all other work required to result in a complete sidewalk. This item shall conform to the applicable portions of the plans, these Special Provisions, Section G - Concrete of the Technical Provisions, and the City of Lindsay Standards. Concrete sidewalks shall be as defined in City of Lindsay Standard Drawing ST-9. Concrete sidewalk shown on the Curb Ramp and Alley Approach Details shall be included in the corresponding Concrete Curb Ramp, Alley Approach, and Drive Approach bid items and shall not be included in this bid item. This bid item shall only be used where specifically noted on the plans. This bid item shall not be used for sidewalk replacement needed for utility installation; those costs shall be included in the bid items related to the utility work. This item shall not be used for sidewalk at drive approach removal and replacements, this work will be included in the Concrete Drive Approach bid items. Bid quantity shown is estimated from approximated dimensions. This bid item will be paid for Per Square Foot.

Bid Item 38 – **Concrete Curb and Gutter in School Area:** Payment under this item shall be considered full compensation for all labor, materials, tools, equipment and incidentals required to construct concrete curbs and gutters to the lines and grades shown and specified in accordance with the Plans and Specifications and as shown on “L6” and “L7” beginning with approximate Tulare Road Station 108+88 and ending at station 113+39. This bid item includes excavation, preparation, and compaction of subgrade, compacting a backing behind the curb when indicated on the plans, forming, doweling into existing concrete, furnishing and placing the Portland cement concrete, placement, finishing and all other work required to result in a complete curb and gutter. This item shall conform to the applicable portions of the Plans, Specifications, these Special Provisions, Section G - Concrete of the Technical Provisions and City of Lindsay Standard Details ST-6, ST-7 and ST-8, and ST-14. Standard Concrete Curb and Gutter shall be 2,500 psi concrete (as defined in City of Lindsay Standard Drawing ST-6). Curb and gutter at driveways, drain inlets, curb and gutter returns will be paid for under the driveway, drain inlet, and curb ramp bid items. Concrete curb and gutter shown on the Curb Ramp and Alley Approach Details shall be included in the corresponding Concrete Curb Ramp, Alley Approach, and Drive Approach bid items and shall not be included in this bid item. This bid item shall only be used where specifically noted on the plans. This bid item shall not be used for curb and gutter replacement needed for utility installation; those costs shall be included in the bid items related to the utility work. This item shall not be used for curb and gutter at drive approach removal and replacements; this work will be included in the Concrete Drive Approach bid item. Bid quantity shown is estimated from approximated dimensions. This bid item will be paid for Per Linear Foot.

Bid Item 39 – **Remove & Relocate Street Lights in School Area:** Payment under this item shall be considered full compensation for all labor, materials, tools, equipment and incidentals required for removing, relocating and installing street light poles, luminaires, junction boxes and conduit. All work involved in removal of the Street Lights as shown in the Plans and identified as “SR” in the Plans. The contractor will backfill and compact any voids left by the removal of the Street Lights with clean topsoil and take appropriate safety measures to ensure that the site is not left in a state which would pose danger to residents/pedestrians. All work involved in installing Street Lights as shown on the Plans and identified by “SL”. This item shall include relocating and installing existing Street Lights located on Tulare Rd as shown on the plans. All Street Lights once

installed, shall be fully functionable and operate per City Standards. This item shall conform to the applicable portions of the Plans, Specifications, and the City of Lindsay Standards. This bid item will be paid for Per Each.

Bid Item 40 – **Plant New Trees in School Area:** Payment under this item shall be considered full compensation for all labor, materials, tools, equipment, and incidentals required for furnishing and installing New Trees in the area located in Tulare Rd as shown on the Plans identified by “TE”. The contractor will backfill and compact any voids left by the installation of new tree/stump/roots with clean topsoil and take appropriate safety measures to ensure that the site is not left in a state which would pose danger to residents/pedestrians. Expected to be 15-gallon container trees to be selected by the City. This item shall conform to the applicable portions of the Plans, Specifications, and the City of Lindsay Standards. This bid item will be paid for Per Each.

Bid Item 41 – **Irrigation Appurtenances in School Area:** Payment under this item shall be considered full compensation for all labor, materials, tools, equipment, and incidentals required for furnishing and installing Irrigation Appurtenances in the Tree Area located on Tulare Rd and Lindsay Highschool as shown on the Plans. The contractor will reconnect any irrigation appurtenances to the existing irrigation system to allow for proper management and maintenance of the system. The contractor will backfill and compact any voids left by the installation of new irrigation appurtenances with clean topsoil and take appropriate safety measures to ensure that the site is not left in a state which would pose danger to residents/pedestrians. This item shall conform to the applicable portions of the Plans, Specifications, and the City of Lindsay Standards. This bid item will be paid for as a Lump Sum.

END OF SECTION

**SECTION FIVE
TECHNICAL PROVISIONS
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SECTION FIVE
TECHNICAL PROVISIONS
A. GENERAL

A1. Work to be Done.

The work to be done under these Specifications shall include the furnishing of all material, labor, equipment and appurtenances necessary for the pre-application, preparation and installation of a Cape Seal surface treatment on existing street sections in the City of Lindsay, as determined in the Contract Documents, project plans, Special and Technical specifications.

A2. General Requirements.

The General Conditions and Special Conditions apply to this division the same as if here written.

A3. Ordinances and Codes.

All work must conform to the requirements of the following authorities:

- a. California Administrative Code, Title 24, Building Standards.
- b. California Administrative Code, Title 19, Public Safety and State Fire Marshal.
- c. California Administrative Code, Title 8, Chapter 4.
- d. California Administrative Code, Title 21, Public Works.

Requirements of local and federal enforcing authorities may supersede requirements of these codes and nothing in these Plans and Specifications shall be construed to permit work not conforming to applicable codes.

A4. Water.

Reasonable amounts of water for testing, construction and dust control will be furnished by the City of Lindsay and only where approved by the City. The Contractor shall be responsible for all costs associated with obtaining the water, disposing of the water and for insuring that the water supply is not contaminated through his actions.

A5. Beginning and Completion of the Work.

The work shall be commenced within ten (10) calendar days from the date of the Notice to Proceed and shall be completed within twenty (20) calendar days from the date of this Notice.

A6. Liquidated Damages.

The Contractor shall, as provided, pay to the Owner as fixed and agreed, liquidated damages for each calendar days' delay in completion of the work beyond the time provided in the Contract, the amount of eight hundred dollars (\$800.00).

A7. Project Coordination.

Prior to beginning work, the Contractor shall provide the Engineer with a schedule of when the various items of work will begin and when they will be completed. Contractor shall provide a representative to coordinate the work with the Engineer. The representative shall be available when necessary, during the course of the project.

A8. Contract Drawings.

The location of the work, its general nature and extent and the form and detail of the various features are shown on the included drawings, accompanying and made a part of these Specifications.

A9. Water System.

The Contractor shall not operate any of the valves or fire hydrants on the City of Lindsay's water system. The Contractor shall notify the City at least seventy-two (72) hours and all affected residents at least forty-eight (48) hours in advance of the need to shut off water. The water shall not be turned off between the hours of 5:00 p.m. and 8:00 a.m. The required notice to all affected residents will consist of distributing a notice on an 8-1/2"x11" sheet of paper to all residents, properties or businesses along the streets that will be without water. The content of the notice, as a minimum, shall include the effected date (or dates), time for shut off and duration, the Contractor's company, Contractor's contacts and phone number(s) and the City's contacts and phone numbers. This notice shall be forwarded to all affected residents as well as The City of Lindsay City Services and Public Safety Department.

A10. Items Provided by Owner.

Unless specifically called for in the project plans and / or the project specifications, all items shown on the project plans shall be considered part of the project and shall be included in the Contractor's bid submittal.

**SECTION FIVE
TECHNICAL PROVISIONS
B. MOBILIZATION / DEMOBILIZATION**

B1. General.

Mobilization / Demobilization shall consist of full payment for transportation of all necessary equipment, supplies, tools, etc. for the completion of all work required for this project.

B2. Obstructions.

The Contractor shall be wholly responsible for the preservation and protection of all underground pipes, conduits, and other improvements, whether or not such improvements are shown on the plans. The Contractor shall notify Underground Services Alert at least 48 hours prior to any excavation.

Existing land survey monuments shall be fully protected from damage or displacement and shall not be disturbed unless directed by the City. If any such monuments are disturbed, they shall be replaced by monuments of similar quality and durability to their original location by a licensed land surveyor at the Contractor's expense. Replacement shall be made at no cost to the City.

B3. Work in City Right of Way.

All of the work shown on the plans and specified herein which is located within the public rights-of-way of the City shall be performed in accordance with city ordinances regulating the use of such public rights-of-way, except as otherwise provided herein. The Contractor shall also familiarize himself with the various regulations and requirements of the City and shall conduct his operations in compliance therewith. Any work required, or necessary, outside of the public right of way shall be held to the same standards as City requirements.

B4. Traffic Control and Street Signs.

To facilitate the work, the Contractor may remove all traffic and street signs within the project area from their existing locations, and stockpile them at a location under his control. All signs so removed shall be saved from all harm, and shall be reinstalled in accordance with City Standards prior to the completion of the work.

In the interim, the Contractor shall install and maintain traffic control devices meeting the requirements of the State of California Department of Transportation (CalTrans) Manual of Traffic Controls for Construction and Maintenance Work Zones, latest revision, as required to control and direct traffic in an orderly and safe manner.

**SECTION FIVE
TECHNICAL PROVISIONS
C. DUST CONTROL**

C1. General.

This work shall consist of applying water and/or an approved dust palliative and taking other such actions as may be required for the alleviation or prevention of dust nuisance in and around the construction zone. Responsibility shall extend to adjacent streets where construction dirt may be spread either by wind or by construction equipment.

Such dust control shall be performed on a daily basis, including weekends and holidays. Job conditions may dictate application more than once per day. The Contractor shall follow the direction of the City in increasing the intensity of his dust control effort if the City determines the need.

The Contractor shall furnish all labor, materials, tools, and equipment necessary to maintain dust control herein specified. Failure to do so shall result in a "Stop Work Order" until such time that the City deems control has been reestablished by the Contractor. The City reserves the right to order such work performed by its forces or by a third party selected by the City, and to collect all charges incurred thereby from the Contractor prior to issuance of certificate of completion or occupancy for the work.

C2. Materials and Application.

Materials. Materials shall be water and/or an approved dust palliative as designated below.

Dust Palliative. Dust Palliative binder shall be either miscible in water or be some form of material that is directly applied to the surface without mixing with water.

Binders that are miscible in water shall be either a resin emulsion, an SS1 type asphaltic emulsion, materials composed essentially of lignin sulfonate, or any other binder that is miscible in water in the proportions provided below in Application, is non-corrosive, and is effective as a dust palliative.

Binders that are directly applied to the surface without mixing with water shall be a product prepared from crude petroleum that is effective as a dust palliative.

Resin emulsion shall be composed of 57%-63% of semi-liquid petroleum resin and the remainder water to which a suitable emulsifying agent has been added. The resin emulsion shall be readily miscible with water and when diluted with any hard water in the proportions of 1 (one) part emulsion to 10 (ten) parts water shall show no signs of breakdown or separation of the petroleum resin base. Resin emulsion which has been stored in closed containers at temperatures above freezing for a period up to 3 months shall not be used until tested and approved.

SS1 type asphaltic emulsion shall conform to Section 203-3 of the Standard Specifications for City Services Construction, 1994 Edition.

Application. Binders that are miscible in water shall be mixed with additional water at the rate of 4-19 parts water to one (1) part binder. Mixing shall be accomplished by placing the binder and water in the spreading equipment simultaneously or by some other mixing method that will produce equivalent results, with approval by the City.

The resulting mixture shall be applied with a pressure type water distributing truck equipped with a spray system or pressure type asphalt distributors conforming to Section 203-2.5 of the Standard Specifications for Public works Construction, 2018 Edition. The application rate shall be 0.2-0.8 gallons per square yard.

Binders that are applied directly to the surface without mixing with water shall be applied by equipment approved by the City. The binder shall be applied at a rate of 0.10-0.25 gallons per square yard.

SECTION FIVE
TECHNICAL PROVISIONS
D. MAINTENANCE OF TRAFFIC AND DETOURS

D1. General.

Traffic shall be maintained at those locations indicated and in conformance with the plans, these specifications, and the Special Provisions.

The Contractor shall furnish, construct, maintain, and finally remove detours, road closures, lights, signs, barricades, fences, flares, miscellaneous traffic devices, flagmen, drainage facilities, reconstruct paving, and such other items and services as are necessary to adequately safeguard the public from hazard and inconvenience. All such work shall be as provided in the specifications herein and as directed by the City's Representative, and shall comply with the ordinances, directives, and regulations of authorities with jurisdiction over the public roads in which the construction takes place and over which detoured traffic is routed by the Contractor.

Prior to the start of construction operations, the Contractor shall notify the City Police and Fire departments, giving the expected starting date, completion date, and the names and telephone numbers of two responsible persons who may be contacted at any hour in the event of a condition requiring immediate correction.

D2. Construction Signing.

Construction signing used for handling traffic and public convenience shall conform to the State of California, Department of Transportation (Caltrans) Manual of Traffic Controls for Construction and Maintenance Work Zones, latest revision.

All signs shall be illuminated or reflectorized when they are used during hours of darkness. All cones, pylons, barricades, or posts used in the diversion of traffic shall be provided with flashers or other satisfactory illumination if in place during hours of darkness.

The signing, barricading, and diverting of traffic shall be subject to the approval of the City, except in areas outside the City limits where encroachment permits issued by other agencies shall govern over these Standard Specifications. The Contractor shall maintain a 24-hour emergency service to remove, install, relocate, and maintain warning devices, and shall furnish to the authority names and telephone numbers of two persons responsible for this emergency service. In the event these persons do not promptly respond or the authority deems it necessary to call out other forces to accomplish emergency service, the Contractor will be held responsible for the cost of such emergency service.

No cross streets or intersecting streets shall be closed without approval of the City or authority with jurisdiction over the public roads in which the construction takes place and over which detoured traffic is routed by the Contractor.

D3. Vehicular Traffic Control.

Public traffic shall be permitted to pass through the construction area with as little inconvenience and delay as possible at all locations where approved alternate routes are not available.

No cross streets or intersecting streets shall be closed without approval of the City or authority with jurisdiction over the public roads in which the construction takes place and over which the detoured traffic is routed by the Contractor.

D4. Street Closure.

Should it become necessary, in the Contractor's opinion, to close a particular street, the Contractor shall submit such a request, in writing, to the City for consideration at least 72 hours prior to the time of such proposed closure. The Contractor's request shall include the estimated duration of closure and provisions for traffic control and detours. If the City approves of the plan to close a street, the Contractor shall notify, in writing, the Police Department and the Fire Department of the contemplated closure not less than 48 hours prior to such closure. Should the Contractor fail to give the required notification, the closure will not be allowed until the required notification is given. Except as noted below, under no circumstances will such closure be allowed for a single period exceeding four hours, although the City may allow the road to be closed more than once over the course of the project.

For road closures exceeding the above-stated four hour maximum, the request to the City must be made at least 10 days in advance of the contemplated closure and the Police and Fire Departments must be notified at least 5 days prior to such closure.

D5. Permanent Traffic Controls.

All existing permanent traffic control signs, barricades, and devices shall remain in effective operation unless a substitute operation is arranged for and approved as a portion of vehicular traffic control above.

D6. Pedestrian Traffic Control.

A minimum of one 4-foot wide pedestrian walkway shall be maintained and safely delineated along each public street at all times during construction.

D7. Access to Adjacent Properties.

Prior to restricting normal access from public streets to adjacent properties, the Contractor shall notify each property owner or responsible person, informing him of the nature of the access restriction, the approximate duration of the restriction, and the best alternate access route for that particular property.

Reasonable access, as determined by the City's Representative, from public streets to all adjacent properties shall be maintained at all times during the construction.

SECTION FIVE
TECHNICAL PROVISIONS
E. FULL DEPTH RECLAMATION - CEMENT

PART 1 GENERAL

1.1 WORK INCLUDED

A. Full Depth Reclamation (FDR) shall consist of the following:

1. Pulverizing the existing materials and constructing a mixture of pulverized existing aggregate, soil, cement, and water to achieve a 12-inch (thickness per plan) thick cement treated base section, in accordance with this specification and in conformity with the lines, grades, thickness and cross sections shown on the plans. The top of the FDR layer shall be set so that the new asphalt concrete placed on top will achieve the finished pavement lines, grades, and slopes shown on the plans.
2. Re-grading and hauling away excess material, as necessary, to meet the finished pavement thicknesses, lines, grades, and slopes shown on the Plans.
3. Compact, fine grade to the finish grades shown on the Plans, cure and micro-crack, and maintain the completed FDR base material surface prior to placement of asphalt concrete, in accordance with the specifications provided below.
4. FDR material shall be constructed in a series of parallel lanes such that longitudinal and transverse joints are minimized.

1.2 SUBMITTALS

A. Submittals shall include the following:

1. Certificates of Compliance for Portland cement.
2. Certified weight tickets of cement delivered to the project location.
3. Submit a detailed work plan to the Engineer a minimum of 2 weeks prior to the start of construction including a list of equipment to be utilized in performance of the work. The work plan shall describe the equipment and methods to be implemented for the pulverization, dust control, blending, chemical treatment, moisture conditioning, compaction, curing, micro-cracking, and maintenance of the cement treated materials prior to placement of the overlying course.
4. FDR work plan, delineating beginning and ending of each day's work.
5. Quality Control Plan to the Engineer a minimum of 2 weeks prior to the start of construction identifying:
 - i. the Contractor's plan to periodically confirm that the required thicknesses of the FDR-C layer is provided.
 - ii. the Contractor's plan to confirm that the gradation of the pulverized/blended materials is achieved.

- iii. the Contractor's plan to confirm the moisture content and compaction of the materials to be treated, including developing a family of moisture density curves for one-point confirmations.
 - iv. the Contractor's plan to confirm the grade and flatness tolerances for the finished cement treated base.
 - v. the Contractor's plan for soil sampling prior to, and during, construction to confirm the proper cement content to be used and the contractor's plan to verify that the proper design strength has been reached in the finished FDR-C base.
6. The Contractor performing the FDR-C work shall possess a minimum of 3 years of documented experience performing similar cement treatment activities for pavement support. The Contractor shall have a representative on the site with a minimum of 3 years of experience in cement stabilization and all personnel shall be properly trained in the cement treatment process, including quality control procedures and safety.
7. The Contractor shall provide Just-In-Time Training (JITT) conducted by an Engineering Instructor experienced in the construction methods, materials, and test methods associated with construction of cement stabilization projects. The training shall be mandatory and consist of a formal joint training class on the process, required special equipment, placement and compaction methods, and quality control. Construction operations for cement stabilization shall not begin until the Contractor's and the Engineer's personnel have completed the JITT. The JITT training class shall be conducted during normal working hours and at a location convenient for both the Contractor and the Engineer. The JITT class shall be completed not more than 7 days prior to the start of the cement stabilization process. A copy of the course syllabus, handouts, and presentation material shall be submitted to the Engineer at least 7 days before the day of the training. The Contractor and the Engineer shall mutually agree to the course instructor, course content, and training site.

The three low bidders shall complete and submit the Certification of Cement Stabilization Subcontractor's Experience and Qualifications form within 24 hours following the bid opening.

PART 2 PRODUCTS

2.1 PORTLAND CEMENT

- A. Portland Cement shall be Type II in conformance with the provisions in Section 90-1.02B (2) "Cement," of the Standard Specifications. Mineral admixtures shall not be substituted for cement.

2.2 WATER

- A. Water shall conform to the provisions in Section 90-1.02D, "Water," of the Standard Specifications.
- B. Water used for FDR shall be clean and free of foreign substances and shall not cause an adverse effect on the FDR mixture.
- C. Water known to be of potable quality may be used without testing, all other water shall require testing.

2.3 PULVERIZED MATERIAL

- A. The existing asphalt concrete surface shall be removed to the depth specified on the plans and

properly disposed of prior to the FDR-C operation for this project.

2.4 EQUIPMENT

- A. The FDR—cement mixing machine must have independent and interlocked systems for water and must include the following:
 - 1. Digital electronic controller system
 - 2. Pumping system
 - 3. Spray bar system
- B. The cement distributor must have a vacuum or dust suppressant system to minimize airborne cement during spreading of the cement on the grade.
- C. Water trucks must not leak and must be attached to the FDR—cement mixing machine with a tow bar and hose if water is introduced during the initial mixing of the cement. The hose must be attached to the bar and must not touch the ground at any time during the initial mixing operation.
- D. Grading and compacting equipment must be rubber-tired, self-propelled and reversible. The frequency and amplitude of vibrating rollers must be adjustable and exceed a force of 15 tons in vibratory mode. The use of track equipment is strictly prohibited.

PART 3 EXECUTION

3.1 GENERAL

- A. Prior to beginning any cement treatment, the existing subgrade shall be graded to conform to the typical sections, lines, and grades as shown on the Plans.
- B. The subgrade shall be trimmed sufficiently low to allow for the added cement volume, proper material compaction, and subsequent layers of asphalt concrete surfacing.
- C. USA Utility Marking Requirements: The Contractor shall contact USA and have all utilities remarked at the project site a minimum of 10 working days prior to commencing FDR-C operations. Contractor shall transfer these markings to existing improvements that will not be affected by the FDR-C operation, i.e. on curb and gutters, sidewalks, etc. with appropriate off-sets to ensure this information is not lost.
- D. Pre-FDR-C Utility Potholing Requirements: After the FDR-C is rough graded, and USA re-marked, the contractor shall be required to thoroughly pothole all utilities and obstructions that may have the possibility of affecting the FDR-C operations.

3.2 SURFACE PREPARATION

- A. Before any FDR work begins, the Contractor shall prepare the existing roadway by:
 - 1. Removing from the existing pavement surface all dirt, vegetation, standing water, combustible materials, oils, raised roadway markings, and other objectionable materials by sweeping, blading, or other approved method.
 - 2. Adjusting affected utilities down or accommodating for utilities prior to FDR in some other means to the satisfaction of the Engineer.
 - 3. Accurately referencing the profile and cross slope as shown on the plans for the finished surface of the FDR material.

4. Contractor shall make written notations of all facilities to be lowered and raised after paving using three fixed points. A copy of the tie recording shall be provided to the City prior to lowering facilities.
5. The Contractor shall verify, as required, that sufficient cover is present over existing underground utilities to perform the work without damage to the existing utilities by potholing or other methods acceptable to the Engineer. Potholing shall be completed and logged prior to any other construction activities on the project. A copy of the potholing log shall be provided to the City prior to starting FDR-C operations.
6. The Contractor shall maintain a minimum of six (6) inches of clearance between the bottom of the proposed stabilized base section, to the top of the existing utility. If the existing soil conditions are unstable (yielding), the minimum clearance shall be increased to twelve (12) inches.
7. When an existing utility is located within the stabilized base section, or within the minimum clearance requirements cited in Section 6 above, the Contractor shall utilize other methods to install the stabilized base section. Contractor shall prepare a description of the alternate method for approval by the Engineer prior to implementation at no additional cost to the City.
8. Site Coordination Walk Prior to FDR-C: The general contractor shall organize a site inspection walk with their job Foreman, Grading subcontractor, FDR-C Subcontractor, and City Inspector the morning just prior to FDR-C operations starting. At this meeting, all parties shall walk the entire project site to review any and all areas that cannot be treated in standard production, such as shallow utilities, areas adjacent to curb and gutter, or any other obstructions that require alternative mixing and compacting methods. These shall be identified and discussed with the FDR-C contractor staff. Obstructions and areas where FDR-C sections shall be changed shall be marked on existing improvements to remain with offsets to this area. They shall also be marked physically at that location with traffic cones or other similar methods as approved by the inspector.

3.3 PORTLAND CEMENT APPLICATION

- A. Portland cement shall be applied at a rate of 3.0 to 5.0 percent by weight of the in place dry material to a depth of 12-inches (thickness per plan). For estimating purposes, an in-place dry unit weight of mixed soil (AC, AB, and subgrade soils) of 130 pcf should be used as the basis for the application rate. For the purposes of the bid an application rate of **3.0 percent** will be assumed.
- B. The cement shall vary no more than 0.5% under and not more than 1.0% over the specified cement content. However, the moving average of the rate of cement content inspections shall not be less than the specified cement content.
- C. During the project, the City may order an increase or decrease in the rate of application of cement. If the Engineer orders a change to the original quantity of cement, calculated as:

(Square Feet of FDR-C) x (Application rate above),

Then, an adjustment to the contract shall be made based on the Increase or Decrease in Cement for FDR-C Method unit price provided by the Contractor in the bid schedule, and as described in the Explanation of Bid Items section of these specifications.

- D. Cement shall be distributed using a non-pressurized mechanical vane-feed spreader, equipped with on-board scales and controls, capable of spreading the cement at the prescribed rate of application. Tailgate spreading of cement will not be permitted. The application percentage should be demonstrated through the use of pan tests performed by the Owner's Lab Contractor, contractor shall notify the Owner's Representative one (1) week in advance of operations for the purpose of coordinating testing with the Owner's Lab. No traffic other than the mixing equipment shall be allowed to pass

over the spread concrete for two hours after the mixing operation is complete.

- E. Spreading operations shall be conducted in such a manner to minimize hazard to construction personnel and the public. Do not spread cement across driveways, alleys, or roadways that remain open until such time that they are shut down for the mixing process.
- F. Cement shall not be spread upon the prepared material more than two hours prior to concrete mixing.

3.4 CONCRETE MIXING

- A. Mixing of the FDR material, cement, and water shall be done with a four-wheel drive rotary mixer (Wirtgen 240i, Caterpillar RM500, or equivalent). The mixing machine shall have equipment provisions for introducing water at the time of mixing through a metering pump device.
- B. Initial Mixing: The full depth of the treated subgrade shall be mixed a minimum of two times with the approved mixing machine. At least one of the two mixes shall be done while introducing water into the soil through the metering pump device on the mixer. Water shall be added to the subgrade during mixing to provide a moisture content of at least 3.0 percent above the optimum moisture of the soil-cement mixture to ensure chemical action of the cement, aggregate, and soil.
- C. To ensure a uniformly treated section, any material or soil around manholes, utility risers, or valves and adjacent to curbs/gutters or in corners, must have that material pulled out by the Contractor, to the depth of treatment, where it is accessible to be mixed with the cement. After that material is uniformly mixed with cement and water, it shall be placed back and compacted to specification.
- D. After initial mixing, the stabilized subgrade shall be lightly rolled and graded prior to performing the final mixing operation. Mixing and re-mixing shall continue until the material is uniformly mixed and free of streaks or pockets of cement. Mix uniformity and depth shall be assessed visually and by use of Phenolphthalein to verify color uniformity and pH greater than 10. After mixing, a test pit shall be excavated to the full depth of the section and phenolphthalein shall be applied to the exposed material in order to verify the base has been mixed uniformly.

3.5 COMPACTION

- A. The mixture shall be compacted in a single layer. The Contractor shall regulate the sequencing of the cement treatment operations such that the final compaction of the FDR mixture to the specified density will be completed within 2-1/2 hours after the initial application of water during the re-mixing operation.
- B. Compaction shall be by means of steel drum, pad foot and/or segmented-wheel rollers of sufficient capacity to compact the full depth. Areas inaccessible to rollers shall be compacted to the required density by other means satisfactory to the City.
- C. The field dry density of the compacted mixture shall be at least 95% percent of the maximum dry density as determined in accordance with ASTM D 1557. In the event of a failed compaction test the entire area represented by said test shall be re-worked and re-tested at the Contractor's sole expense.
- D. Should the treated sub-grade yield under the weight of the compaction equipment, compaction effort shall cease in an effort to not compromise the section, in this case, the maximum achievable field density may be accepted by the Owner, or an alternate remedial plan may be proposed by the Contractor.

3.6 QUALITY CONTROL AND TESTING

Quality Control (QC): The contractor shall provide quality control sampling and testing of the FDR-C in accordance with, and at the frequencies of, the 2018 Caltrans Standard Specifications. The Contractor shall provide a Quality Control Plan, as indicated in Section 1.2. Quality control sampling and testing shall be performed by those persons currently certified by Caltrans for the performance of their duties in accordance to Caltrans and AASHTO methods and protocols. The Quality Control Lab shall use QC testing data to advise/direct the Contractor during construction operations. This data shall be provided to the Engineer for review and consideration. Should discrepancies be encountered between the Contractor's Quality Control and the City's Quality Assurance testing data, the Quality Assurance data shall prevail.

<u>Test Type</u>	<u>Test Procedure</u>	<u>Number of Tests</u>
Maximum Dry Density & Optimum Moisture	ASTM D1557	For each soil type treated, with at least 1 test/10,000 ft ²
Spread Rate	Pan Test (Minimum Pan Area of 3 square feet)	One test for every spreading operation with at least 1 test every 250 lf
Mix Uniformity and Depth	Visual and Phenolphthaleine to verify pH greater 10.5 pH indicator color shall also be uniform.	Shall be performed after final mixing. 1 test/500 LF with minimum of 2 tests per separate operation area, if less than 500 LF.
Field Dry Density & Moisture	Nuclear Gage or Sand Cone through the depth of the treated zone.	1 test/500 LF with minimum of 2 tests per separate operation area, if less than 500 LF
Unconfined Compressive Strength of FDR	ASTM D1633 (Required Min. 350 psi)	Minimum one (1) test per day Perform additional tests for separate mixing operations and change in materials

1. Frequency of tests is based on the length of a treatment pass.
2. Frequency of pan tests shall be increased as necessary at project start-up to establish a construction procedure to maintain the recommended spread rate.
3. The nuclear gauge moisture and densities shall be correlated and corrected daily based on oven-dried soil moistures and sand cones.
4. Treated bulk samples shall be obtained from the subgrade after initial mixing. The material shall be screened in accordance with the test method, split in proper proportions and containerized for a period of 24 hours prior to performing laboratory compaction curve.
5. Treated bulk samples shall be obtained from the subgrade after initial mixing. The material shall be split in proper proportions and containerized for a period of 24 hours prior to remolding for unconfined

compressive strength. Unconfined compressive strength specimens to be molded in a split 4-inch diameter proctor mold or R-value mold with diameter to length ratio of 1 to 1.1.

3.7 FINISHING AND CURING

- A. After the final layer of cement stabilized subgrade has been compacted, it shall be brought to the required lines and grades in accordance with the Plans, and shall be kept at the specified moisture.
- B. The finished surface of cement treated base shall not vary more than 0.04-feet above or below the grade established by the Engineer. The thickness of the cement treated base shall not be more than 0.04-feet thinner than the specified thickness at any point.
- C. The completed section shall then be finished by rolling with a steel drum or other suitable roller approved by the Engineer. Any necessary trimming (cuts only) shall be completed in the same day of mixing.
- D. After compaction, cement treated soil shall not be placed to fill low areas in the grade.
- E. Contractor shall be required to constantly apply moisture to the FDR-C during the curing process during working and non-working hours. Contractor shall provide 24 hour phone numbers for employees responsible for curing the FDR-C. If the contractor fails to properly cure the FDR-C and the surface of the FDR-C becomes unstable, the contractor shall bear the burden of all costs associated with removing the unstable surfacing, replacing the entire section in-kind, or installing additional hot mix asphalt to fill in gaps from the unstable FDR-C.
- F. The completed cement-stabilized subgrade shall be moisture-cured until completion of micro-cracking.
- G. The cement-stabilized subgrade shall be kept free from heavy traffic during the curing period or until the asphalt concrete surfacing is placed whichever is less, unless otherwise directed by the Engineer.

3.8 MICRO-CRACKING

- A. Micro-cracking of the cement stabilized subgrade shall be completed 48-56 hours after the final compaction.
- B. Micro-cracking of the section shall be accomplished by a 12-ton steel-wheel vibratory roller, traveling at a speed of approximately 2 mph and vibrating at maximum amplitude (or as directed by the City). The section shall have 100% coverage exclusive of the outside 1-foot, so as to induce minute cracks in the section. The contractor shall perform passes as directed by the engineer.
- C. It is anticipated that the roller will have to make between 2 to 4 passes to achieve the required reduction in stiffness. After micro-cracking is complete, the Contractor may open the area to public traffic prior to placement of subsequent courses being placed over the section. If the Contractor elects to open the section to public traffic then temporary 10 MPH speed limit signs shall be posted around the affected area as part of the Contractor's Traffic Control Plan.
- D. The Contractor will also be responsible for maintaining the FDR-C Section per the requirements of Section 22 "Finishing Roadway" and other applicable sections of the 2018 Caltrans Standard Specifications. Prior to placement of any subsequent courses the City shall determine which areas shall be repaired by the Contractor. Any areas that are not able to be repaired with minor HMA (AC) shall be completely removed and re-constructed to the Engineer's satisfaction at the Contractor's sole expense.

3.9 CONSTRUCTION JOINTS

- A. Construction joints shall have vertical faces and shall be made in thoroughly-compacted material. Additional mixture shall not be placed against the construction joint until the joint has been approved by the City. Where a roadway is being constructed in phases, FDR-C joints shall be overlapped by 12 inches to insure proper support for the roadway section.
- B. The face of the cut joint shall be lean and free of deleterious material and shall be kept moist until the placing of the adjacent soil-cement.

3.10 REPAIR

- A. If the cement-stabilized subgrade is damaged, it shall be repaired by removing and replacing the entire depth of affected layer in the damaged area. Feathering will not be permitted for repair of low areas.

END OF SECTION

SECTION FIVE
TECHNICAL PROVISIONS
F -DEMOLITION

F-1. General.

Demolition shall consist of the removal and disposal of all materials, roots, existing concrete, existing asphaltic material, and/or other obstructions not specified above as required by the plans and specifications within the entire project area.

F-2. Obstructions.

The Contractor shall be wholly responsible for the preservation and protection of all underground pipes, conduits, and other improvements, whether or not such improvements are shown on the plans. The Contractor shall notify Underground Services Alert at least 48 hours prior to any excavation. Existing land survey monuments shall be fully protected from damage or displacement, and shall not be disturbed unless directed by the City. If any such monuments are disturbed, they shall be replaced by monuments of similar quality and durability to their original location by a licensed land surveyor at the Contractor's expense. Replacement shall be made at no cost to the City.

F-3. Work in City Right of Way.

All of the work shown on the plans and specified herein which is located within the public rights-of-way of the City shall be performed in accordance with city ordinances regulating the use of such public rights-of-way, except as otherwise provided herein. The Contractor shall also inform himself as to the various regulations and requirements of the City and shall conduct his operations in compliance therewith. Any work required or necessary outside of the public right of way shall be held to the same standards as City

F-4. Traffic Control and Street Signs.

To facilitate the work, the Contractor may remove all traffic and street signs within the project area from their existing locations, and stockpile them at a location under his control. All signs so removed shall be saved from all harm, and shall be reinstalled in accordance with City Standards prior to the completion of the work.

In the interim, the Contractor shall install and maintain traffic control devices meeting the requirements of the State of California Department of Transportation (CalTrans) Manual of Traffic Controls for Construction and Maintenance Work Zones, latest revision, as required to control and direct traffic in an orderly and safe manner.

F-5. Concrete Removal.

Concrete removal shall conform to Section 300 of the Standard Specifications for Public Works Construction, 1997 Edition. Existing manholes to be abandoned shall be removed to a minimum of two feet (2') below the finished grade, and shall be backfilled with decomposed granite and compacted as required. Existing concrete to be removed shall be saw cut at the limits of removal to a minimum depth of 1 1/2" using a diamond-coated abrasive saw. All saw cuts shall be straight and true, and shall produce a clean edge on the existing concrete designated to remain.

SECTION FIVE
TECHNICAL PROVISIONS
G- CONCRETE

G-1. General.

The work shall consist of the construction of concrete curb and gutters, gutter depressions, handicap returns, cross gutters and miscellaneous concrete of the form and dimensions as shown on the plans and specifications and the special provisions. They shall be constructed at the locations shown on the plans and to the elevations established by the engineer.

G-2. Material.

Concrete shall be as called on the plans and comply with the following specifications:

Concrete gutters, curb and gutters; handicap returns ; miscellaneous concrete : Shall be Class B (2,500 pounds per square inch) Portland cement concrete conforming to the requirements of Section 90 of the

G-3. Standard Specifications.

Concrete Cross Gutters: Shall be Class B (3,000 pounds per square inch) Portland cement concrete conforming to the requirements of Section 90 of the Standard Specifications.

Concrete Slab: Shall be Class B (2,500 pounds per square inch) Portland cement concrete conforming to the requirements of Section 90 of the Standard Specifications.

Portland cement shall conform to standard specifications for Type II Cement, ASTM Designation C-150 with subsequent amendments.

The consistence shall be such that the slump will not be more than three inches (3").

G-4. Sub-grade Preparations.

The sub-grade shall be constructed true to grade and cross section as shown on the plans or as directed by the engineer. The sub-grade shall be moistened and thoroughly compacted prior to placing the concrete. All soft or spongy material shall be removed to a depth of not less than 0.50 foot below sub-grade elevation. Fills necessary to bring the sub-grade to require elevation shall consist of earth, sand or gravel of a quality that when moistened and compacted will form a stable foundation. The completed sub-grade shall be tested for grade and cross section by means of a template support on the side forms. The sub-grade and forms shall be wet immediately in advance of placing concrete.

G-5. Existing Curbs and Flatwork.

Where the work consists of the reconstruction of a portion of an existing curb, gutter, or sidewalk, the existing section shall be cut to a minimum depth of one half inches (1 1/2") with an abrasive type saw at the first scoring line at or beyond the planned joint and the entire section to be reconstructed shall be removed. The new curb, gutter, or sidewalk shall join the old work at this line as directed by the Engineer.

G-6. Forms.

Forms shall be true and shall have a smooth and straight upper edge. Forms shall be carefully set to alignments, grades and dimensions and shall be staked and braced to insure rigidity.

The width of forms shall be equal to the full dimension of the surface they are forming. All forms shall be

thoroughly cleaned and coated with form oil to prevent concrete from adhering to them. Timber forms shall be surfaced on the side placed next to the concrete and shall not be less than one and five eighths inches (1 5/8") thick after being surfaced. Benders or thin plank forms rigidly placed may be used for curb returns and sidewalk curves. Back forms for curb returns may be made of one half inch (1/2") thick benders cleated together for the full depth of the curb. The form on the front of the curbs shall not be removed in less than one hour nor more than 6 hours after the concrete has been placed. In no event shall forms be removed while the concrete is sufficiently plastic to slump.

G-7. Curb Construction.

Curbs shall be of the dimensions shown on the plans or as designated by the engineer. Entrances shall be provided for driveways where necessary.

Concrete curbs to be constructed over an existing pavement shall be anchored to the pavement by means of steel dowels firmly grouted with 1:1 Portland cement and sand grout in holes drilled in the pavement. Dowels shall be spaced and shall be the sizes as shown on the plans.

Control joints shall be constructed in the curbs per City of Lindsay approved development standards. Joints shall be made at right angles to the curb line.

G-8. Expansion Joint Material.

Expansion joints shall be filled with pre molded joint filler conforming to the provisions in Section 51-1.12, 'Pre Molded Expansion Joint Fillers', of the Standard Specifications. Expansion joint filler shall be stapled to the cross section of the curb and gutter. The top edge of the expansion joint filler shall be placed one quarter inch (1/4") below all concrete surfaces.

G-9. Placing and Finishing.

Concrete shall be placed and compacted in the forms without segregation. Holes or pockets appearing on concrete surfaces, after removing forms, shall be filled with mortar composed of one part Portland cement to two parts sand. Surfaces of driveways, island paving and alley entrances shall be finished to grade and cross section with a float, towed smooth and finished with a broom.

Faces of curbs shall be smoothed and finished with a steel towel and given a final fine brush finish with brush strokes parallel to the line of the curb. The face of the curb shall be true and straight and the top surfaces of the curbs and gutters shall be of uniform width free from humps, sags, or other irregularities. When a straight edge ten feet (10') long is laid on the top of the face of the curb or on the surface of the gutter, the surface shall not vary more than 0.001 foot from the grade of the straight edge except at grade changes or curves. Sidewalk surfaces shall not vary more than 0.002 foot from a ten foot (10') straight edge.

G-10. Protection and Curing.

Concrete shall be cured with a pigment curing compound as provided in Section 90-7.01B of the Standard Specifications for a period of 72 hours, only as required.

Exposed surfaces shall be sprayed uniformly with the pigment curing compound at the rate of approximately one gallon per 200 square feet of area.

The contractor shall maintain suitable barriers to protect the concrete from traffic, and any part of the work damaged by traffic, or other causes, prior to its acceptance shall be repaired or replaced by the contractor, at his own expense, in a manner satisfactory to the engineer.

G-11. Final Clean Up.

The area adjacent to the new concrete shall be cleared of any debris, filled as necessary with soil suitable for planting and raked smooth and neat. It shall be the contractor's responsibility to dispose of all excess earth.

SECTION FIVE
TECHNICAL PROVISIONS
H- ASPHALT CONCRETE PAVEMENT

PART 1 GENERAL

1.1 WORK INCLUDED

- A. The work of this section consists of constructing one or more surface courses composed of a mixture of aggregate, filler if required, asphalt material and placed on a prepared base to lines, grades and details, as shown on the plans and covered within these specifications. This section includes asphalt patching for areas where utility lines cross existing paved surfaces, trench resurfacing, saw cutting and resurfacing additional paving widths as required in the contract or under permit requirements.
- B. Mix aggregate and asphalt binder at a central mixing plant. Haul, spread, and compact the mixture for paved areas as shown and as specified.
- C. Upon completion of all paving, finish the entire roadway. Trim and shape cut and fill slopes to produce smooth surfaces and uniform cross sections. Clean the finished pavement of all dirt and foreign material.
- D. Cross sections of paving shall be as indicated in the Plans.

1.2 RELATED WORK

- A. Section E – Full Depth Reclamation - Cement

1.3 REFERENCES

- A. Section 22 – Finishing Roadway, State Standard Specifications
- B. Section 39 – Asphalt Concrete, State Standard Specifications
- C. Section 92 – Asphalt Binders, State Standard Specifications
- D. Section 94 – Asphaltic Emulsions, State Standard Specifications

1.4 SUBMITTALS

- A. Submittals shall be in accordance with the Standard General Conditions and the Special Conditions.
- B. Certificates:

Certification from the supplier that the asphalt concrete is of correct type and meets requirements of this section.

- 1. Job mix formula shall be submitted with certification that the mix formula meets the requirements of Standard Specification Specifications Section 39, Asphalt Concrete. The job mix formula shall include definite single values for:
 - a. The percent of aggregate passing the specified sieve, based on dry weight of aggregate.

- b. The percent of bituminous material to be added, based on the total weight of the mix.
- c. Kind and amount of chemical additives (anti-stripping, hydrated lime, etc.) as established by the design procedure.
- d. Maximum theoretical density.
- e. Temperature ranges for the bituminous material at the point of mixing with the aggregates and bituminous mixture at the paving machine.

1.5 QUALITY ASSURANCE

- A. Asphalt concrete supplier to prepare a mix design; to recommend adjustments to the proportions of the mix, as necessary, to conform to the mix design; and to consult with the Contractor and the Engineer during paving as required.
- B. Testing required to, determine compliance for the work of this section shall be performed by an independent testing laboratory, approved by the Engineer and appointed and paid for by the Contractor. The independent testing laboratory shall be used to sample and test asphalt concrete at the job sites. One test shall be taken for each paving period and at least one test every four hours. As a minimum, results of the test shall include items A, B, C and E of the job mix formula submittal.
- C. Density: Acceptable density of the in-place asphalt concrete pavement shall be 95 percent of the optimum values as determined from the mix design formula. Field sampling and density determination shall be made in accordance with an accepted nuclear procedure.
- D. Testing shall be performed in such a manner that will least encumber the performance of the work. The Contractor shall cooperate by rerouting equipment or by temporarily closing the immediate work area to be tested.
- E. Contractor shall instruct the testing laboratory to provide the test results to the Engineer immediately in the field and a copy of the written report sent directly to the Engineer.

PART 2 PRODUCTS

2.1 ASPHALTS

- A. Asphalt binder to be mixed with aggregate shall be liquid asphalt PG 64-10, conforming to State Standard Specifications Section 92, Asphalt Binders.
- B. Asphalt Concrete shall be Type A, in accordance with State Standard Specifications 39-2.02.

2.2 AGGREGATE

- A. The combined aggregate grading of the asphalt concrete shall be Type A, 3/4-inch maximum grading, per Section 39-2.02B(4)(b), of the State Standard Specifications.

2.3 FORMS

- A. Redwood header boards shall be two inches wide by six inches deep (nominal measurement).
- B. Metal forms shall be submitted to Engineer for approval prior to use.

PART 3 EXECUTION

3.1 GENERAL

- A. The pavement section shall comply with Caltrans State Standards and as shown on the Plans.
- B. Prior to any paving and surfacing operations, all pipes and conduits shall be installed and properly backfilled as shown.

3.2 STORAGE

- A. Storage of materials shall comply with the requirements of Section 39, State Standard Specifications.

3.3 MIXING

- A. Mixing shall conform to the approved mix design.
- B. The weight of asphalt binder to be mixed with aggregate shall be between 3 percent and 7 percent of the weight of the dry aggregate.

3.4 SUBGRADE

- A. Subgrade shall conform to Section 39-2.01C(3)(b), State Standard Specifications.
- B. Unless otherwise specified, the upper six inches of subgrade beneath the structural section shall be scarified, moisture conditioned as necessary and compacted to at least 95 percent relative density.

3.5 EQUIPMENT

- A. Spreading and compacting equipment shall conform to State Standard Specifications Section 39-2.01C(2), Spreading and Compacting Equipment.

3.6 PLACING AND COMPACTING

- A. Placing and compacting shall conform to State Standard Specifications Section 39-2.05A(3)(d), Placing and Compacting Hot Mix Asphalt.
- B. Apply mixture only during hours of daylight; when air temperature is 50 degrees F or higher; when surfaces to be paved are dry and free of frost, snow or ice; and when precipitation is not imminent.

3.7 FORMS

- A. Wood or metal. Place true to line and grade, and anchor securely. Use adequately sized forms or prevent bulging and bending while the bituminous surface is being worked.

3.8 COLD PLANE ASPHALT CONCRETE PAVEMENT

- A. Existing asphalt concrete shall be cold planed at the locations and to the dimensions shown on the plans and in accordance with these special provisions.
- B. The depth, width and shape of the cut shall be as indicated on the typical cross sections or as directed by the Engineer. The final cut shall result in a uniform surface conforming to the typical cross sections. The road surfacing to remain in place shall not be damaged in any way.

- C. The depth shown on the plans for cold plane wedge cuts along existing concrete gutter are to be measured from the surface of the concrete gutter. In some cases where a prior overlay surface was constructed above the gutter lip, the actual depth of cut will exceed the dimension shown on the Plans.
- D. The Contractor shall remove existing pavement overlay from the top surface of gutters adjacent to any area specified to be cold planed.
- E. The planing machine shall be self-propelled and especially designed and built for grinding flexible pavements. It shall plane without tearing or gouging the underlying surface and blade material in a windrow. Drum lacing patterns shall permit a grooved or smooth surface finish as selected by the Engineer and the drum shall be totally enclosed in a shroud to prevent discharge of any loosened material into adjacent work areas. A zero (0) inches to three (3) inches deep cut to predetermined grade may be required on one (1) pass. The machine shall be adjustable as to crown and depth. The equipment shall meet the standards set by the San Joaquin Valley Air Pollution Control District and the Air Quality Act of 1969 for noise and air pollution.
- F. The Contractor shall provide a smaller machine to trim areas inaccessible to the larger machine at manholes, curb returns and intersections. The smaller machine shall be equipped with a 12-inche wide cutting drum mounted on a three wheel chassis allowing it to be positioned without interrupting traffic or pedestrian flow. Jack hammering areas not accessible to grinding machine will not be allowed.
- G. The surface tolerance produced shall be such that a ten-foot straight edge laid laterally will indicate variances of less than three-eighths (3/8) inch. The Contractor shall remove all loosened material from the roadway each day before leaving the site of the work.
- H. The Contractor shall protect structures and provide necessary traffic control and barricades as required by the Engineer.
- I. Temporary oil-sand ramps shall be constructed at intersecting streets, and along longitudinal joints, immediately after cold planing and prior to opening the lanes to traffic. Cold planing operations shall not commence until temporary oil-sand is on site with workers to place material.
- J. Cold planing cuts across travel lanes shall be the last cuts made at each side. After removal of loosened material from such cuts, temporary ramps shall be constructed of oil-sand at the deep end of cuts before opening the lane to traffic.
- K. Irregular, gouged, ripped or damaged areas, as determined by the Engineer, shall not be accepted. All such areas shall be repaired by methods approved by the Engineer, prior to resurfacing operations. The Engineer, at his discretion, may require substitution of planing machine and/or operating personnel if the cold-planed surface does not meet these specifications.
- L. Existing traffic detector loops damaged during cold plane operations will be returned to their original condition.
- M. After conducting cold planing operations on a given street, the Contractor shall begin pavement operations on that street within seven calendar days. Deviations from this requirement must be requested in writing and approved by the Engineer prior to the beginning of planing operations.

3.9 MISCELLANEOUS AREAS

- A. Paving miscellaneous areas shall conform to State Standard Specifications Section 39-2.01C(9), Miscellaneous Areas and Dikes.

3.10 FINISHING PAVED AREAS

- A. Finishing roadway and parking areas shall conform to the provisions of State Standard Specifications Section 22, Finishing Roadways.

3.11 TRENCH RESURFACING

- A. At areas where asphalt concrete had been removed due to pipeline construction, trench shall be resurfaced with asphalt concrete. Unless otherwise noted, asphalt concrete resurfacing shall match the existing thickness of the asphalt and base course removed.
 - 1. Base course shall be as specified in Section 32 11 23, Aggregate Base, and in this Section.
- B. If an edge of a trench resurfacing occurs within three feet of an existing edge of pavement, lip of gutter or the face of curb, or if no gutter is present, the Contractor shall remove all existing paving to the lip of gutter or curb face and or, edge of existing pavement and resurface with the applicable trench resurfacing section. The limits of removal are minimum requirements.
- C. If during the Contractor's operations pavement is disturbed outside the limits of removal, Contractor shall make the necessary repairs at no additional cost to the Owner.

3.12 ACCEPTANCE REQUIREMENTS

- A. Surface Tolerance: The variation between any two contacts with the surface shall not exceed ± 0.015 foot in 10 feet. Correct all humps or depressions exceeding the specified tolerance by removing defective work and replacing it with new material at no additional expense to the Owner.
- B. A uniform compacted thickness shall be obtained for each course equal to or greater than the thickness shown. Individual tests shall not vary by more than ± 0.02 foot.
- C. Width: Plan dimension, ± 0.02 foot.
- D. Thickness: Plan dimension, ± 0.02 foot.

SECTION FIVE
TECHNICAL PROVISIONS
I- SEWER AND STORM DRAIN PIPE

I-1. Description

This work shall consist of furnishing and installing sewer and storm drain pipe as shown in the approved Construction Drawings, as directed by the Engineer, and as specified in these Standard Specifications. All precast pipe shall be of the size and class shown in the approved Construction Drawings or specified in the Special Provisions. The pipe class, as designated in the approved Construction Drawings, has been determined for vertical load under average trench conditions. The Contractor shall exercise precautionary measures against trench cave-ins by providing adequate shoring or other devices to minimize the development of adverse trench conditions. Should the trench condition exceed in width the average trench condition, the Contractor shall provide a recognized special bedding, approved by the Engineer, which is adequate to maintain pipe strength equivalent to the average trench condition. No additional compensation will be paid for such special bedding. In lieu of special bedding and the class of pipe designated in the approved Construction Drawings, the Contractor may provide a class of pipe in accordance with the manufacturer's recommendation for the conditions under which the pipe is placed, with no additional payment therefore.

I-2. Types of Pipes

Storm Drain Pipe: Where "storm drain pipe" is specified in the approved Construction Drawings, the Contractor will be allowed to install either reinforced concrete pipe, non-reinforced concrete pipe, or polyvinyl chloride pipe (PVC) conforming to these Standard Specifications except where a particular type of pipe is specified in the approved Construction Drawings or in the Special Provisions. Where a particular type of pipe is specified in the approved Construction Drawings or in the Special Provisions, only that type of pipe shall be installed and no substitution will be allowed except as specified in Section Five H5 of these Standard Specifications. Once pipe laying operations have begun, the Contractor will not be allowed to switch to a type of pipe different from that laid without prior approval from the Engineer. Rubber gasketed concrete pipe conforming to these Standard Specifications shall be installed if "rubber gasketed storm drain pipe" is specified in the approved Construction Drawings. Where a particular type of pipe is specified in the approved Construction Drawings or in the Special Provisions, only that type of pipe shall be installed and no substitution will be allowed except as specified in Section Five H5 of these Standard Specifications. The strength of pipe to be installed shall be specified in the approved Construction Drawings as Class II (CI II), Class III (CI III), Class IV (CI IV) or Class V (CI V). These strength classifications are based on the D-Load to produce the ultimate load in the 3-edge bearing strength test, ASTM Designation: Test Method C497 or C500. The following table shall be used to determine the strength class of pipe to be installed by the Contractor to meet the class specified in the approved Construction Drawings:

b. Sewer Pipe: Where "sewer pipe" is specified in the approved Construction Drawings, the Contractor will be allowed to install either vitrified clay pipe, or poly vinyl chloride (PVC) pipe conforming to these Standard Specifications except that once pipe laying operations have begun, the Contractor will not be allowed to switch to a type of pipe different from that being laid without prior permission from the Engineer. The final determination as to the suitability of any pipe for use as sewer pipe shall be made by the City Engineer. Sewer pipe shall be designed such that the slope of the proposed line will create a velocity of two feet per second (2ft/sec) when the pipe is flowing half full using a Manning's "N" of eleven thousandths (0.011).

Once pipe laying operations have begun, the Contractor will not be allowed to switch to a type of pipe different from that being laid without prior permission from the Engineer. The final determination as to the

suitability of any pipe for use as sewer pipe shall be made by the City Engineer. Where a particular type of pipe is specified in the approved Construction Drawings or in the Special Provisions, only that type of pipe shall be installed and no substitution will be allowed without permission from the City Engineer.

I-3. High Density Polyethylene Pipe (HDPE)

All HDPE for sanitary sewers shall be Class 63. Pipe material shall meet the requirements of Type III, Class C, Category 5, Grade P34 as defined in ASTM D1248 Standard Specification for polyethylene plastics molding and extrusion materials. Gaskets shall meet the requirements of ASTM F477 and be molded into a circular form or extruded to the proper section and then spliced into circular form and shall be made of a properly curved high grade elastomer compound. The basic polymer shall be natural rubber, synthetic elastomer or a blend of both. The lubricant used for assembly of gasket joints shall have no detrimental effect on the gasket or on the pipe. The Contractor shall have the manufacturer furnish a "Certificate of Conformance" to these Standard Specifications.

Upon completion of backfill and compacting trenches, the Contractor, at his expense, shall pull a properly sized mandrel through the installed main line to demonstrate the maximum pipe deflection does not exceed five percent (5%). If excessive pipe deflection obstructs passage of the mandrel, the Contractor shall excavate and make suitable repairs to the Engineer's satisfaction.

I-4. Polyvinyl Chloride (PVC) Large Diameter Ribbed Pipe

Large diameter ribbed pipe and fittings materials shall meet and/or exceed all of the requirements of ASTM F794 Specification. Minimum pipe stiffness (F/y) at five percent (5%) deflection shall be forty-six (46) for all sizes when tested in accordance with ASTM method D2412. Special care shall be taken in the installation of PVC pipe so that no more than five percent (5%) deflection occurs in the pipe. The bottom of trench shall be formed such that the pipe can be placed with uniform support along its length. The first lift of backfill shall be placed by hand and shall extend only to the pipe springline and hand tamped; the second lift of backfill shall extend to six inches (6") above the top of the pipe and hand tamped only on the sides of the pipe.

Documentary evidence of test results will be considered sufficient when pipe manufacturer furnishes a certificate indicating that the pipe has been subjected to and passed hydrostatic, load, and chemical resistance tests conducted in accordance with approved methods. Upon completion of backfill and compacting trenches, the Contractor, at his expense, shall pull a properly sized mandrel through the installed main line to demonstrate the maximum pipe deflection does not exceed five percent (5%). If excessive pipe deflection obstructs passage of the mandrel, the Contractor shall excavate and make suitable repairs to the Engineer's satisfaction.

I-5. Polyvinyl Chloride (PVC) Sewer Pipe and Fittings

a. Materials: Poly vinyl chloride (PVC) pipe and fittings shall be manufactured in accordance with ASTM Designation: D3034 – 73. The minimum allowable pipe stiffness (F/AY) for all sizes shall be forty-six pounds per square inch (46 psi) at five percent (5%) deflection when tested in accordance with ASTM Test Method D2412. Pipe and fittings shall be manufactured and supplied with bell and spigot joints which are an integral part of the pipe or fitting. Upon demand, the manufacturer of PVC pipe shall furnish to the Engineer a "Certificate of Compliance". External loading properties of plastic pipe by parallel-plate loading, and shall conform to the following dimensions and tolerances, as in accordance with ASTM designation D3034-73:

For pipe larger than fifteen inches (15") in diameter, the Contractor shall submit to the City Engineer the specification for the pipe for approval. Special care shall be taken in the installation of PVC Pipe so that no

more than five percent (5%) deflection occurs in the pipe. The bottom of trench shall be formed such that the pipe can be placed with uniform support along its length. Documentary evidence of test results will be considered sufficient when pipe manufacturer furnishes a certificate indicating that the pipe has been subjected to and passed hydrostatic, load, and chemical resistance tests conducted in accordance with approved methods. Upon completion of backfill and compacting trenches, Contractor, at his expense, shall pull a properly sized mandrel through the installed main line to demonstrate the maximum pipe deflection does not exceed five percent (5%). If excessive pipe deflection obstructs passage of the mandrel, the Contractor shall excavate and make suitable repairs to the Engineer's satisfaction.

b. Joints: Joints for PVC pipe and fittings shall be elastomeric gasket type able to withstand contraction and expansion and be able to prevent displacement during assembly after the pipe has been locked into place. Joints shall be water tight when tested in accordance with ASTM Test Method D2855. Joints shall be of such a design that when the pipe is properly laid, there shall be a smooth and uniform interior surface. Ends of pipe sections and fittings shall be free of cracks and broken edges. Pipe found to be so damaged shall be rejected for use in the work. The ends of the pipe shall be thoroughly cleaned immediately prior to joining sections of pipe. Pipe shall then be joined together as recommended by the manufacturer. Gaskets shall be properly lubricated and the pipe "homed" as far as recommended. No appreciable gap shall exist at the completed joint, except as permitted by the Engineer. Excess gaps in any case shall be cause for rejection of the work, and corrective measures shall be taken when ordered by the Engineer.

c. Pipe Laying: Pipes shall be laid in conformity with the prescribed lines and grades obtained from stakes set by the Engineer. The pipe shall be laid uphill from structure to structure with the bell (or groove) end up-grade. Occasional variations in grade will be permitted as follows: Above grade, one-fourth of one inch ($\frac{1}{4}$ "), below grade, not to exceed one-half of one inch ($\frac{1}{2}$ "); alignment, not to exceed three inches (3") or uniform deflection in a distance of twenty feet (20'). Adjustments of pipes to line and grade shall be made under the body of the pipe throughout its entire length and not by blocking or wedging. Bell holes shall be accurately placed and shall not be larger than is reasonably required to make the joint. Before the pipe is laid, the interior of the bell of the preceding pipe shall be carefully cleaned. After each section of pipe has been laid to line and grade, it shall be joined to the preceding section as required in Section H6-b, "Joints" of these Standard Specifications. After jointing procedure has commenced, there shall be no movement of the pipe whatsoever in subsequent operations. Material shall be placed uniformly on either side of the pipe to prevent any movement. No walking in the trench or working over the pipe after it has been laid, except as may be necessary in tamping the earth and refilling, will be permitted until the pipe has been braced as specified above. The open ends of all sewer lines being installed shall be covered to keep out animal life, etc., whenever the line is left unattended for any length of time, such as overnight.

d. Bedding: Bedding for PVC pipe shall conform to the requirements of ASTM Designation: D2321, for the type and class of material encountered in the trench. These Standard Specifications shall take precedence over other bedding requirements specified in those Specifications, but not exclude them.

e. Backfill: The first lift of backfill shall be placed by hand and shall extend only to the pipe springline and hand tamped; the second lift of backfill shall extend to six inches (6") above the top of the pipe and hand tamped only on the sides of the pipe. The initial backfill operation shall conform to the requirements of the "Haunching and Initial Backfill" section of ASTM Designation: D2321.

f. Deflection Test: Deflection testing shall be provided by the Contractor for all PVC installations. The Contractor shall demonstrate that the maximum pipe deflection does not exceed five percent (5%) of the diameter of the pipe installed by pulling a properly sized solid ball or mandrel or a rigid set of discs, as approved by the Engineer, through the pipe. Where deflection of the pipe exceeds the allowable, the Contractor shall, at his own expense, make suitable repairs to the line before it is offered for retesting and

acceptance. All repairs shall be made to the satisfaction of the Engineer. Deflection testing shall be paid for at the unit price bid per linear foot of pipe when the items of work are included in the bid proposal. When no item of work is included in the bid proposal, payment for the testing shall be considered to be included in the price bid for the various items of work requiring the testing and no additional payment will be made therefore. Full compensation for providing deflection testing, including furnishing all labor, materials, tools, equipment, and incidentals, and doing all work involved in performing the required testing shall be included in the unit price bid per linear foot for deflection testing or included in the various items of work requiring the testing and no additional payment will be made therefore.

I-6. Reinforced Concrete Pipe

a. Materials: Reinforced concrete pipe shall be manufactured in accordance with ASTM Designation: C76, as amended or revised. When used as a sanitary sewer application this pipe shall be PVC lined. Upon demand, the manufacturer of pre-cast concrete pipe shall furnish to the Engineer a "Certificate of Compliance". The cement used in manufacture shall be Type II, as per ASTM C150. Unless otherwise noted in the approved Construction Drawings, provide Class III pipe for all pipe buried ten feet (10') or less, Class IV for pipe buried eleven feet to fifteen feet (11'-15'), and Class V pipe buried greater than sixteen feet (16'). All pipe approved will have an interior surface which is free from roughness, projections, indentations, offsets or irregularities of any kind. Pipe type could vary dependent upon "D" loads. Engineer to specify and provide verification.

b. Pipe Lengths: Furnish pipe in standard lengths. Shorter lengths may be used where required by construction details or when approved by the City.

c. Repairs: Pipe may be repaired, if necessary, because of occasional minor imperfections in manufacture or accidental injury during handling and will be acceptable if, in the opinion of the City, the repairs are sound, properly finished and cured, and the repaired pipe conforms to the requirements of ASTM C76. Use mortar for repairs which has a compressive strength of six thousand (6,000) psi at the end of twenty-eight (28) days.

d. Marking: Mark all pipe in accordance with ASTM C76; no pipe will be accepted unless these markings appear on all pipe.

e. Joints: The ends of reinforced concrete pipe sections shall be of such design that when properly laid they shall have a smooth and uniform interior surface. Both ends of pipe sections shall be substantially free of cracks and broken edges. Pipe so found to be damaged shall be rejected for use in the work. Each joint shall be sealed to prevent leakage. Sealing of joints shall be accomplished with rubber gaskets, as indicated in the approved Construction Drawings or specified in the Special Provisions, and shall conform to the following specifications:

i. Rubber Gasketed Joints: Rubber gasketed joints shall conform to the requirements of ASTM Designation: C443 and shall be flexible and able to withstand expansion, contraction and settlement. The ends of the pipe shall be thoroughly cleaned immediately prior to joining sections of pipe. The two (2) on the bell end of the pipe. No appreciable gap shall exist at the completed joint, except as permitted by the Engineer at locations where curves in the pipe alignment are specified or required. Excessive gaps in any case shall be cause for rejection of the work, and corrective measures shall be taken when ordered by the Engineer.

ii. Construction Joints: Whenever two (2) sections of pipe are to be joined where standard joints are not available, such as joining reinforced concrete pipe to cast-in-place or asbestos cement pipe, a concrete collar shall be constructed around the full periphery of the pipe and extending one foot (1') each side of

the joint. The collar shall be of a minimum thickness equal to that of the concrete pipe, but in no case less than four inches (4") thick. The interior of the joint shall be smoothed with cement mortar and brushed. The area to receive the collar shall be thoroughly cleaned and dampened immediately prior to construction of the collar. The cost of constructing concrete collars shall be considered as included in the cost of the items requiring the collar, and no additional payment will be made therefore.

f. Pipe Laying: Pipes shall be laid in conformity with the prescribed lines and grades obtained from stakes set by the Engineer. The pipe shall be laid uphill from structure-to-structure with the bell (or groove) end up-grade. Pipe with elliptical reinforcement shall be placed with the minor axis in a vertical position. Adjustments of pipes to line and grade shall be made under the body of the pipe throughout its entire length and not by blocking or wedging. Bell holes shall be accurately placed and shall not be larger than is reasonably required to make the joint. Before the pipe is laid, the interior of the bell of the preceding pipe shall be carefully cleaned. After each section of pipe has been laid to line and grade, it shall be joined to the preceding section as required in Section Five H6-b, "Joints" of these Standard Specifications. After jointing procedure has commenced, there shall be no movement of the pipe whatsoever in subsequent operations. Material shall be placed uniformly on either side of the pipe to prevent any movement. For mortar joint pipe, no walking in the trench, or working over the pipe after it has been laid, except as may be necessary in tamping the earth and refilling, will be permitted until the pipe has been braced as specified above.

I-7. Bedding

Bedding for all pipe, unless specified otherwise in these Standard Specifications or the Special Provisions, shall conform to the requirements of these Standard Specifications.

I-8. Backfill

Backfill for all pipes, unless specified otherwise in these Standard Specifications, shall conform to the requirements of these Standard Specifications.

I-9. Protection of Pipe

The requirements of this Section Five H shall not relieve the Contractor of the provisions of these Standard Specifications.

The Contractor shall exercise every precaution against damage to the pipe, including damage from subsequent backfill or compaction operations. Any damaged pipe shall be removed from the work or repaired as directed by the Engineer.

I-10. Water/Sewer Separation

Water and sewer mains and house services shall maintain minimum vertical and horizontal separation between each other as required by Title 17 of the State of California Administrative Code, Section 7081 (b).

SECTION FIVE
TECHNICAL PROVISIONS
J- LANDSCAPE AND IRRIGATION MATERIALS

J-1.General.

With regards to Landscaping and Irrigation Materials, the type of landscaping to be installed, replaced or relocated shall match that of the existing area. The irrigation system to be removed and relocated shall follow the guidelines set forth in this section as closely as possible. The new tree plantings shall follow the project plan details. The new irrigation system shall follow these specifications.

J-2.Landscape Materials.

Topsoil.

Topsoil to be utilized is that found in place in the designated landscape area, including soil compacted in place as part of the earthwork specified for the project.

Manure. Manure shall be the product of yard fed cattle, free of weed seed, straw or other inert material, and aged at least 3 months. The manure shall have been processed by grinding and screening and shall be of a consistency that will readily spread with a mechanical spreader. Manure may be supplied in bulk if the source is approved in advance by the Engineer.

Commercial Fertilizer.

Commercial fertilizer shall be a pelletized product having a chemical analysis as specified on the plans or in the specifications. Commercial fertilizer shall be free flowing material delivered in unopened sacks. Material which becomes caked or otherwise damaged shall not be used.

Organic Soil Amendment. Organic soil amendment shall be a ground or processed wood product derived from redwood, fir or cedar sawdust, or from the bark of fir or pine, treated with a non-toxic agent to absorb water quickly.

Mulch.

Mulch shall be packaged in bales or bags unless the Engineer approves a bulk source in advance of delivery to the work site. Mulch shall comply with the requirements for organic soil amendment.

Plants

Plants shall be inspected and approved by the City representative prior to planting. All plants shall have a growth habit normal to the species and shall be sound, healthy, vigorous and free from insect pests, plant diseases, sun scalds, fresh bark abrasions, excessive abrasions, or other objectionable disfigurements. Tree trunks shall be sturdy and well "hardened off". All plants shall have normal well-developed branch systems, and vigorous and fibrous root systems which are neither root nor pot bound and are free of kinked or girdling roots.

Trees and shrubs shall be of the specified type and size, selected from high quality, well-shaped nursery stock. Ground cover plants and other flatted plants shall be grown and remain in flats until transplanted at the site. The soil and spacing of plants in the flat shall ensure the minimum disturbance of the root system at time of transplanting.

J-3.Irrigation System Materials.

Pipe and Fittings.

The type of pipe materials and fittings shall be as designated on the plans or in the specifications and shall comply with the following:

Steel pipe shall be galvanized standard weight (Schedule 40) complying with the requirements of ASTM A 120. Steel pipe shall be jointed with galvanized, threaded, standard weight malleable fittings and couplings.

Plastic pipe shall be rigid unplasticized polyvinyl chloride PVC 1220 (Type 1, Grade 2), conforming to ASTM D 1785. Plastic pipe marked with product standard PS-21-70 conforms to the ASTM requirements. The minimum pressure rating shall not be less than the working pressures indicated therein for the schedule and sizes listed.

Schedule 40 pipe shall be used for installation on the discharge side of control valves. Schedule 80 pipe shall be used for continuously pressurized pipe on the supply side of control valves. Schedule 80 only, shall be supplied when threaded joints are specified or otherwise permitted by the Engineer.

Fittings and couplings for plastic pipe shall be threaded or slip-fitted socket solvent weld type. Threaded adapters shall be provided with socket pipe for connections to threaded pipe. Plastic pipe fittings and couplings shall be PVC I or PVC II material supplied in the same schedule size specified for the pipe. The type of plastic material and schedule size shall be indicated on each fitting or coupling. Fittings and couplings shall comply with the following specifications:

Socket Fittings:

Schedule 40 ASTM D 2466

Schedule 80 ASTM D 2467

Threaded Fittings

Schedule 80 ASTM D 2464

Plastic pipe for use with rubber ring gaskets shall be rigid unplasticized polyvinyl chloride PVC 1120 (Type 1, Grade 1), manufactured in accordance with ASTM D 2241. Plastic pipe marked with product standards PS 22-70 conforms to ASTM requirements. Pipe shall be supplied with plain ends or with an integral thickened bell with rubber ring groove. Couplings for plain end pipe shall be of the single rubber ring type with solvent weld socket on one end or shall be of the double ring type.

Rubber ring gaskets shall be of synthetic rubber supplied in accordance with the requirements of ASTM D 1869.

Pipe shall be furnished in the following Standard Dimension Ratios (SDR) and Pressure Ratings:

160 psi (1.1 Mpa) SDR 26

200 psi (1.4 Mpa) SDR 21

Valves and Valve Boxes. Valves shall be of the size, type and capacity designated on the plans or in the specifications and shall comply with the requirements specified herein.

All valves except garden valves shall be capable of satisfactory performance at a working pressure of 200 psi (1.4 Mpa). Valves shall be designed to permit disassembly to replace sealing components without removal of the valve body from the pipeline.

Gate valves in sizes 2 inches (50 mm) and smaller shall be all bronze double disc wedge type with integral

taper seats and non rising stem. Sizes 2 ½ inches (63mm) and larger shall be iron body, brass trimmed with other features the same as for 2-inch (50 mm).

Manual control valves shall be brass or bronze, and shall be straight or angle pattern globe valves, full opening, key operated with replaceable compression's disc and ground joint union on the discharge end. Remote control valves shall be electrically or hydraulically operated. They shall be brass or bronze with accurately machined valve seat surfaces, equipped with flow control adjustment and capability for manual operation. They shall be made so that they may be readily disassembled for servicing.

Garden valves shall be ¾-inch (19 mm) straight-nosed, key operated and pressure rated for operation at 150 psi (1.0 Mpa).

Quick-coupling valves shall be brass or bronze with a built-in flow control and self closing valve and supplied in ¾-inch (19 mm) size unless otherwise required. When a quick-coupler assembly is specified, it shall consist of the valve, quick-coupler connection and hose swivel.

Valve Boxes. Valve boxes and covers shall be precast Portland cement concrete or approved equal.

Backflow Preventer Assembly. The backflow preventer assembly shall consists of a backflow preventer unit and related components conforming to the governing code requirements.

Sprinkler Equipment. Sprinkler heads, bubbler heads and spray nozzles shall be of the types and sizes shown on the plans. Equipment of one type and flow characteristic shall be from the same manufacturer and all equipment shall bear the manufacturer's name and identification code in a position where it can be identified in the installed position.

Fixed head sprinklers shall have a one-piece housing with provision for interior parts replacement. Pop-up sprinklers shall be designated to rise at least 1 inch (25 mm) during operation. Full or part circle sprinklers shall be interchangeable in the same housing.

Shrubbery and bubbler heads shall be adjustable from full flow to shutoff.

SECTION FIVE
TECHNICAL PROVISIONS
K- FENCING

K-1. General.

Fencing shall consist of supply all materials, labor and tools necessary to construct and install the various types of fencing shown on the plans and specified herein.

K-2. Chain Link Fencing.

Construction. All work shall be performed in a workmanlike manner and in full compliance with the provided chain link fence detail and current accepted standard practices.

Fence height in most cases shall match that of removed fence. If conflict arises as to the height of the new fence, the City and property owner shall review the current approved City fence ordinance and an agreed height shall be established.

K-3. Wood Fencing.

Construction. All work shall be performed in a workmanlike manner and in full compliance with the current accepted standard practices for the construction of wood fences.

Fence height in most cases shall match that of the removed fence. If conflict arises as to the height of the new fence, the City and property owner shall review the current approved fence ordinance and an agreed height shall be established.

Fence materials shall match those of the removed fence. In no case shall the fence material be that of a lesser quality wood material. Fence configuration shall match that of the removed fence. If conflict arises as to the configuration of the new fence, the City and property owner shall review the current approved City fence ordinance and an agreed configuration shall be established.

K-4. DECORATIVE BLOCK WALL FENCE.

Construction. All work shall be performed in a workmanlike manner and in full compliance with the current accepted standard practices for the construction of decorative block wall fences.

Fence height in most cases shall match that of the removed fence. If conflict arises as to the height of the new fence, the City and property owner shall review the current approved fence ordinance and an agreed height shall be established.

Fence materials shall match those of the removed fence. In no case shall the fence material be that of a lesser quality wood material. Fence configuration shall match that of the removed fence. If conflict arises as to the configuration of the new fence, the City and property owner shall review the current approved City fence ordinance and an agreed configuration shall be established.

SECTION FIVE
TECHNICAL PROVISIONS
L-STORM WATER POLLUTION PREVENTION PLAN
PART 1 GENERAL

PART 1 GENERAL

1.1 WORK INCLUDES

- A. The Contractor shall apply for and obtain coverage under State of California Construction General Permit Order 2022-0057-DWQ, as applicable, at least three weeks before starting Work and shall implement storm water pollution prevention measures as prescribed in the Legally Responsible Person approved SWPPP to prevent sediment and/or pollutants from entering storm drains, streams, or water bodies throughout the duration of the Work in compliance with the permit requirements, including CalGreen Building Standards. Work shall be performed in accordance with all Federal, State, and local regulations. It is assumed that the project's total disturbed surface area is greater than 1 acre.
- B. The Contractor shall furnish and exercise every reasonable precaution to protect channels, storm drains, and bodies of water from pollution and provide all labor, materials, tools, and equipment necessary to prevent storm water pollution associated with construction activities, including preparation of Stormwater Pollution Prevention Plan (SWPPP) and amendments if necessary for CGP Compliance, installation, maintenance and final removal of all temporary and permanent erosion and sediment control measures, in accordance with the requirements of the Contract Documents.
 - 1. The Legally Responsible Person (LRP) is the City of Lindsay.
 - 2. The Approved Signatory for the LRP is Joseph Avila.
- C. **Penalties:** Failure to comply with this Section may result in significant fines and possible imprisonment. The Regional Water Quality Control Board (RWQCB) or other prosecuting authority may assess fines for each violation. Should the District be fined or penalized as a result of the Contractor failing to comply with this Section and applicable permit requirements, the Contractor shall reimburse the District for any and all fines, penalties and related costs.
- D. All costs for work required for compliance with this Section shall be included in the price bid for Storm Water Pollution Prevention Plan.

1.2 REFERENCES

- A. California State Water Resources Control Board, Construction General Permit 2022-0057-DWQ, https://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2022/wqo_2022-0057-dwq.pdf
- B. California Stormwater Quality Association (CASQA), <https://www.casqa.org/>

1.3 SUBMITTALS

- A. As specified in Section 01 33 00 – Submittal Procedures.

- B. Submittals under this section shall be completed and submitted at least three weeks prior to beginning work and within 2 days of issuance of the Notice to Proceed.
1. In the event that CGP Waiver conditions apply, the contractor shall submit the Erosivity Value calculation, the corresponding project schedule, total disturbed area calculations, and an Under 1-Acre Pollution Prevention Plan (UPPP) demonstrating pollution prevention measures and steps to be taken to ensure no pollutant discharges from the project site to be submitted to the State Water Board via the SMARTS system. All documents shall be kept onsite in either a job trailer or accessible lockbox.
 2. In the event that a CGP Traditional or LUP SWPPP is required, or CGP Waiver conditions no longer apply, the contractor shall submit the appropriate project type SWPPP, Post-Construction Calculations, Dewatering Plan(s), Risk Level/Type Level Determination, additional Permit Registration Documents, Annual Reports, Sampling and Analysis reports, and all other permit compliance documents to be submitted to the State Water Board via the SMARTS system. All documents shall be kept onsite in either a job trailer or accessible lockbox.
- C. Certifications
1. As applicable to the appropriate permit requirements:
 - a. Copy of the Certificate of Training issued by CASQA demonstrating qualification of the designated QSD or CBPELSG Licensed QSD Training Program proof of good standing.
 - b. Copy of the Certificate of Training issued by CASQA demonstrating qualification of the designated QSP(s) or CBPELSG Licensed QSD Training Program proof of good standing.
 - c. Copy of the Certificate of Training issued by the Project QSP demonstrating qualification of the designated QSP Delegate(s) Foundational and Site-Specific Training.
- D. Proof of project sign with SWPPP WDID number and the location to be displayed.
- E. Proof of installation of rain gauge on project site.
- F. Submit all required inspection reports including project photographs (weekly, quarterly, precipitation event (pre, during and post), quarterly, and sampling results) to QSD & LRP within 24 hours of inspection.

1.4 QUALITY ASSURANCE

At minimum, the following measures shall be taken to help ensure control of storm water and non-storm water pollution. These measures shall not be construed to limit or override the measures set forth and called for in the SWPPP.

- A. Develop, submit to the QSD, and obtain approval from the RWQCB for site dewatering. Control the rate and effect of dewatering in such a manner as to avoid all objectionable settlement and subsidence and to assure the integrity of the finished work.
- B. Where critical structures or facilities exist immediately adjacent to areas of proposed dewatering, establish reference points and observe at frequent intervals to detect any settlement that may develop. Conduct the dewatering operation in a manner that protects adjacent natural resources and facilities. Cost of repairing all damage to adjacent resources and facilities shall be the sole responsibility of the Contractor.
- C. Before commencing grading, excavation or filling in any part of the site, Contractor shall construct swales, diversion channels, inlet protection barriers, sedimentation traps, and other measures to guide runoff away from

the work area and to capture eroded material before it reaches natural water courses. The measures shall be in accordance with the approved storm water pollution prevention plans.

- D. Arrange demolition activities to minimize erosion to the maximum practical extent. Clearing, excavation, and grading shall be limited to those areas of the Project site necessary for demolition. Minimize the area exposed and unprotected.
- E. Clearly mark and delineate the work limits activities. Equipment shall not be allowed to operate outside the limits of work or to disturb existing vegetation. Excavation and grading shall be completed during the dry season to the maximum extent possible.

1.5 GENERAL REQUIREMENTS

- A. The Contractor shall exercise care in preserving vegetation and protecting property, to avoid disturbing areas beyond the limits of the Work and promptly repair any damage caused by Contractor operations.
- B. The Contractor shall provide all necessary water pollution control devices to prevent, control, and abate water pollution, and implement good housekeeping pollution control measures to reduce the discharge of pollutants from the Site to the maximum extent practicable. These water pollution control devices include structural BMPs, drains, gutters, slope protection blankets and retention basins and shall be constructed concurrently with other Work at the earliest practicable time.
- C. Stockpiles of earth and other construction-related materials shall be protected from being transported from the Site by wind or water using covers or equivalent.
- D. The Contractor shall properly store and handle fuels, oils, solvents, and other toxic materials in a manner not to contaminate the soil or surface waters, enter the groundwater, or be placed where they may enter a live stream, channel, drain, or other water conveyance facilities. All approved toxic storage containers shall be protected from weather. Spills shall be cleaned immediately, and soiled materials shall be properly disposed of. Spills shall not be washed into live streams, channels, drains, storm drains, or other water conveyance facilities.
- E. Excess or waste concrete (including concrete decant water) shall not be washed onto bare ground, into the public way or any drainage systems. The concrete wastes shall be retained on-site until they can be appropriately disposed of or recycled. Concrete wastes shall not be washed into live streams, channels, drains, storm drains, other water conveyance facilities, bare ground or unapproved concrete washout containment areas.
- F. Non-stormwater runoff from equipment washing, vehicle washing, and any other activities shall be contained at the work site and properly disposed of. Non-stormwater runoff shall not be allowed to enter live streams, channels, drains, storm drains, or other water conveyance facilities.
- G. The Contractor shall prevent sediments and other materials to be tracked from the Site by vehicle traffic. Construction entrance roadways shall be stabilized to inhibit sediments from being deposited onto public ways. The Contractor shall immediately sweep up accidental depositions and not allow depositions to be washed away by rain or by any other means.

1.6 REGULATORY REQUIREMENTS

- A. The Contractor shall comply with the requirements of the State Water Resources Control Board (SWRCB), RWQCB, California Administrative Code, California Building Code, Owner and any other agencies having jurisdiction in storm water and non-storm water discharges and waste management.
- B. General Permit Registration Documents:

1. The Contractor shall employ or contract with qualified personnel to prepare all compliance documents in accordance with the applicable regulatory requirements.
 2. All engineering calculations, reports, and drawings shall be prepared, and signed by a California licensed engineer in accordance with California Business and Professional Code Section 6700, et seq.
 3. The LRP qualified personnel shall file the required documents, as necessary, through the SWRCB's Storm Water Multiple Application and Report Tracking System (SMARTS) website.
 4. The Contractor shall mail the appropriate application fee to the SWRCB no later than two (2) days after notification of submittal to the SWRCB via SMARTS. The Contractor shall affix the SWRCB Fee Statement Letter to the application fee. The Contractor shall pay all amendment and/or annual fees for subsequent years as required by the CGP.
 5. The Contractor shall not commence any construction work until a Waste Discharger Identification (WDID) number assigned by the SWRCB is received. The Contractor shall retain a copy of the WDID onsite, as evidence of the SWRCB acceptance of the PRDs/SWPPP/Waiver.
- C. The Contractor shall comply with the discharge and effluent prohibitions and limitations listing in the 2022 CGP.

1.7 STORM WATER POLLUTION PREVENTION PLAN IMPLEMENTATION

A. General Requirements:

1. Implementation of all BMPs shall be overseen by trained personnel employed or retained by the Contractor.
2. All required site monitoring and water testing, as necessary, shall be overseen by a QSP employed or retained by the Contractor.
3. All erosion and sediment control measures shall be implemented as specified in the SWPPP or UPPP.
4. A copy of the UPPP/Waiver Documents/SWPPP, including working details (fact sheets) for construction site BMPs and applicable amendments, shall be kept and maintained by the Contractor on the construction site and continuously updated in accordance with CGP requirements to reflect current site conditions throughout the duration of the project.

B. The Contractor shall implement all activities required by the CGP for the Type and/or Risk Level of the project as detailed in the SWPPP in accordance with the CGP. The SWPPP shall Identify applicable best management practices (BMPs). All stormwater or non-stormwater pollution prevention activities specified in the SWPPP shall comply with the guidance provided in the "*Stormwater Best Management Practice Handbook, Construction*," August 2023 or more current edition, published by the California Stormwater Quality Association (CASQA).

1. The SWPPP shall detail the placement of physical BMPs required for installation and the methods used to comply with those BMPs. The Contractor's preferred techniques shall show how it will comply with the stated objectives of the SWPPP and the terms of the CGP.

C. Non-Stormwater Management: As specified in the CGP as appropriate to the project Risk Level, the SWPPP shall discuss any non-stormwater sources (i.e., landscaping, irrigation, pipe flushing, street washing and dewatering). In addition, the SWPPP shall include standard observation measures and BMPs, including BCT/BAT practices that are to be implemented in order to reduce the pollutant loading in the discharge waters.

D. Amendments: All SWPPP amendments shall be prepared by the QSD at no additional cost to the Owner.

1. The Contractor shall, at no additional cost to the Owner, amend the SWPPP whenever there is a change in construction or operations which may affect the discharge of pollutants to stormwater. All fees as determined by the SWRCB will be paid by the Contractor.
 2. The Contractor shall, at no additional cost to the Owner, amend the SWPPP if it is in violation of any conditions of the CGP or has not achieved the general objective of reducing pollutants in stormwater discharges. All fees as determined by the SWRCB will be paid by the Contractor.
- E. Annual Reporting: The Contractor shall submit to the LRP an annual report and all required information for SMARTS data entry, no later than July 15th of each year. The LRP shall submit to the SWRCB via the SMARTS system in accordance with the requirements the CGP, including but not limited to: a summary and evaluation of all sampling and analysis results, original laboratory reports, chain of custody forms, a summary of all corrective actions taken during the compliance year and identification of any compliance activities or corrective actions that were not implemented. The LRP will certify the annual report by September 1st. A project of 90 days or more duration can require more than one Annual Report. See below.
1. An Annual Report is required while the Project is still under construction, if construction begins not later than June 1 of a calendar year and is not completed by September 1 of that same year.
 2. An Annual Report is required, without exception, within 90 days of or prior to the September 1 following project completion.
- Example: A project commencing on May 31 and completed on September 2 of the same year would require an annual report both by September 1 of the reporting year, and prior Notice of Termination submittal.
- F. Notice of Termination: Once construction is completed and the Site has been stabilized with final, sustainable cover, the QSP shall prepare a Notice of Termination (NOT), including a final site map, photos, and a final project Annual Report, shall obtain necessary signatures from the LRP and shall submit all through the State Water Board's SMARTS website within 80 days after all land disturbing activities end and construction is complete. The LRP will certify the Notice of Termination within 90 days of all land disturbing activities end and construction is complete via SMARTS in accordance with the CGP.

A Notice of Termination is distinct from an Annual Report. Both are required.

PART 2 PRODUCTS

2.1 GENERAL

- A. Materials furnished for BMPs shall meet the requirements of the California Stormwater Quality Association, *Stormwater Best Management Practice Handbook, Construction* – August 2023 edition (or most current version) unless otherwise indicated.
- B. Before the work begins, sufficient equipment shall be available on the site to assure that the operation and adequacy of the erosion control plans can be continuously maintained.

PART 3 EXECUTION

3.1 GENERAL DESCRIPTION

- A. The Contractor shall install and maintain all pollution, erosion, and sediment control measures and carry out inspections in accordance the approved SWPPP/UPPP.

- B. Sediment transport and erosion from working stockpiles shall be controlled and restricted from moving beyond the immediately stockpile area by implementing applicable BMPs, including but not limited to construction of temporary toe-of-slope ditches and accompanying silt fences as necessary. If the BMPs proposed in the SWPPP prove inadequate to control sediment transport and erosion on the Site, the Contractor shall without delay implement additional provisions to obtain effective control. The SWPPP shall be updated to reflect the necessary changes as discussed in paragraph 1.7 above.
- C. The Contractor shall be responsible for taking the proper actions to prevent contaminants and sediments from leaving the project Site. The Contractor shall take immediate action if directed by the Construction Manager/LRP, or if the Contractor observes contaminants and/or sediments entering the storm drainage system, to prevent further stormwater from entering the system.

3.2 NOTIFICATION AND REPORTING

- A. If non-stormwater pollution occurs in the work area for any reason or when the Contractor becomes aware of any violation of this Section, the Contractor shall correct the problem and shall follow the requirements of the SWPPP for monitoring, control and reporting of non-stormwater discharges.

3.3 FIELD QUALITY CONTROL

- A. The Contractor shall maintain the BMPs and other protective measures in good and effective operating condition by performing routine inspections to determine condition and effectiveness, by restoration of destroyed vegetative cover, and by repair of erosion and sediment control measures and other protective measures.

Should the QSP note any deficiencies in necessary BMPs during the course of QSP's inspections and reporting, Contractor shall immediately repair or replace the defective BMPs as required by the QSP.

3.4 INSPECTIONS

- A. The Contractor's QSP shall inspect disturbed areas of the construction site, areas that have not been finally stabilized, areas used for storage of materials exposed to precipitation, stabilization practices, structural practices, other controls, and area where vehicles are stored and/or exit the Site at least weekly, and in accordance with CGP precipitation event inspection requirements. The QSP shall perform quarterly inspections per CGP requirements.
- B. The Contractor's QSP shall inspect discharge locations or points to ascertain whether BMPs are effective in preventing significant impacts to receiving waters. Inspect locations where vehicles exit the Site for evidence of offsite sediment tracking.
- C. If required by the Project's Risk Level, Contractor's QSP shall conduct necessary Precipitation Event Monitoring, Sampling, and Reporting as required under the CGP.
- D. Inspection Reports shall be in compliance with the requirements of the CGP for the specified Risk Level/LUP Type. Furnish the report to the Construction Manager, QSD, Engineer, and LRP within 24 hours of the inspection as a part of the Contractor's daily report or as a standalone report.
- E. The Contractor's trained personnel shall be responsible for site discharge sampling and reporting as required under the CGP. Sample analysis reporting shall be submitted to the LRP and QSD within 24 hours of receipt from the field sampler and/or the laboratory along with sampling locations (latitude/longitude) and other requirements listed in the SWPPP.
- F. A copy of the QSP's inspection report shall be maintained on Site.

3.5 *RECORDS*

- A. The Contractor shall retain records/copies of data used to complete the PRDs; the SWPPP and all attachments and amendments; compliance certifications; notifications of non-compliance; training; incidents such as spills or other releases, including photographs as available; sampling and analysis of discharges discovered through visual monitoring; all reports required by the CGP; BMP inspections and checklists, and maintenance and repair activities; and activity-based BMPs, such as good housekeeping, that have been implemented.
- B. After the work is complete and accepted by the Owner, submit to the Engineer and Owner all records/copies of documents required by the CGP, including, but not limited to, the records/copies of the documents noted above, and all documents uploaded to the SMARTS system.

3.6 *MAINTENANCE OF TEMPORARY FACILITIES*

- A. Inspect erosion and sediment control structures daily, including site exit locations, and as specified in the SWPPP.
- B. Sediment shall be removed from behind run off control structures after each storm, or as directed by the Engineer, LRP, QSD or QSP.
- C. If areas are seeded, Contractor shall examine those areas during and after major storms to check that grass is becoming established.

3.7 *DISPOSAL OF SEDIMENT FROM STORM WATER POLLUTION CONTROL STRUCTURES*

- A. Sediment excavated from temporary sediment control structures shall be disposed on the site with general fill or with topsoil. Sediment shall be allowed to dry out as required before reuse. All trash shall be removed before reuse.
- B. Contractor shall place the sediment removed from traps and other structures where it will not enter a storm drain or water course and where it will not immediately reenter the basin.

3.8 *REMOVAL OF TEMPORARY STORM WATER POLLUTION CONTROL MEASURES*

- A. In accordance with SWPPP requirements, temporary control measures shall be removed once all drainage area ground disturbance is completed, permanent drainage works have been constructed and full stabilization is achieved. Contractor shall not breach any temporary control structures until the associated catchment area is complete unless approved by the Engineer.

END SECTION

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SECTION FIVE
TECHNICAL PROVISIONS
M- DETECTABLE WARNING TACTILE SURFACE

PART 1 GENERAL

1.1 WORK INCLUDED

- A The work shall consist of all labor, materials, tools, equipment and services necessary to satisfactorily complete the installation of detectable/tactile warning surfaces at the bottom of curb ramps and other locations shown on the plans, including where sidewalk meets alley approaches.

1.2 REFERENCES

- A Section 90 - Portland Cement Concrete, State Standard Specifications.

1.3 SUBMITTALS

- A Submittals shall be as specified in Special Provisions, Section 3000 – Submittals
- B Product Data: Manufacturer’s data sheets on each product to be used, including:
 - 1. Material Test reports from independent testing laboratory indicating that the material proposed for use meets the physical properties indicated herein.
 - 2. Preparation instructions and recommendations.
 - 3. Storage and handling requirements and recommendations.
 - 4. Installation methods.
 - 5. Maintenance instructions for tactile warning panels as required.
- C Shop Drawings: Provide fabrication details, tactile warning surface profile, and plans of placement including joints.
- D Verification Samples: For each finish product specified, two samples, minimum size 4 inches square, representing actual product, color, and patterns

1.4 QUALITY ASSURANCE

- E Detectable tactile warning surfaces shall comply in all respects with the Americans with Disabilities Act requirements.

PART 2 PRODUCTS

2.1 MANUFACTURE

- A Detectable Warning Tactile Mats shall be equivalent in all respects to the SSTD traditional mat manufactured by Safety Step TD, Redlands, CA, or an approved equivalent to the satisfaction of the Owner. Detectable Warning Tactile Panels made for “wet set” applications will not be accepted on this project.

2.2 PANELS

- A Detectable Warning Tactile Mats shall be made of fiber reinforced, polymer-modified cement and coated with an acrylic emulsion. Mat color shall be Yellow.
- B Dome geometry shall be in compliance with “ADA Regulations for Detectable Warning Panels.”
- C Panel edges shall have one-half-inch bevel in accordance with ADA requirements regarding Change in Level.
- D Panels shall meet the following minimum requirements:

Abrasion Test, ASTM D1242: Thickness loss 1.5%
Accelerated Weathering, 1500 Hours QUV: No Effect on Film Integrity
Bond Strength, ASTM C297: Concrete, 290 PSI; Plywood, 155 PSI
Bond Strength after Accelerated Aging, ASTM D756: 249 PSI
Compressive Strength, ASTM C 109: 5690 PSI
Concentrated Load, ICC-ES AC308: No apparent damage. Average penetration, 0.031; Residual, 0.020.
Fire Test, ASTM E108: Class A Flexural Strength, 1835 PSI
Impact Strength: 22 in/lbs.
Impact Test, ASTM D 3220:
No Cracking Percolation Test, AC308 Sec.IV G: 0.25 inches
Tensile Strength, ASTM C 190: 855 PSI
Water Absorption, ASTM D570: 6.5% Water Ponding, ASTM E96: 0.0102 grams/24 hours
Water Vapor Transmission, ASTM E96: 0.958 perm

2.3 ADHESIVE, TOP COAT, CLEAR FINISH SEALER

- A Bond coat adhesive shall be water based acrylic emulsion resin per manufacturer recommendations.
- B Top coat shall be a water-based, pigmented acrylic per manufacturer recommendations.
- C Clear finish sealer shall be a water-based, clear, acrylic sealer per manufacturer recommendations.

2.4 INSTALLATION CAUTIONS

- A Humidity affects characteristics of adhesive to a greater degree than temperature. The higher the humidity, the faster the cure.
- B Slab temperature shall be between 50° F and 100° F during installation.

- C Allow concrete to cure a minimum of 7 days prior to installation
- D Substrate shall be dry, solid and free from dust or other contaminate.
- E Substrate concrete shall not be treated with sealer or curing compound.

PART 3 EXECUTION

3.1 GENERAL

- A Consult Plans and Details for areas to receive detectable warning panels. Place mats at the bottom of curb ramps per plans. Install across the full width of ramp a minimum 36" in depth and set back 6"-8" from face of curb line depending on installation details. Where indicated on the plans for parallel curb ramps, the minimum depth may be 24" in depth and set back 6"-8" from face of curb. Provide adequate drainage to prevent the accumulation of water and debris on or at the bottom of ramp.

3.2 INSTALLATION

- A Install mats per manufacturer recommendations. Safety Step TD detectable warnings shall be installed by Safety Step TD certified installing contractor.

3.3 EXAMINATION

- A Do not begin installation until substrates have been properly prepared.
- B Expansion joints and control joints shall be located in compliance with ACI recommendations. Joint materials shall follow manufacturer's directions and instructions.

3.4 PREPARATION

- A Prepare a well-drained and properly compacted subgrade for the panel. Leave no puddles, standing water, ice, frost, or mud.

3.5 WARRANTY

- A Manufacturer shall warrant that purchased shall be free from defects in material and workmanship and shall not split or crack under normal use and conditions for a period of five (5) years from date of substantial completion.

END OF SECTION

**SECTION FIVE
TECHNICAL PROVISIONS
N- RECTANGULAR RAPID FLASHING BEACON SYSTEM**

PART 1 GENERAL

1.1 DESCRIPTION

- A. The system consists of the materials for the installation of a Rectangular Rapid Flashing Beacon (RRFB) system meeting the requirements of this Specification; the Federal Highway Administration (FHWA) Interim Approval for Optional Use of Pedestrian Actuated RRFB at Uncontrolled Marked Crosswalks (IA-21) dated March 20, 2018 (with correction issued 3/21/2018); and the Plans.

1.2 REFERENCES

- A. FHWA Interim Approval for Optional Use of Pedestrian Actuated RRFB at Uncontrolled Marked Crosswalks (IA-21) dated March 20, 2018 (with correction issued 3/21/2018)
- B. 2014 California Manual on Uniform Traffic Control Devices (CA MUTCD), Revision 5.
- C. Caltrans Traffic Operations Policy Directive 21-06 – Touch-free Accessible Pedestrian Signal (APS)

1.3 WARRANTY

- A. System components shall have an unconditional warranty against all defects in material and workmanship for a minimum duration of three (3) years from the date of the project's Notice of Completion or other date agreed upon by the Engineer.

PART 2 PRODUCTS

2.1 RRFB SYSTEM

- A. The provided system shall be solar powered and capable of communicating and activating the RRFB indications and advance warning amber flashing beacons wirelessly upon Pedestrian Push Button activation. The RRFB indications and amber flashing beacons shall respectively flash synchronously and cease after a programmable timeout.
- B. The system components include:
 - 1. Control Cabinet
 - 2. Flash Controller
 - 3. Wireless Transceiver
 - 4. Solar Charge Regulator
 - 5. Solar Panel
 - 6. Batteries
 - 7. Touch-free Pedestrian Push Button Assembly
 - 8. RRFB indications
 - 9. Amber Flashing Beacons Solar Panel
 - 10. Aluminum Poles
 - 11. All necessary mounting hardware.
- C. The RRFB Crosswalk System shall be solar powered with manufacturer designed and supplied solar/battery

power package.

- D. The RRFB System batteries shall be capable of providing a minimum of 12 days autonomy.

2.2 *Control Cabinet*

- A. Shall be NEMA 3R Type, or approved equal, constructed of 0.080" thick aluminum.
 - 1. Minimum size shall be 15" tall x 12.5" wide x 9.9" deep.
- B. The cabinet shall be vented with screening included on all vents and drains to prevent insects and other foreign matter from entering.
- C. The cabinet must include at least two tamper-resistant stainless-steel hinges and a replaceable #2 traffic lock with keys.
- D. The cabinet shall include a removable control panel to which all control circuit components either mount or connect.
- E. The cabinet shall utilize four 5/16"-18 stainless steel mounting studs that mate to a range of bracket options. To ensure a secure mount to the supporting post, two banding style brackets that fit poles with a 2-3/8" or larger diameter shall be included as standard equipment.
- F. All materials used in the construction or mounting of the control cabinet shall be either aluminum or stainless steel. Anti-vandal mounting hardware shall be utilized unless cabinet is positioned more than 8 feet above the adjacent ground surface.
- G. A UV resistant label shall be applied to the exterior of the cabinet and include system specific information including model number, serial number, date of manufacture, as well as any applicable regulatory compliance information.

2.3 *Flash Controller*

- A. The programmable flash controller shall be housed within the control cabinet and meet the following requirements:
 - 1. Be internally housed in its own IP67 type enclosure.
 - 2. The controller shall include integrated constant-current LED drivers with a minimum of two-channel output for driving up to two RRFB units.
 - 3. The controller shall automatically adjust the LED drive current control to optimize brightness for the ambient lighting conditions determined by the phototransistor input.
 - 4. Have the LED drive outputs reach the full output current as programmed within the duration of the 100 milliseconds on-time.
 - 5. Flashing pattern requirements are included in the RRFB indication section below.
 - 6. Include an integrated Real Time Clock (RTC) with on-board battery backup.
 - 7. Include a minimum of two General Purpose Inputs and Outputs (GPIO).

8. Be independently replaceable of other control panel components.
9. Be able to monitor internal temperature.
10. Operate between the temperatures of -40° to +176°F (-40° to +80°C).

2.4 *Wireless Transceiver*

- A. Shall be TAPCO Blinkerbeam Wireless Transceiver or approved equivalent.
- B. Shall operate wirelessly at 900 Mhz, utilizing Frequency Hopping Spread Spectrum (FHSS) technology to minimize the effects of external RF interference.
- C. Shall seamlessly integrate with the controller to ensure sequential activation of other radio-equipped devices in the system.
- D. Shall include an integrated LCD and two user-interface buttons for setup and troubleshooting, including readouts of flash duration (timeout), battery conditions, and LED testing functionality.
- E. Shall include two LED indicators for status and troubleshooting.
- F. Shall be capable of operating as a Parent (Gateway) or Child (Node or Repeater).
- G. Shall be capable of providing site-survey data for verification of signal strength between network devices.
- H. Shall include network-wide modification of sign controller settings and output durations, using programmability from any networked transceiver without the use of additional equipment or software.
- I. Shall synchronize the system components to activate the indications within 120 millisecond of one other and remain synchronized throughout the duration of the flash (timeout) cycle.
- J. Shall operate on the license-free ISM band.
- K. Shall comply with part 15 of FCC rules.
- L. Shall operate from 3.3VDC to 15VDC.
- M. Shall be, in the unlikely event of failure, replaceable independently of other components.

2.5 *Solar charge Regulator*

- A. Shall automatically provide Low Voltage Disconnect (LVD) to protect batteries when needed.
- B. Shall automatically provide Load-Reconnection once battery levels have been restored to an acceptable value.
- C. Shall protect against and automatically recover from: short circuit, overload, reverse polarity, high temperature, lightning and transient surge, as well as voltage spikes.
- D. Shall be independently replaceable of other control panel components.
- E. Shall operate from -40° to +140°F (-40° to +60°C).

2.6 *Solar panel*

- A. Solar Panel shall be constructed of an anodized aluminum frame, high-transmission 1/8" tempered glass, with silicon cells encapsulated in double-layer EVA, and with a white polymer backing.
- B. The Solar Panel shall be affixed to a pole top bracket that allows an adjustable angle to provide maximum insolation exposure.
- C. To ensure maximum solar insolation regardless of installation location, the post top mounting system shall provide 360° of rotational direction adjustment and upon installation, must be oriented with the panel facing south.
- D. The solar panel must be IEC61215, TUV, and UL 1703 certified. The solar panel shall operate at 12VDC nominal with a maximum output rating of 55 watts.
- E. The solar panel specifications:
 - 1. Maximum power voltage: 18.18 VDC
 - 2. Maximum power current: 3.1 A
 - 3. Short circuit current: 3.31 A
 - 4. Open circuit voltage: 22.1 VDC
 - 5. Operate from -40° to +194°F (-40° to +90°C)
- F. All solar panel connectors shall conform to Ingress Protection, IP-67 rating, dust proof, and protected from temporary immersion in water up to 1 meter deep for 30 minutes. Connectors shall be Deutsch DTM series.
- G. All solar panel fasteners shall be anti-vandal pin-type set screws. Wrench shall be provided.

2.7 *Battery*

- A. The Battery shall be housed inside the Control Cabinet.
- B. Shall have a nominal output voltage of 12 VDC and a capacity of 48 Ah.
- C. Shall be rechargeable type Gelled-Electrolyte.
- D. Shall be sealed and spill-proof.
- E. Battery shall be replaceable independently of other components.
- F. Shall be fused for short circuit protection.

2.8 *Pedestrian Push Button Assembly*

- A. Type B Pedestrian Push Button: Polara iDS2 model or approved equivalent, equipped with Frame and R10-25 (PUSH BUTTON TO TURN ON WARNING LIGHTS) 5"x7" Sign.
- B. The unit shall be ADA compliant with touchless activation and shall have English & Spanish voice narration message with adjustable volume control and built in speaker.
- C. The unit shall be supplied with all necessary mounting hardware

2.9 RRFB Indication assembly

- A. The RRFB indication assembly shall be TAPCO RRFB-XL2 Light Bar or approved equivalent.
- B. The RRFB indication assembly shall be in conformance with all applicable FHWA MUTCD standards and guidelines and shall meet or exceed the requirements specified in FHWA Memorandum IA-21, Interim Approval for Optional Use of Pedestrian-Actuated Rectangular Rapid Flashing Beacons at Uncontrolled Marked Crosswalks.
- C. The light intensity of the RRFB's indications shall meet the minimum specifications for Class 1 yellow peak luminous intensity in the Society of Automotive Engineers (SAE) standard J595 (Directional Flashing Optical Warning Devices for Authorized Emergency, Maintenance, and Service Vehicles) dated January 2005. Manufacturer Certification of Compliance shall be provided upon request.
- D. The RRFB indication assembly shall consist of two rapidly alternatively flashing rectangular yellow LED array vehicle indications and one side-mounted yellow LED array pedestrian indication.
- E. The two RRFB vehicle indications shall be aligned horizontally, with the longer dimension of the indication horizontal, and a minimum space between the two indications of approximately 7" measured from inside edge of one indication to inside edge of second indication.
- F. Each RRFB vehicle indication shall be a minimum size of approximately 5" wide x 2" high.
- G. Each pedestrian indication, where included, shall be a minimum size of approximately 1 square inch.
- H. Each RRFB assembly shall be supplied with all the required installation hardware. All exposed hardware shall be anti-vandal.
- I. Each RRFB assembly shall be located between the bottom of the crossing warning sign and the top of the supplemental downward diagonal arrow plaque.
- J. The outside edges of the two indications, including any housing, shall not protrude beyond the outside edges of the integral signage of the RRFB.
- K. When activated, the two yellow indications in each RRFB shall flash in a rapidly flashing sequence per Condition 5b, FHWA IA-21, dated March 21, 2018.
- L. The duration of a predetermined period of operation of the RRFBs following each actuation shall be based on the procedures provided in Section 4E.06 of the CA MUTCD for the timing of pedestrian clearance times for pedestrian signals.
- M. The flash rate of each individual RRFB indication, as applied over the full on-off sequence of a flashing period of the indication, shall not be between 5 and 30 flashes per second, to avoid frequencies that might cause seizures.

2.10 AMBER FLASHING BEACON

- A. Amber Flashing Beacon shall be TAPCO-Integrated Blinkerbeacon or approved equivalent.
- B. Signal heads shall be 12" aluminum signal head.
- C. Standard visors shall be tunnel, 12" diameter, 12" depth and the finished shall be powder coated aluminum with black exterior and interior

- D. LED signal module shall be 12" LED Yellow signal module and shall be on Caltrans Qualified Product List (QPL) and ITE compliant.
- E. The Amber flashing beacon shall be activated wirelessly upon Pedestrian Push Button activation.

PART 3 EXECUTION

3.1 Installation

- A. The provided system shall be installed per manufacturer's installation requirements and as indicated on the plans and details included therein.
- B. The system shall be demonstrated to be complete and fully functional prior to project acceptance.

3.2 Manuals

- A. The Contractor shall provide the Owner with an Operations and Maintenance Manual for the entire system in a bound 3-ring binder and electronically as a clear and legible PDF.

END SECTION

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